

The Auditor-General  
Audit Report No.40 2005–06  
Performance Audit

# **Procurement of Explosive Ordnance for the Australian Defence Force (Army)**

**Department of Defence**

**Defence Materiel Organisation**

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of Australia 2006

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Canberra ACT  
17 May 2006

Dear Mr President  
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Defence and Defence Materiel Organisation in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit and the accompanying brochure. The report is titled *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*.

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

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ian McPhee', is positioned above the printed name.

Ian McPhee  
Auditor-General

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

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# Abbreviations

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AAS	Australian Accounting Standard
AASB	Australian Accounting Standard Board
ADF	Australian Defence Force
ASDEFCON	Australian Defence Contracting Suite of Templates
ASLAV	Australian Light Armoured Vehicle
CASAC	Chief of Army's Senior Advisory Committee
CONDMAT(L)	Counsellor Defence Materiel - London
CONDMAT(W)	Counsellor Defence Materiel - Washington
COMSARM	Computer System for Armaments
DI (G)	Defence Instruction (General)
DMO	Defence Materiel Organisation
EO	Explosive Ordnance
FMS	Foreign Military Sales
GWEO	Guided Weapons and Explosives Organisation Branch
JALO	Joint Ammunition and Logistics Organisation
JLC	Joint Logistics Command
JP	Joint Project
MSA	Materiel Sustainment Agreement
OPSMAN 4	Operations Manual 4
ROMAN	Resource and Output Management and Accounting Network
SAMS	Strategic Agreement for Munitions Supply
WREOC	War Reserve Explosive Ordnance Committee

# **Summary and Recommendations**



## **Javelin anti-armour rocket**

Source: Department of Defence.



# Summary

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## Background

1. The procurement and through life support of explosive ordnance<sup>1</sup> is a complex process involving extended lead-times and the commitment of significant levels of resourcing. As at 30 June 2005, the recorded value of Defence's explosive ordnance exceeded \$2 billion. During 2004–05, the Defence Materiel Organisation<sup>2</sup> (DMO) was allocated an explosive ordnance sustainment budget, for all three Services, of \$183.5 million of which it spent \$144.2 million. This budget included \$62 million to address previous logistic funding shortfalls.
2. Major Capital Equipment Projects also fund the procurement of explosive ordnance in support of new weapons platforms being acquired. In addition to recurrent funding, Project JP 2085 is intended to increase reserve explosive ordnance stockholding levels. Approved in 2003, Phase 1B of the Project has a budget of \$202 million to be expended over five years commencing in 2003–04. Later phases of the Project are estimated to cost between \$500 million and \$700 million.
3. Defence advised the ANAO that during a period of substantial organisational change the operational tempo for the Australian Defence Force<sup>3</sup> (ADF), and particularly Army, have increased substantially, commencing with the deployment to East Timor through to the current day deployments to Iraq and Afghanistan. Consistent with the increased ADF tempo, explosive ordnance sustainment procurement has increased from a baseline of around \$120 million per annum in 2001–02, to nearly \$250 million per annum in 2002–03 and 2003–04. Defence considers that the requirement to meet increased operational demands has contributed to at least some of the sub-optimal practices outlined in this audit report.

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<sup>1</sup> Explosive ordnance includes: bombs and warheads; guided and ballistic missiles; artillery, mortars, rockets and small arms ammunition; all mines, torpedoes and depth charges; demolition charges; propellant-actuated devices; and all similar, related items or components explosive in nature.

<sup>2</sup> On 1 July 2005, the DMO was established as a Prescribed Agency under the *Financial Management and Accountability Act 1997* thereby making the Chief Executive of the DMO responsible for the financial management of the agency. In line with this change, this report refers to the DMO when issues are specific to that agency.

<sup>3</sup> The term ADF is used within this report to describe the military elements of the Department of Defence.

## *DMO Procurement*

4. The DMO is responsible for the procurement of explosive ordnance to fulfil requirements identified by the Services<sup>4</sup> for operating stock, and the Capability Development Group for new Capital Equipment Projects and Project JP 2085<sup>5</sup>. The DMO provides advice to the Services and the Capability Development Group on how endorsed explosive ordnance capability requirements may be achieved using available funding, current stockholdings and supply chain dynamics.

5. In May 2004, following the 2003 Defence Procurement Review, the Guided Weapons and Explosive Ordnance (GWEO) Branch<sup>6</sup> was established within the Electronic and Weapon Systems Division of the DMO. The GWEO Branch is responsible for explosive ordnance procurement and management functions including the acquisition of explosive ordnance and associated through life support.

### *Suppliers of explosive ordnance*

6. In 1999, the Government sold its shareholding in ADI Limited. The Mulwala Agreement and the Strategic Agreement for Munitions Supply (SAMS Agreement) now guarantee the future of ADI as the principal domestic explosive ordnance supplier to the DMO. Both of these agreements were renegotiated concurrently with the sale of ADI<sup>7</sup>.

7. The Mulwala Facility, in southern New South Wales, manufactures propellants and high explosives for use in the manufacture of explosive ordnance for the ADF<sup>8</sup>. The Facility is owned by Defence and managed by ADI. Under the Mulwala Agreement the DMO pays ADI in the order of

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<sup>4</sup> Services include Army, Navy and Air Force.

<sup>5</sup> Operating stocks are those that Army regard as necessary to fulfil peacetime training requirements and are generally funded through recurrent funding or funding associated with the introduction into service of new weapons platforms. Reserve stocks are those held in addition to operating stocks for possible contingency requirements, which may be funded through recurrent funding, by funding derived from Project JP 2085, or funding associated with the introduction into service on new weapons platforms.

<sup>6</sup> The functions assigned to the GWEO Branch were previously conducted within the DMO's Joint Ammunition Logistics Organisation (JALO). An outcome of the Defence Procurement Review was the reallocation of JALO functions between the DMO and Defence.

<sup>7</sup> A Multi-Party Deed was executed in 1999, which provides security to the financiers of the purchaser of ADI (Transfield Thomson-CSF Investment Pty. Ltd.).

<sup>8</sup> The physical facility was not included in the sale of ADI due to a range of occupational health and safety, environmental and modernisation issues.

\$31 million annually to operate the Facility<sup>9</sup>. The cost of propellant and high explosive purchased by the DMO is additional to that payment. Significant expenditure has also been committed towards modernising and addressing environmental issues associated with the Facility. At the time of audit fieldwork the DMO was seeking and evaluating tenders for the redevelopment of the Mulwala Facility.

8. The SAMS Agreement relates to the Benalla Facility, which manufactures munitions primarily for the ADF<sup>10</sup>. In addition to the cost of any explosive ordnance procured by the DMO under the SAMS Agreement, the DMO pays the supplier some \$50 million annually to maintain the capability to manufacture munitions at the Benalla Facility until at least 2015<sup>11</sup>.

9. Explosive ordnance is also procured by the DMO from overseas suppliers using three key methods. These are directly from overseas suppliers; using ADI as an intermediary; and from the US Government under Foreign Military Sales (FMS) arrangements. In some instances, explosive ordnance is procured by ADI from overseas suppliers, where the provisions of the SAMS Agreement provides exclusive rights to supply certain types of ammunition.

## Audit approach

10. The objective of the audit was to examine processes used by Defence and the DMO to procure explosive ordnance for the ADF, with an emphasis on Army requirements. The audit reviewed the extent to which the DMO effectively translated the explosive ordnance requirements of the ADF, and particularly of Army, into procurement and through life support arrangements.

<sup>9</sup> In 2005, this comprised a capability payment of \$25.8 million and approximately \$5 million per annum paid to ADI for the repairs and maintenance to plant, buildings and infrastructure associated with the capability being a Government owned facility. The cost of modernisation and environmental rectification of the Mulwala Facility is in addition to this amount.

<sup>10</sup> ADI advised the ANAO that the Australian Government, after numerous reviews, has confirmed the need for a strategic self reliant munitions manufacturing capability to provide high consumption or specialist munitions to the ADF. The Benalla Facility was sized to provide the annual training requirement on a single shift basis with surge requirements met by multi-shift production.

<sup>11</sup> Approximately \$22.8 million of the capability payment under the SAMS Agreement passes directly from ADI to the financiers of the purchase of ADI from the Government.

## Overall audit conclusion

11. The procurement of explosive ordnance involves significant levels of expenditure and has implications for the overall preparedness of the ADF. The ANAO considers that extensive improvements are required within Defence, and the DMO, to better align explosive ordnance procurement processes with ADF preparedness requirements to train, and meet contingency requirements should they eventuate.

12. The ANAO identified that management action is required in respect of the following areas:

- Procurement planning: Processes to translate identified explosive ordnance demand into inventory management and procurement plans were not clearly defined, or adequately documented between Defence and the DMO. The explosive ordnance requirements for Major Capital Equipment Projects can involve significant expenditure; however, these requirements were inadequately costed through the approval process for Project Land 19 Phase 6–Short Range Air Defence Weapon System and Project Land 907–Main Battle Tank Replacement.
- Financial management: Weaknesses in procurement planning for explosive ordnance have contributed to a poor alignment between explosive ordnance budgets and actual expenditure. In 2002–03 and 2003–04, the DMO initiated a number of prepayments that were in excess of 90 per cent of contract values to bring forward expenditure. In 2004–05, approximately \$47.8 million in explosive ordnance funding was returned to the Defence budget. As at June 2005, \$202 million out of the \$684 million in Defence prepayments, related to explosive ordnance.
- Inventory management: The management of the serviceability of explosive ordnance was such that in October 2005, \$1.04 billion, or approximately half the total explosive ordnance inventory, was classified as other than ‘serviceable’<sup>12</sup>.
- Safety and suitability for service assessments: In 2000, the remediation of legacy explosive ordnance<sup>13</sup> was identified by Defence as a

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<sup>12</sup> Other than ‘serviceable’ explosive ordnance comprises three broad categories which are ‘repairable’; ‘pending’; and ‘non-repairable’.

<sup>13</sup> Legacy explosive ordnance is ordnance currently in ADF service, for which there is no clearly identifiable audit trail in relation to the associated safety and suitability for service assessment.

significant long-term issue requiring resolution. Measures to resolve the legacy explosive ordnance issue have achieved limited improvement. The continued procurement of explosive ordnance without, in some cases, being able to secure technical data to support safety and suitability for service assessments has compounded these issues and exposed Defence to significant risk.

- Contract management: Management of the SAMS Agreement for the domestic manufacture of explosive ordnance has required the DMO to initiate a remediation programme in mid 2005, given the significance to Defence capability and the level of associated expenditure. The DMO has not maintained an up to date version of the SAMS Agreement since 2000, and inadequate documentation surrounding amendments to the contract constrains the capacity of the DMO to manage the Agreement.

13. These issues require the effective implementation of long-term remediation strategies. Prior to and during the course of the audit Defence and the DMO recognised a number of weaknesses in the management processes associated with explosive ordnance. A number of remediation activities have been initiated to address these weaknesses. The ANAO considers this to be a positive outcome acknowledging that these are initial phases in a process of ongoing reform.

## Key findings

### Forecasting demand (Chapter 2)

14. Project JP 2085, which is classified by Defence as a Major Capital Equipment Project, was not subject to the full two pass approval process<sup>14</sup> having only being considered by Government on one occasion. The ANAO considers that documentation of the Project could be improved particularly with respect to overall procurement planning and identifying the capabilities required of new types of ammunition procured using Project funds. Weaknesses in planning processes for initial expenditure against Phase 1B

<sup>14</sup> The two stage decision making process for Major Capital Equipment Projects, directed by Government consists of first pass approval at which Government considers alternatives and approves a capability development option(s) to proceed to more detailed analysis and costing; and second pass approval at which Government agrees to fund the acquisition of a specific capability system with a well defined budget and schedule.

Defence advised the ANAO that Project JP 2085 Phase 1B was approved by Government in February 2004 and at that time the two pass approval process was not embedded in the Cabinet Handbook. The ANAO notes that the Strengthened Two Pass Approval process was recommendation 3 of the 2003 Defence Procurement Review which was adopted by Government in September 2003.

resulted in Project funding not being aligned with standard contractual payment requirements for explosive ordnance. Consequently, in 2003–04 the DMO initiated several large prepayments which represented significant proportions of associated contract values in order to expend funds.

15. The ANAO identified that processes between the DMO and Army to translate operating and reserve explosive ordnance stock requirements into procurement and inventory management strategies required improvement. In December 2005, Defence indicated that the Secretary of Defence and the Chief Executive Officer of the DMO had directed that a more comprehensive and contemporary policy on explosive ordnance should be developed to complement reserve stockholding policy.

16. The ANAO noted that weaknesses exist in the planning process for the acquisition of explosive ordnance for new weapons platforms, including the identification and costing of explosive ordnance requirements. The ANAO identified that Major Capital Equipment Projects including Land 19 Phase 6-Short Range Air Defence Weapon System and Land 907-Main Battle Tank Replacement were experiencing difficulty in funding the procurement of explosive ordnance within the approved Project budgets. A combination of Project funds, recurrent explosive ordnance funding and JP 2085 funding were being used to procure explosive ordnance required by these weapons platforms.

### **Operational availability of explosive ordnance (Chapter 3)**

17. In March 2005, the DMO identified that approximately one-third of the \$928 million in explosive ordnance that was classified as other than ‘serviceable’, could not be made serviceable. The serviceability of one-quarter of this figure was yet to be determined. The ANAO identified that serviceability issues have impacted on the availability of certain types of explosive ordnance to Army. In October 2005, Defence advised the ANAO that the value of other than ‘serviceable’ inventory had increased to \$1.04 billion<sup>15</sup>.

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<sup>15</sup> The DMO advised that a recent withdrawal from service of missiles and related items awaiting disposal, was skewing these figures upwards temporarily.

18. The existence of explosive ordnance without a complete safety and suitability for service assessment<sup>16</sup> increases the risk in handling inherently hazardous materiel. In 2002, the DMO recognised that there was a need to take urgent action to address the legacy explosive ordnance issue. A DMO report in December 2002 identified that it would take between five to 14 years to address all legacy explosive ordnance issues. Overall, there has been an absence of progress in addressing these legacy explosive ordnance issues since 2003, other than in the area of airdrop<sup>17</sup> assessments. In October 2005, a scoping study for a project to resolve legacy explosive ordnance issues was finalised by the DMO.

19. The ANAO identified several instances, involving significant expenditure, where the DMO has not secured technical data at the time of the procurement to enable a safety and suitability assessment, thereby compounding the legacy explosive ordnance issue. In some circumstances, the requirement to expend funds has been given priority over securing technical data through the contracting processes. Obtaining technical data can be more difficult to achieve after a contract has been let.

20. The ANAO considers that the availability of technically qualified personnel is limiting the capacity to address serviceability and legacy explosive ordnance issues. Factors identified as contributing to these personnel deficiencies were the loss and redistribution of technically qualified military personnel as a consequence of the rationalisation of the explosive ordnance function from the Services into JALO in 1998. In May 2005, the DMO commenced developing a workforce renewal strategy to address workforce planning and training issues associated with an ageing workforce. This strategy was finalised in October 2005.

## **Domestic supply (Chapter 4)**

21. The DMO has not updated the SAMS Agreement to incorporate Agreement Change Proposals since 2000. In other instances, changes to

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<sup>16</sup> The assessment of safety involves an appraisal of the inherent freedom from explosive hazard of the item design; evaluating the inherent risk on deploying the item in prescribed environments throughout its anticipated service life; and consideration of the acceptability of this risk in meeting the operational requirement. The assessment of suitability for service requires objective evidence that the item or associated elements of a weapon or equipment are capable of functioning as designed and that the service environments encountered throughout the service life will not degrade the functioning to an unacceptable level.

<sup>17</sup> Airdrop relates to the delivery of equipment, including explosive ordnance, from the air by suitable aircraft.



processes outlined in the Agreement were agreed between the DMO and the Supplier, but not reflected in Agreement Change Proposals.

**22.** The ANAO noted that annual reviews of the costs associated with the SAMS Agreement were not being conducted on a timely basis and mechanisms to record this data were not in accordance with the Agreement. The Agreement provided that a performance target for costs would be set in 2003. This had not occurred at the time of ANAO fieldwork in late 2005.

**23.** The SAMS Agreement stipulates when the DMO is required to submit Requests for Quotations and orders for a given financial year. The timing of key ordering processes in the SAMS Agreement was not reflected in the Materiel Sustainment Agreement (MSA) for explosive ordnance between Army and the DMO. The DMO advised that the MSA was the subject of ongoing review to identify improvements.

**24.** The ANAO reviewed a number of Agreement Change Proposals to alter the capability of the Benalla Facility. The ANAO noted that the DMO did not undertake detailed cost investigations or financial analysis prior to accepting these proposals. Other weaknesses surrounding acceptance of these Agreement Change Proposals included inadequate long-term forecasting of demand and inadequate liaison between the DMO and Army. In August 2005, Defence commissioned a review of the SAMS Agreement to address DMO management concerns and issues identified by the ANAO.

**25.** At the time the SAMS Agreement was renegotiated in 1999, the contract was estimated to be valued at \$591.1 million, payable by Defence over the initial term of the Agreement<sup>18</sup>. This was based on an initial investment of \$176.8 million. The arrangement has the characteristics of a finance lease under the Australian Accounting Standards given that it is, amongst other matters, effectively non-cancellable and has a bargain purchase clause where the DMO can buy the Benalla Facility for one dollar in 2015. A finance lease effectively transfers all the risks and benefits incidental to ownership of the leased non-current asset from the lessor (ADI) to the lessee (DMO). Under an operating lease, the lessor effectively retains substantially all such risks and benefits.

**26.** The Acting Defence Chief Finance Officer advised the ANAO in October 2005 that the Department had concluded that the SAMS Agreement was a lease that should be treated as an operating lease. This matter is the

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<sup>18</sup> During the initial term of the Agreement, which expires in 2015, the rate of return is derived by adding an average ten year bond rate to a constant margin for risk.



subject of ongoing dialogue between the ANAO and Defence. In March 2006, Defence advised that it was reviewing the accounting treatment of the SAMS Agreement as part of the 2005–06 financial statements process.

## **Overseas supply (Chapter 5)**

27. A November 2004 DMO report identified weaknesses in contract management arrangements in the GWEO Branch. Subsequent internal reviews confirmed the need for improvement in contract management arrangements within the GWEO Branch. Issues identified included limited awareness and use of key Defence procurement policy documents and unfamiliarity with financial delegations and procurement approval requirements. ANAO audit fieldwork supports these findings. In mid to late 2005, the DMO initiated a number of measures to improve contract and financial management processes within the GWEO Branch.

28. During fieldwork the ANAO identified a number of instances where the DMO had effectively outsourced explosive ordnance procurement management to ADI. This outsourcing occurred under a standing offer arrangement first executed in 1999 and amended in mid 2003. The DMO did not obtain legal advice on the standing offer arrangements prior to mid 2005. The standing offer provided indemnities inconsistent with both Defence and Department of Finance and Administration guidelines. In mid 2005, legal advice was obtained by the DMO that resulted in the decision being taken to discontinue the use of the standing offer in July 2005.

## **Financial management (Chapter 6)**

29. In recent years, there has been a poor alignment between budgeted and actual explosive ordnance expenditure for both recurrent and Project JP 2085 expenditure. In 2002–03, the DMO was allocated additional funding late in the financial year, which enabled expenditure on explosive ordnance to exceed the original annual budget by \$110 million. To expend these additional funds, within the financial year, the DMO initiated substantial prepayments. For the bulk of the prepayments no explicit benefit or discount was obtained. In acquiring one tranche of Bolide missiles involving a 90 per cent prepayment on a \$26.6 million contract, the DMO negotiated a series of benefits including additional missiles and accelerated deliveries to justify the prepayment<sup>19</sup>. A number of these benefits did not eventuate.

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<sup>19</sup> The Bolide is a third-generation version of the RBS-70 missile, which is primarily used by Army for very low-level air defence.

30. The DMO also made significant prepayments late in 2003–04 to achieve expenditure of sustainment funding and Project JP 2085 Phase 1B funding. For Project JP 2085 the DMO initiated prepayments, totalling \$44.9 million out of a budget of \$50.1 million. The largest proportion of JP 2085 expenditure was a 90 per cent prepayment (\$33.3 million contract) for another tranche of Bolide missiles. In several instances, 100 per cent prepayments were made for explosive ordnance being supplied under the provisions of the SAMS Agreement. Under the terms of the SAMS Agreement, milestone payments normally occur during the period from acceptance of quotation to actual delivery. The DMO could not provide documentation to justify these prepayments and the ANAO questions the validity of prepayments for a milestone based contract arrangement.

31. Expenditure forecasts for 2004–05 indicated that a large proportion of the explosive ordnance budget would be expended in June 2005. However, these forecasts were adjusted in March 2005 resulting in the return of \$47.8 million in explosive ordnance sustainment funding to the Defence budget. This figure represented one-quarter of the total recurrent budget for explosive ordnance and indicates the need for improvement in budget estimation and related procurement planning processes. The DMO advised that during 2004–05 the DMO recognised that substantial prepayments had been made without adequate justification and indicated that the return of \$47.8 million in 2004–05 was in part as a result of imposing additional business rules for prepayments.

32. A 2005 Defence internal audit into the recording of prepayments by the GWEO Branch confirmed that a discrepancy existed between the Resource and Output Management and Accounting Network (ROMAN) and the Computer System for Armaments (COMSARM). This discrepancy resulted in a significant understatement of the value of explosive ordnance prepayments as at April 2005. Consequently, the calculated value of explosive ordnance prepayments was increased from \$103.4 million<sup>20</sup> to \$207.5 million. In mid 2005, the DMO initiated a number of measures to improve accountability processes for prepayments.

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<sup>20</sup> In October 2005 Defence advised the ANAO that this adjustment had been revised to \$98 million.

## Recommendations

33. The ANAO has made 15 recommendations to improve management approaches associated with procurement planning; financial management; inventory management; safety and suitability for service assessments; and contract management.

## Agency response

34. The Department of Defence provided a response (see Appendix 1) on behalf of DMO and Defence. Defence and the DMO agreed with all 15 recommendations contained in the report. An extract from the response stated that:

The Department of Defence's management of explosive ordnance for the Australian Defence Force has undergone significant review and reform since 1998 when the management of explosive ordnance for all three Services was brought under a single entity. Initial reforms centred on improving technical integrity of decision making and data management which are ongoing. More recent reforms have included changes to financial, business and logistics management, and the remediation of explosive ordnance requirements definition processes. The changes have played an important role in improving the overall management of the procurement of explosive ordnance for the Australian Defence Force. Much of the remediation work was commenced by Defence prior to and during the ANAO audit.

The 15 recommendations arising out of the ANAO report are consistent with the broad approach adopted by Defence regarding the reform of the procurement of explosive ordnance for the Australian Defence Force. The ANAO acknowledges Defence's efforts throughout their report into the *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*. Defence recognises the importance of ongoing assurance and continuous improvement activity in relation to the management of the procurement of explosive ordnance for the Australian Defence Force.

# Recommendations

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*Set out below are the ANAO's recommendations, with report paragraph reference. The recommendations are discussed at the relevant parts of this report. The ANAO considers that the relevant agencies should give priority to recommendations 2, 4, 6, 9, 14, and 15.*

## **Recommendation No.1**

### **Para 2.12**

The ANAO recommends that the JP 2085 1B Equipment Acquisition Strategy be updated by the Defence Materiel Organisation to include all procurements of new explosive ordnance types under that Project Phase.

*Defence and DMO response: Agreed*

## **Recommendation No.2**

### **Para. 2.23**

**1.2** The ANAO recommends that the Defence Materiel Organisation and Defence:

- (a) establish requirements determination processes to identify longer-term inventory line item stockholding levels necessary to fulfil operating and reserve explosive ordnance requirements; and
- (b) incorporate performance measures, based on agreed inventory levels, into future Materiel Sustainment Agreements for explosive ordnance.

*Defence and DMO response: Agreed*

## **Recommendation No.3**

### **Para. 2.33**

The ANAO recommends that to improve the transparency of costs associated with Major Capital Equipment Project proposals, Defence and the Defence Materiel Organisation include, in the second pass approval documentation, analysis of initial project funding to procure explosive ordnance required to support new weapons platforms including those associated with safety and suitability for service assessments.

*Defence and DMO response: Agreed*

**Recommendation  
No.4**

**Para. 3.15**

The ANAO recommends that the Defence Materiel Organisation develop specific performance indicators and establish procedures to monitor the effectiveness of processes to improve the serviceability of all explosive ordnance.

*Defence and DMO response: Agreed*

**Recommendation  
No.5**

**Para 3.21**

The ANAO recommends that the Defence Materiel Organisation establish appropriate targets for the implementation of the workforce renewal strategy and implement processes to monitor progress against these targets.

*Defence and DMO response: Agreed*

**Recommendation  
No.6**

**Para. 4.25**

The ANAO recommends that the Defence Materiel Organisation complete a SAMS Agreement remediation programme to:

- (a) update the SAMS Agreement to reflect an agreed contract baseline between the parties; and
- (b) implement version control arrangements to ensure that the SAMS Agreement remains up to date and available to staff.

*Defence and DMO response: Agreed*

**Recommendation  
No.7**

**Para. 4.40**

The ANAO recommends that the Defence Material Organisation and Defence develop planning processes to determine explosive ordnance requirements that align deliveries of explosive ordnance under the SAMS Agreement to Army's planned explosive ordnance consumption.

*Defence and DMO response: Agreed*

**Recommendation  
No.8**

**Para. 4.47**

The ANAO recommends that the Defence Materiel Organisation reinstate mechanisms to record and update cost data in accordance with the requirements of the SAMS Agreement.

*Defence and DMO response: Agreed*

**Recommendation  
No.9**

**Para. 4.59**

The ANAO recommends that the Defence Materiel Organisation develop procedures to ensure that changes to the capability of the Benalla Facility are subject to long-term requirements forecasting and detailed financial analysis to confirm value for money.

*Defence and DMO response: Agreed*

**Recommendation  
No.10**

**Para. 4.69**

The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the accounting treatment of the SAMS Agreement is in accordance with the relevant Australian Accounting Standard.

*Defence and DMO response: Agreed*

**Recommendation  
No.11**

**Para. 5.23**

The ANAO recommends that the Defence Materiel Organisation review processes for the acceptance of explosive ordnance to ensure that the level of initial receipt inspection is consistent with the risks associated with the procurement source.

*Defence and DMO response: Agreed*

**Recommendation  
No.12****Para. 6.18**

The ANAO recommends that the Defence Materiel Organisation include a risk analysis in prepayment business cases to determine the likelihood of associated benefits being realised.

*Defence and DMO response: Agreed*

**Recommendation  
No.13****Para. 6.27**

The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the allocation of funding for future phases of Project JP 2085 are aligned with standard contract payment requirements.

*Defence and DMO response: Agreed*

**Recommendation  
No.14****Para. 6.37**

The ANAO recommends that the Defence Materiel Organisation review in-year and future-year budget and contract management processes for explosive ordnance procurement to improve the alignment between budgeted and actual expenditure.

*Defence and DMO response: Agreed*

**Recommendation  
No.15****Para. 6.43**

The ANAO recommends that the Defence Materiel Organisation review the effectiveness of internal control arrangements within the Guided Weapons and Explosive Ordnance Branch having regard to reporting, reviewing and approving of financial reconciliations.

*Defence and DMO response: Agreed*





## **Audit Findings and Conclusions**



# 1. Introduction

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*This chapter provides an overview of explosive ordnance management arrangements within Defence and the DMO.*

## Background

**1.1** Army's explosive ordnance is categorised as either operating or reserve stock. Operating stock is the quantity of explosive ordnance required by Army to maintain authorised levels of peacetime training activity between successive procurements. Reserve stocks are those held in addition to operating stocks to meet the anticipated requirements of possible contingencies.

**1.2** Army and Defence have undertaken several studies to identify operating and reserve explosive ordnance requirements. The 2002 Army Ammunition Study examined operating stock requirements while the 2002 ADF Explosive Ordnance Stockholding Study<sup>21</sup> (the Explosive Ordnance Study) examined reserve stock requirements for Army, Navy and Air Force. A further study into reserve explosive ordnance requirements was ongoing at the conclusion of audit fieldwork.

**1.3** Figure 1.1 outlines the composition of explosive ordnance inventory. To maintain Army at desired levels of preparedness, explosive ordnance inventory management processes need to maintain inventory at levels to enable ongoing training to occur while maintaining appropriate stockpiles for possible contingencies<sup>22</sup>. The achievement of this outcome is contingent on long-term forecasting of requirements and close interaction between key stakeholders including Army, the Defence Capability Development Group and the DMO. Other factors that impact on the supply of explosive ordnance to Army include rapid acquisitions of explosive ordnance; operational imperatives; the level of resources available; and priorities identified by Army Headquarters and the Capability Development Group.

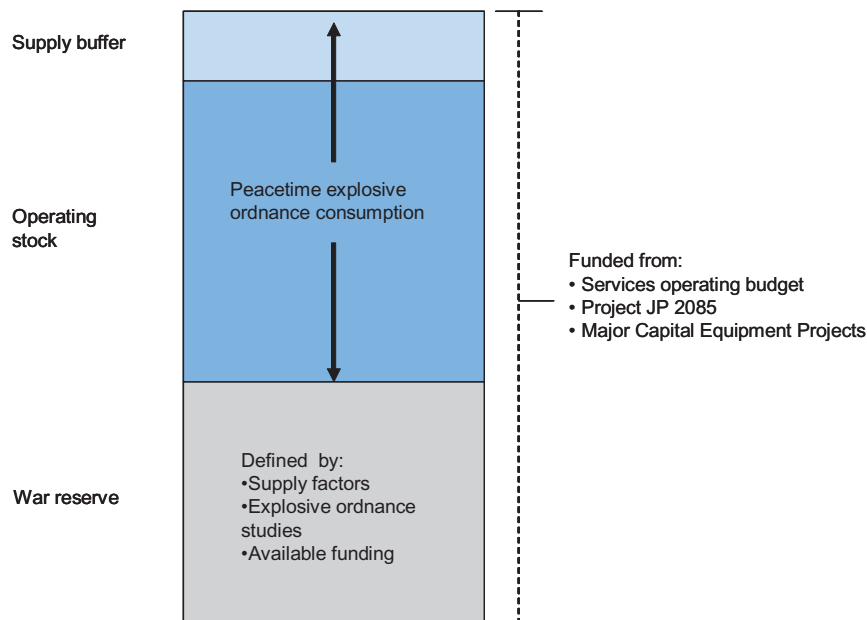
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<sup>21</sup> In 2002, the Defence Capability Investment Committee directed that a study be conducted to determine if the level of explosive ordnance stockholding was likely to be adequate for possible future demands based upon advice from the Deputy Director Strategy.

<sup>22</sup> Factors impacting on the overseas supply of munitions include the capacity of overseas suppliers to fulfil Australian requirements in times of high demand for the same items from other countries; restrictions placed on overseas suppliers by overseas governments on the deployment and end use of explosive ordnance; and long lead-times for some munitions and/or munitions components.

**Figure 1.1**

**Composition of explosive ordnance inventory**



Source: Adapted from DMO documentation.

**Joint Project 2085 Phase 1B**

**1.4** Project JP 2085 Phase 1B has an approved budget of \$202 million. This funding is intended to provide for the progressive acquisition of a variety of explosive ordnance over the period 2004 to 2007, to increase Defence's reserve stock holding levels. Overall, the Project is planned to procure around 121 different items of explosive ordnance. As at December 2005, actual expenditure against Phase 1B of the Project was \$51.6 million.

**Explosive ordnance procurement arrangements**

**1.5** The establishment of the DMO, in July 2000, brought together Defence's major capital acquisition organisation and the separate through life support organisation. This change was intended to ensure that the DMO provided a single point of contact for logistic matters including functions ranging from operational logistics support through to equipment management.

**1.6** The Defence Procurement Review 2003 recommended that the DMO establish a separate identity from Defence, through the formation of an

Executive Agency<sup>23</sup>. The Defence Procurement Review identified that the functions covering strategic and operational level logistics 'did not sit neatly' within the core business of the DMO, which it regarded to be the acquisition of Defence equipment and the provision of through life support. As a consequence Defence retained responsibility for many of the physical logistics functions for explosive ordnance, including distribution and warehousing, within Joint Logistics Command which is a component of Headquarters Joint Operations Command.

**1.7** On 1 May 2004, the GWEO Branch was established within the Electronic and Weapon Systems Division of the DMO. The GWEO Branch is responsible for the procurement and through life support of explosive ordnance. In June 2005, the Chief of Army signed an MSA with the DMO for explosive ordnance. The MSA provides that the GWEO Branch will manage the procurement and through life support of explosive ordnance required by Army.

## Audit approach

**1.8** The objective of the audit was to examine processes used by Defence and the DMO to procure explosive ordnance for the ADF, with an emphasis on Army requirements. The audit reviewed the extent to which the DMO effectively translated the explosive ordnance requirements of the ADF (Army) into procurement and through life support arrangements. The audit did not review explosive ordnance distribution and warehousing processes and control arrangements within Defence. It was not an audit of contractor performance.

**1.9** Audit fieldwork was conducted from March 2005 to November 2005. Several issues and discussion papers, consolidating the findings of the audit, were provided to Defence and the DMO from September 2005 to December 2005. Draft audit reports were provided to Defence and the DMO in January 2006 and April 2006.

**1.10** The audit was conducted in accordance with the ANAO Auditing Standards at a cost to the ANAO of \$397 000.

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<sup>23</sup> On 1 July 2005 the DMO became a Prescribed Agency under the provisions of the Financial Management and Accountability Act 1997.

## **Report structure**

**1.11** The remainder of this report is structured into five chapters. Chapter 2 outlines processes to forecast and meet demand for explosive ordnance and the procurement of explosive ordnance in support of new weapons platforms. Chapter 3 reviews processes to maintain the operational availability of explosive ordnance including serviceability and the assessment of safety and suitability for service. Chapter 4 examines domestic manufacturing arrangements. Chapter 5 discusses overseas procurement mechanisms. The final chapter considers the effectiveness of explosive ordnance financial management arrangements.

## 2. Forecasting Demand

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*This chapter outlines processes used by Defence to determine training and contingency explosive ordnance requirements and align DMO procurement activities to those requirements.*

### Operating stock requirements

**2.1** In 1998, the then Chief of Army's Senior Advisory Group implemented an explosive ordnance consumption cap on Army of \$75 million per annum. This cap was intended to address sustainability issues caused by Army's annual explosive ordnance consumption exceeding available replenishment investment. In 2001, the Army identified that explosive ordnance stocks had reached critical shortage levels and that replacement investments, coupled with lengthy procurement lead-times<sup>24</sup>, were affecting Army's individual training and warfighting capabilities. As a consequence Army undertook the Army Ammunition Study to identify the quantity of explosive ordnance required to maintain Army at the Directed Level of Capability<sup>25</sup>.

**2.2** In late 2002, the Chief of Army's Senior Advisory Committee (CASAC) endorsed the outcomes of the Army Ammunition Study. The Explosive Ordnance Baseline, recommended by the Study and accepted by CASAC, was more than double the average annual consumption of explosive ordnance by Army in the previous four years. The Baseline was acknowledged to be overstated in terms of Army's capacity to consume identified explosive ordnance requirements in normal circumstances.

**2.3** Defence advised the ANAO that the Army Ammunition Study provided an Explosive Ordnance Baseline<sup>26</sup> that defines the amount of ammunition required to maintain Army units at required levels of preparedness. Army indicated that this baseline is being continuously

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<sup>24</sup> Lead-time is defined as the time elapsing between the placing of an order and receiving the item into store.

<sup>25</sup> The Directed Level of Capability is the funded level of capability maintained during a specified budget period. The Directed Level of Capability is formally agreed in an Organisational Performance Agreement between the Chief of the Defence Force/Secretary of Defence and each of Defence's Output Executives which includes the Chiefs of the Services.

<sup>26</sup> The Explosive Ordnance Baseline does not account for long-term factors affecting consumption such as unplanned operational requirements and environmental factors such as fire restrictions on ranges. The Explosive Ordnance Baseline also assumes fully manned units, training courses and Army Reserve Activities. As a consequence Defence expects that the Baseline is likely to remain greater than consumption, in any individual year, but that as a requirements planning tool it guarantees the availability of explosive ordnance for Army's preparedness requirements.

reviewed by an ongoing programme of working group activities; and based on requirements identified by Army units through the Army Capability Management System<sup>27</sup>; and in accordance with training methodologies and historical consumption.

**2.4** The MSA between the DMO and Army acknowledges that Army may not consume the Explosive Ordnance Baseline in one year. The ANAO calculated that if Army had been funded to the Explosive Ordnance Baseline level in both 2003–04 and 2004–05, approximately \$96 million in surplus explosive ordnance would have been procured over that period. Data provided by Defence indicates that the funding for explosive ordnance in 2005–06 closely approximates the Explosive Ordnance Baseline. Defence indicated that procurements surplus to consumption may be utilised to address shortages in reserve stocks.

## **Remediation of explosive ordnance reserve stocks (Project JP 2085)**

**2.5** The 2002 Explosive Ordnance Study analysed the reserve stock requirements of the three Services. The Study formed the basis for prioritising procurements using Project JP 2085 Phase 1B funding. A further study into reserve explosive ordnance requirements was conducted by the Defence Capability Development Group in 2005, to inform Phase 2 of Project JP 2085. In December 2005, Defence advised that the modelling to support this Phase of the Project has been completed and a proposal addressing the procurement strategy will be considered by senior Defence committees in early 2006.

**2.6** From late 2001 to 2004, the Defence Capability Committee and the Defence Capability and Investment Committee provided higher-level oversight of the Reserve Stock Remediation Process. In September 2004, the Chief of the Capability Development Group recommended the establishment of the War Reserve Explosive Ordnance Committee (WREOC). The purpose of the WREOC is to provide specialist sub-committee oversight of the development of war reserve stockholding processes and to provide a formal forum to address emerging explosive ordnance issues<sup>28</sup>. In December 2004, the WREOC met for the first time.

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<sup>27</sup> The Army Capability Management System is used by Army to manage the allocation of resources, including explosive ordnance, based on capability directives and within funding constraints.

<sup>28</sup> The WREOC primarily comprises representatives from the three Services, the Capability Development Group and the DMO.



**2.7** Project JP 2085 seeks to replenish priority ADF reserve stocks of explosive ordnance that have been drawn down over time to satisfy training requirements. The Project is split into several phases with the final Phase scheduled for completion in 2014. Prior to Project JP 2085 Phase 1B, Defence allocated an additional \$20.9 million in 2002–03 to replenish explosive ordnance reserve stocks. Project JP 2085 Phase 1B has an approved budget of \$202 million.

**2.8** Phase 1B procurement priorities were established and approved by the Defence Capability Committee in June 2003, and provided to the DMO at that time. Project JP 2085 Phase 1B was not subject to the full two pass approval system for Major Capital Equipment Projects. Defence advised the ANAO that Project JP 2085 is a means of augmenting existing inventory. It was therefore considered that the production of Project documentation associated with the two pass approval system such as the Operational Concept Document<sup>29</sup>, Function and Performance Specification and Test Concept Document was unnecessary.

**2.9** Approximately one-third of the \$202 million in Project JP 2085 Phase 1B funding was planned to be allocated to the procurement of a new type of precision guided artillery munition not in-service with the ADF at the time of approval<sup>30</sup>. There was an absence of operational capability documentation identifying the specific capabilities required of this munition. In mid 2005, the DMO were yet to receive operational concept requirements for this munition from Army. Defence advised that it is planned to have these requirements defined by March 2006, approximately two years following the approval of Phase 1B.

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<sup>29</sup> An Operational Concept Document is the primary reference for determining fitness-for-purpose of the desired capability to be developed, and is complementary to the Function and Performance Specification and the Test Concept Document which form the Capability Definition Document to define the capability system baseline.

<sup>30</sup> Defence advised the ANAO that at the time of the development of Phase 1B there were some precision guided munition development programs operating in the US Army, and it was planned that as these programs matured Australia would be well positioned to leverage off these programs. Thus it was considered that Army's operational requirement was already defined by the 'Copperhead' [the existing round which is no longer manufactured], and, it was reasonable to assume the US Army precision guided munition would deliver a capability beyond that of the 'Copperhead'. Defence indicated that once the US precision guided munition program is finalised, and the operational capabilities of the ammunition are known, the precision guided munition purchase under Project JP 2085 will effectively become a military-off-the-shelf acquisition.

## Equipment Acquisition Strategy

**2.10** Expenditure against Project JP 2085 Phase 1B is spread across five years commencing in 2003–04. Army explosive ordnance requirements account for a significant proportion of the Phase 1B budget. The Equipment Acquisition Strategy for Phase 1B was not approved by the relevant DMO authority until August 2005, approximately 15 months after initial commitments and expenditure occurred<sup>31</sup>. At that time some \$50.1 million of Phase 1B funds had already been committed and largely expended in 2003–04. The ANAO notes that a poor alignment exists between the phasing of funding for Phase 1B and standard contractual payment requirements which have precipitated significant prepayments being initiated by the DMO (see Chapter 6)<sup>32</sup>.

**2.11** The DMO advised the ANAO that Project JP 2085 procurements were normal business transactions for the GWEO Branch and as such the lack of an Equipment Acquisition Strategy was considered low risk. The ANAO identified a range of issues that indicate that the risk profile should have been assessed as higher than that indicated by the DMO. These include:

- significant proportions of funding being allocated to the acquisition of explosive ordnance not in-service in the ADF;
- the shifting of funding from procuring explosive ordnance for existing weapons platforms to platforms which are yet to be introduced into service;
- an inability to secure required technical data associated with a large procurement (see Chapter 3)<sup>33</sup>; and
- significant prepayments (see Chapter 6).

## Recommendation No.1

**2.12** The ANAO recommends that the JP 2085 1B Equipment Acquisition Strategy be updated by the Defence Materiel Organisation to include all procurements of new explosive ordnance types under that Project Phase.

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<sup>31</sup> The equipment acquisition strategy did not encompass all items to be procured using Project JP 2085 Phase 1B funding. Most notable among these for Army was precision guided munitions.

<sup>32</sup> Defence indicated that the 'poor alignment' was because the initial Phase 1B cash budget allocation was made too late in the financial year. Defence advised the ANAO that this problem has been addressed with payments now synchronised to contract requirements.

<sup>33</sup> Defence advised the ANAO that it does not agree that the identified issues should have changed the risk profile of Project JP 2085. Defence regards the only issue that may be of any substance relates to the claimed inability to secure technical data.

### *Agency response*

**2.13** Defence and DMO response: Agreed. The JP2085 Phase 1B Acquisition Strategy will be updated progressively as details of natures to be procured are finalised.

## **Matching inventory levels to identified requirements**

**2.14** Effective procurement planning for explosive ordnance requires accurate and consolidated explosive ordnance consumption and reserve stock data. Data to guide procurement processes to meet these requirements is provided to the GWEO Branch in various formats. These include consumption figures provided by the Services, which are in varying formats and for different durations; war reserve requirements set out in the Chief of Defence Force Preparedness Directive; planned procurements to replenish war reserves using Project JP 2085 funding; and changes to explosive ordnance requirements due to the phasing in and out of weapons platforms. Weaknesses in the coordination of these requirements have led to difficulties in developing comprehensive, validated explosive ordnance procurement plans.

**2.15** The GWEO Branch uses a Requirements Determination process to manage the timing of explosive ordnance procurements. The purpose of this process is to maintain inventory at required levels, through analysis of explosive ordnance consumption, the remaining life of existing inventory, procurement lead-times and minimum or economic order quantities. At the time of audit fieldwork the GWEO Branch were reviewing Requirements Determination processes and as a result standardised procedures were not in place across the GWEO Branch. In December 2005, the DMO advised the ANAO that all Non-Guided Product Lines within the GWEO Branch have been instructed to follow a standard Requirements Determination Process. This process is based on each of the Services forecast of operating stock requirements and reserve stock requirements identified in the Chief of the Defence Force Preparedness Directive 2004.

**2.16** The Requirements Determination process is based on inventory data sourced from COMSARM, Defence's explosive ordnance inventory management system. This data is extracted and manipulated by the GWEO Branch to identify explosive ordnance surpluses, deficiencies and items on order. Based on this information, the DMO informed the December 2004 WREOC meeting that inventory rebalancing between operating and reserve stocks could enable the redirection of \$80 million in funding for new explosive

ordnance procurements across all three Services. That Committee recommended that surplus stocks be reassigned between operating and reserve stocks only with the agreement of the relevant Output Executive (Chief of Army, Navy or Air Force).

**2.17** A June 2005 GWEO Branch report outlining explosive ordnance holdings indicated that the training stock surplus was valued at approximately \$180 million, of which 41 per cent related to Army. Defence advised that these figures were subject to review with the Service Capability Managers and as a consequence may change. In December 2005, the DMO advised the ANAO that processes were being developed in liaison with the WREOC to review long-term explosive ordnance volume requirements in order to make a more accurate assessment of surplus and shortage volumes.

**2.18** The DMO also presented a procurement methodology to the WREOC in December 2004. This methodology was based on the procurement parameters outlined above for the Requirements Determination process. The WREOC noted that the methodology required further work and Service input. The ANAO was advised in December 2005, that the finalisation of a new set of Requirements Determination Business Rules would be premature prior to resolution of issues in the WREOC<sup>34</sup>.

**2.19** The ANAO noted that liaison between Army and the GWEO Branch in relation to explosive ordnance inventory management has produced less than adequate outcomes. Audit fieldwork revealed that liaison procedures were poorly defined and the documentation of procurement strategy processes was inadequate. In early 2006, Defence advised that the WREOC will report to a higher Defence committee in May 2006 on an updated explosive ordnance management process.

**2.20** The MSA between Army and the DMO for explosive ordnance management states that it outlines processes that are currently in practice but not formally documented. In August 2005, the Chief Executive Officer of the DMO directed that all MSA's be reviewed to confirm the accuracy of information contained in the agreements; revalidate the achievability of commitments agreed by the DMO; and ensure that Defence provides adequate levels of support. In March 2006, Defence advised that the Army MSA Schedule dealing with explosive ordnance is being updated to better define Army's and the GWEO Branch's role in planning and executing procurements.

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<sup>34</sup> Defence advised that the Requirements Determination process for 2006–07 is being conducted using the traditional consultative approach with the Service Capability Managers.

**2.21** In June 2005, the WREOC established an Explosive Ordnance Working Group to look at issues associated with explosive ordnance procedures and terminology across all stakeholders<sup>35</sup>. The Working Group is to examine processes for explosive ordnance inventory management, procurement, stockholding and funding so as to construct a management framework that meets the needs of all stakeholders.

**2.22** In August 2005, the Secretary of Defence agreed to the development of a specific Defence Instruction addressing explosive ordnance issues. Once developed, a review is planned to assess the alignment between that Instruction and an updated version of the Defence Instruction on Requirements Determination and Management of Reserve Stocks. The content of the proposed Defence Instruction on explosive ordnance is being developed by the Explosive Ordnance Working Group.

## Recommendation No.2

**2.23** The ANAO recommends that the Defence Materiel Organisation and Defence:

- (a) establish requirements determination processes to identify longer-term inventory line item stockholding levels necessary to fulfil operating and reserve explosive ordnance requirements; and
- (b) incorporate performance measures, based on agreed inventory levels, into future Materiel Sustainment Agreements for explosive ordnance.

### *Agency response*

**2.24** Defence and DMO agreed to all parts of the recommendation and commented that:

- (a) Agreed. Work commenced in 2004 to better define policy and related processes.
- (b) Agreed. Rudimentary performance measures are currently included in the MSA schedules for explosive ordnance. These will be improved in future MSA's.

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<sup>35</sup> Defence refers to this Working Group as the Explosive Ordnance Tiger Team as it was established for a specific purpose and is intended to have a finite life. The Working Group comprises representatives from a number of areas including the Service Headquarters; the Capability Development Group; Joint Logistics Command; Headquarters Joint Operations Command; and the GWEO Branch.

## Major Capital Equipment Projects

**2.25** The 2003 Defence Procurement Review found that a growing logistics shortfall has been a consequence of Defence underestimating the whole-of-life costs of platforms<sup>36</sup>. In 2002–03, Defence received the first tranche of additional logistics shortfall funding, of approximately \$1.1 billion, to be expended over five years. The explosive ordnance component of this funding is spread across the period 2002–03 to 2006–07 and totals \$294 million for all three Services. The 2003–04 Defence Portfolio Budget Statements advises that this spending will fund a substantial increase in explosive ordnance stock, including that required for enhanced training for Army personnel.

**2.26** Financial planning processes for Major Capital Equipment Projects recommends the provisioning for three years supply of consumable repair parts, including initial requirements and authorized buffer stocks, having regard to appropriate lead-times<sup>37</sup>. In principle, these Projects are also required to provide initial military capabilities, including reserve explosive ordnance stocks<sup>38</sup>.

**2.27** The ANAO reviewed several Army Major Capital Equipment Projects<sup>39</sup> and identified two Projects that were experiencing difficulty in funding the procurement of associated explosive ordnance within the Project budget. These were Project Land 907-Main Battle Tank Replacement and Project Land 19 Phase 6-Short Range Air Defence Weapon System. The ANAO noted that the funding of explosive ordnance required in support of these platforms was being derived from a variety of sources, including Project funds, Project JP 2085 funding and recurrent sustainment funding.

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<sup>36</sup> The Commonwealth Procurement Guidelines require that value for money considerations include financial consideration of all relevant direct and indirect costs over the whole procurement cycle. The Defence Procurement Policy Manual states that failure to adequately consider the through life support issues early in the procurement process may leave the way open for significant additional costs to be incurred and other problems encountered later in the process.

<sup>37</sup> Defence Instruction (General) (DI (G)) Administrative 05-5 titled *Financial Provisions for Initial Support Spares and Project Repair Parts for Major and Minor Equipment Projects* suggests a provision of 30-35 per cent for guns, guided weapons systems, operational vehicles; aircraft and complex avionics/electronics. The actual procurement decision is separate to the provisioning and is subject to a range of considerations.

<sup>38</sup> DI (G) LOG 06-4 *Australian Defence Reserve Stockholding Policy*.

<sup>39</sup> In addition to Project JP 2085.



## Land 907 – Main Battle Tank Replacement Project

**2.28** The Land 907 Project will replace the Leopard Tank Fleet with the M1A1 Abrams Main Battle Tank, with an initial in-service objective of one squadron by December 2007 (see Figure 2.1). The Project has an approved budget of \$534 million including an integrated logistics support budget of \$118 million that was originally scoped to fund the procurement of explosive ordnance. The initial ammunition purchase was planned to include three years supply of 120mm training rounds and some war stock.

**Figure 2.1**

### M1A1 Abrams Main Battle Tank



Source: Department of Defence.

**2.29** In late 2004, Army identified that cost increases within the Land 907 Project had placed pressure on the Projects ability to provide reserve explosive ordnance stocks and that the budget for Land 907 was regarded by Army as ‘conservative for the full range of operational contingencies’. Subsequently, the DMO awarded a \$53 million contract to acquire 120mm ammunition, used by the Abrams Tank, which comprises \$18 million from within the Land 907 budget and \$35 million of funding sourced from outside the Project.

**2.30** The 2004–05 Defence Portfolio Budget Statements state that projects costing between \$8 million and \$50 million require the joint approval of the Minister for Defence and the Minister for Finance and Administration<sup>40</sup>. No such approval was obtained for this \$35 million expenditure on explosive ordnance for the replacement tanks. Defence advised that it considered the

<sup>40</sup> Defence Portfolio Budget Statement 2004–05, p. 81.

extant policy and funding allocations for the replacement battle tanks acquisition and concluded that approval of the joint Ministers for this procurement was not required.

## **Land 19 Phases 5A and 6 - Short Range Air Defence Weapon System Project**

**2.31** Land 19 Phases 5A and 6 were approved in the 2001–02 Budget. Phase 5A is intended to provide a life-of-type extension to existing RBS-70 Short Range Air Defence Weapon System (see Figure 2.2). Phase 6 will procure additional equipment and enhance existing capability by providing Army's 16 Air Defence Regiment with two complete RBS-70 batteries. Both Phases had a total approved budget of \$110 million. Following a sole source tender in 2002, the DMO received a quotation that exceeded the Project budget by some \$30 million. Through negotiations this difference was reduced to \$15.4 million.

**Figure 2.2**

**RBS 70 weapon system which uses the Bolide missile**



Source: Department of Defence.

**2.32** A 2005 Contract Change Proposal for Land 19 Phase 6 noted that funding limitations resulted in the decision being taken, at the time of contract, to include a number of integrated logistics support elements as options. The March 2005 Project Governance Board Review of the Land 19 Project indicated that inadequate funding for the project required Army to absorb the cost of procuring three years supply of Bolide missiles<sup>41</sup>. In 2002–03 Defence entered

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<sup>41</sup> Bolide missiles replaced the RBS-70 missiles which are no longer manufactured.



into a \$26.6 million contract to procure Bolide Missiles using a surplus of funds and in 2003–04 Defence entered into a \$33.3 million contract for Bolide Missiles using JP 2085 funding. These procurements are outlined in further detail in Chapter 6.

## Recommendation No.3

**2.33** The ANAO recommends that to improve the transparency of costs associated with Major Capital Equipment Project proposals, Defence and the Defence Materiel Organisation include, in the second pass approval documentation, analysis of initial project funding to procure explosive ordnance required to support new weapons platforms including those associated with safety and suitability for service assessments.

### *Agency response*

**2.34** Defence and DMO response: Agreed. The current Capability Development processes require in-depth analysis of all costs, including explosive ordnance.

### 3. Operational Availability of Explosive Ordnance

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*This chapter outlines issues associated with maintaining the serviceability of explosive ordnance inventory and the assessment of safety and suitability for service.*

#### Serviceability of explosive ordnance inventory

**3.1** In 2002, the COMSARM inventory management system recorded approximately \$600 million of explosive ordnance held against various condition codes listed as other than 'serviceable'. At the time, the DMO assessed that approximately \$400 million could be made serviceable through some form of inspection and/or maintenance processes, as and when required. In March 2005, the value of explosive ordnance inventory categorised as other than 'serviceable' had increased<sup>42</sup> by 55 per cent to \$928 million<sup>43</sup>.

**3.2** DMO analysis in March 2005 identified that explosive ordnance inventory held against condition codes other than 'serviceable' comprised three broad categories which are 'repairable' (41 per cent); 'pending' (25 per cent); and 'non-repairable' (34 per cent) with detail of the categories as follows:

- 'repairable' category requires some form of inspection and/or a routine testing or servicing process to be conducted to confirm ongoing serviceability;
- 'pending' category comprises mostly new inventory waiting receipt inspection before being confirmed as 'serviceable', and also items undergoing technical investigation and warranty claims; and
- 'non-repairable' category comprises items that have reached the end of their useable life, have become obsolete, or are beyond economical repair. 'Non-repairable' items are effectively held on account awaiting disposal, often through wholesale detonation twice per year at Woomera Range.

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<sup>42</sup> Defence indicated that the increases in items categorised as other than 'serviceable' are consistent with the higher operational commitment and increases in funding and procurements.

<sup>43</sup> As at 30 June 2005 the recorded value of Defence's explosive ordnance exceeded \$2 billion.

**Figure 3.1****Destruction of explosive ordnance at Woomera Range**

Source: Department of Defence.

**3.3** In early 2005, the GWEO Branch established a Project to review the level of other than 'serviceable' explosive ordnance. The objective of the Project is to reduce the value of explosive ordnance classified as other than 'serviceable' to less than 25 per cent of total inventory value by December 2006. The review will focus on defined categories which excludes obsolete and out-of-life inventory.

**3.4** In October 2005, the DMO indicated that the value of other than 'serviceable' inventory was \$1.04 billion. This figure comprised \$378 million of obsolete and life-expired inventory up from \$315 million in March 2005. The DMO advised the ANAO that the recent withdrawal from service of a large number of missiles which are awaiting disposal was skewing these figures upwards. The DMO also advised that other temporary distortions derive from large value explosive ordnance deliveries from overseas, usually twice yearly, that are held on account as 'pending' awaiting receipt inspection before transferring to 'serviceable'.

## **Assessment of the safety and suitability for service**

**3.5** Legacy explosive ordnance is ordnance currently in-service for which there is no clearly identifiable audit trail regarding the safety and suitability for

service. A Legacy Explosive Ordnance Project was established following a Board of Inquiry into the death of a soldier in 1998, due to the initiation of a fragmentation grenade. An initial scoping study for the Legacy Explosive Ordnance Project was conducted in May 2000 and a subsequent scoping study was conducted in November 2002. A December 2002 DMO report on legacy explosive ordnance identified that it would take between five to 14 years to address all legacy explosive ordnance issues, depending on the number of personnel assigned to the task.

**3.6** ANAO Audit Report No.30, 2002–03 *Defence Ordnance Safety and Suitability for Service* noted that significant proportions of explosive ordnance inventory could be regarded as legacy ordnance. In response to ANAO concerns, the DMO agreed that there was a need to take urgent action to address the legacy explosive ordnance issues.

**3.7** In 2005, the DMO acknowledged that it had been unsuccessful in addressing legacy explosive ordnance issues. Reasons cited included a lack of resources and required skill sets; the absence of a project management methodology; and inaccuracies in supporting information systems.

**3.8** Documentation indicates that since 2003, other than improvements associated with airdrop assessments, no legacy items had been subject to a full safety and suitability for service assessment. Defence advised that the Legacy Explosive Ordnance Project did not achieve the planned results in 2004–05 due to personnel resource limitations and priority being given to tasks such as airdrop assessments required by Army Headquarters.

**3.9** In late 2005, the GWEO Branch developed a further scoping study for Project Phoenix which is a medium-term initiative to re-establish and maintain full technical integrity in the management and use of the ADF's explosive ordnance.

**3.10** Safety and suitability for service assessments procedures require a safety case to be developed and approved for explosive ordnance not currently in-service prior to introduction into service<sup>44</sup>. Procurement authorities are responsible for obtaining technical data in support of all new or modified materiel systems and equipment<sup>45</sup>. This data enables the conduct of a safety

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<sup>44</sup> Operations Manual (OPSMAN 4) outlines procedures relating to safety and suitability for service assessments and requires a Safety Case to be developed and approved for explosive not currently in service prior to commencing procurement action.

<sup>45</sup> The input for the safety and suitability for service assessment is a developing, or developed, technical data pack.

and suitability for service assessment<sup>46</sup>. The ANAO noted several instances where the DMO was not able to obtain the required data at the time of procurement. In some instances, operational needs were the reason provided to justify not obtaining all required data at the time of procurement. However, this was not the case in all instances identified through audit fieldwork.

**3.11** In some instances, the requirement to expend funds has been afforded priority over securing necessary technical data prior to finalising contract negotiations. Defence acknowledged that technical data is more difficult to obtain following the letting of a contract.

**3.12** For example, both procurements of the Bolide missiles in 2002–03 and 2003–04, totalling \$59.9 million, experienced difficulties in obtaining all technical data required to complete the safety and suitability for service assessment (see also Chapter 6)<sup>47</sup>. The previous version of the Bolide missile, the RBS-70, is classified as legacy explosive ordnance. Defence documentation indicates that while the safety and suitability for service assessment has not been completed for the Bolide missile, it is not considered legacy explosive ordnance, as they are new procurements. All new procurements require the full rigour of OPSMAN 4 to be applied to satisfy duty of care requirements.

**3.13** In December 2005, the DMO advised the ANAO that the Explosive Ordnance Certification Plan for the Bolide missile was regarded to be 90 per cent complete. Further testing and evaluation is to occur in early 2006, twelve months after delivery of the first batch of Bolide missiles. The ANAO notes that a primary justification for the prepayments in 2002–03 was to provide accelerated delivery of the missiles (see Chapter 6).

**3.14** In March 2006 the DMO advised as follows:

DMO has strengthened its contracting policy and processes with the objective of improving technical data availability, but there will remain occasions when

<sup>46</sup> Defence indicated that the main purpose in acquiring technical data is to obviate, to the maximum extent practicable, the need to perform lengthy and expensive testing that would otherwise be necessary for establishing confidence that explosive ordnance is safe and suitable for service. Where technical data cannot be acquired to demonstrate the safety and suitability for service explicitly, there is still an option to accept the explosive ordnance into service through risk analysis, and or supported by testing and functional requirements.

<sup>47</sup> The DMO advised that the original intention was to purchase RBS-70 missiles that were already in-service and integrate them onto the parent firing platform. Following inquiries it was identified that the RBS-70 missile had been replaced by a 3<sup>rd</sup> generation missile renamed the 'Bolide'. Bolide was sufficiently different to the RBS-70 as to warrant a repeat safety and suitability for service assessment. Had Bolide not been purchased as an upgraded version of the RBS-70 missile, Army would have had no low-level air self-defence capability because the RBS-70 was no longer manufactured. The DMO advised that it was therefore necessary to fulfil an emerging high-priority capability gap quickly and resolve technical governance issues subsequently.

the choice will be to accept the technical data that can/will be provided, or, not to purchase. In many of these situations it will not be possible to take a 'not purchase' decision because it will impact on ADF capability. In these cases it is necessary to address the gap in technical data through physical testing and/or desk-top risk based analysis. The risk analysis is a standard procedure within the development framework for the Explosive Ordnance Design Certificate required for all new explosive ordnance introduced into the ADF inventory.

## **Recommendation No.4**

**3.15** The ANAO recommends that the Defence Materiel Organisation develop specific performance indicators and establish procedures to monitor the effectiveness of processes to improve the serviceability of all explosive ordnance.

### *Agency response*

**3.16** Defence and DMO response: Agreed.

## **Availability of qualified technical personnel**

**3.17** In 2000, the DMO identified that the formation of JALO resulted in a significant loss of personnel possessing explosive ordnance experience and qualifications. This was attributed to functions formerly being performed by qualified technical personnel being transferred into JALO, but thereafter not being properly resourced.

**3.18** Reviews conducted by the GWEO Branch during 2004 and 2005 of its technical staff identified that a significant proportion of the technical workforce were aged 45 and over. The Review indicated that attrition rates were exceeding intake rates at Defence Establishment Orchard Hill, where the majority of the GWEO Branch's technical and professional positions are located. The 2005 report noted that personnel restrictions, inadequate succession planning and the lack of availability of training were limiting the GWEO Branch's capacity to sustain a well-balanced workforce.

**3.19** The ANAO considers that these personnel management issues have adversely impacted on the capacity of the DMO to address explosive ordnance serviceability and remediate legacy explosive ordnance issues. Defence advised the ANAO that major reasons for the degradation in serviceability and the capacity to remediate legacy explosive ordnance issues were a Defence-wide staffing freeze, higher-priority tasks and significant increases in support for current operations.

**3.20** In October 2005, a GWEO Branch Renewal Strategy was developed in acknowledgement of the ageing workforce issues. The plan developed for this initiative encompasses a range of issues including a training and recruitment framework; the relationship with ADI as a service provider; the development of key workforce planning performance indicators; and technical data management. Many of these issues are not new to the management of explosive ordnance within the DMO and the ANAO considers that the renewal strategy will need to be closely monitored and reviewed to confirm that it is contributing to improved workforce planning outcomes.

## **Recommendation No.5**

**3.21** The ANAO recommends that the Defence Materiel Organisation establish appropriate targets for the implementation of the workforce renewal strategy and implement processes to monitor progress against these targets.

### *Agency response*

**3.22** Defence and DMO response: Agreed.



## 4. Domestic Supply

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*This chapter outlines the management of contracts for the domestic manufacture of munitions, high explosive and propellant.*

### Background

**4.1** In May 1989, the Government established Australian Defence Industries Limited (renamed ADI Limited in 1996) as a wholly owned Government corporation to replace the Office of Defence Production. In 1989, Australian Defence Industries assumed responsibility for six ammunition factories through a Deed of Transfer. Many of these factories were established prior to and during the Second World War. Australian Defence Industries rationalised these explosive factories to two sites. These were through the establishment of a munition manufacturing facility near Benalla in Victoria<sup>48</sup> and the consolidation of propellant and high explosive production to the existing Mulwala Facility in southern New South Wales<sup>49</sup>.

**4.2** During the 1990's, Defence reviewed the need to maintain the capacity to domestically manufacture ammunition. In 1998, Defence reaffirmed the requirement for a viable domestic munitions manufacturing capability until at least 2030. In November 1999, the Government sold its shareholding in ADI at a negotiated price of \$346.8 million<sup>50</sup>. Defence retained ownership of the Mulwala Facility.

**4.3** Table 4.1 compares the proportion, by value, of non-guided explosive ordnance procured domestically to that procured from overseas sources.

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<sup>48</sup> Defence advised the ANAO that the Benalla Facility was constructed by ADI in accordance with the 1993 Long Term Agreement (LTA). ADI was to construct the facility and Defence would procure certain munitions from ADI until 2015. ADI suggested that those arrangements and the strategic principles of operation that flow from the LTA are the cornerstone of the SAMS negotiations. ADI indicated that the building and funding of the Benalla Facility (\$146.37 million in February 1992 dollars) was only undertaken by ADI on the basis that the Australian Government would enter into a long-term arrangement (20 years) to purchase specific quantities and types of munitions. The concept of the capability payment was introduced through renegotiations of the Agreement in the late 1990's.

<sup>49</sup> Following representations by Australian Defence Industries, the Mulwala Facility was returned to Defence ownership in 1993. Australian Defence Industries asserted that it could not cost effectively operate the plant given the overheads associated with running an inefficient and sub-optimal facility that required both modernisation and the rectification of significant occupational health and safety and environmental issues. Australian Defence Industries continued to operate the Mulwala Facility.

<sup>50</sup> The purchaser of ADI was Transfield Thomson-CSF Investment Pty. Ltd. which represented a joint venture between Transfield Holdings Pty. Ltd. Group and the French listed company Thomson-CSF Group (now Thales).



Overall, 62 per cent of explosive ordnance is sourced from overseas suppliers. Guided weapons, such as missiles, are not included in Table 4.1.

**Table 4.1**

**Comparison, by value, of non-guided explosive ordnance procured from domestic and overseas suppliers - March 2005**

Type of explosive ordnance product	Domestic %	Overseas %
Medium calibre including artillery and tank ammunition.	40	60
Bombs and close support including small arms ammunition, grenades and aircraft bombs.	50	50
Pyrotechnics, countermeasures, flares and aircraft egress.	10	90
<b>Total</b>	<b>38</b>	<b>62</b>

Note: The values used to calculate the domestic proportion do not include approximately \$80 million per annum in payments made to the supplier under the SAMS and Mulwala Agreements. The values used to calculate the overseas proportion would include costs such as margins and overheads, which form part of the capability payment made under the SAMS and Mulwala Agreements. Defence advised that the domestic/international split is driven by Defence's changing needs, and unless the Benalla Facility manufacturing capabilities are incrementally adjusted to reflect changes in requirements, the facility will become progressively redundant and the balance will shift away from domestically sourced explosive ordnance.

Source: DMO.

**4.4** Two interrelating contracts guarantee the future of ADI as the principal domestic explosive ordnance supplier to Defence. These are the Mulwala Agreement and the SAMS Agreement. Both the Mulwala and the SAMS Agreements were negotiated between Defence and ADI in 1998. Amendments were then negotiated with the purchasers of ADI in 1999. The GWEO Branch within the DMO is responsible for the ongoing management of these contracts.

## Mulwala Agreement

**4.5** The Mulwala Agreement was negotiated to replace a facility lease arrangement and the 'Defence Required Support Arrangements'. These arrangements were for differing durations and the decision was taken to consolidate both into a single agreement with the same duration as the SAMS Agreement<sup>51</sup>.

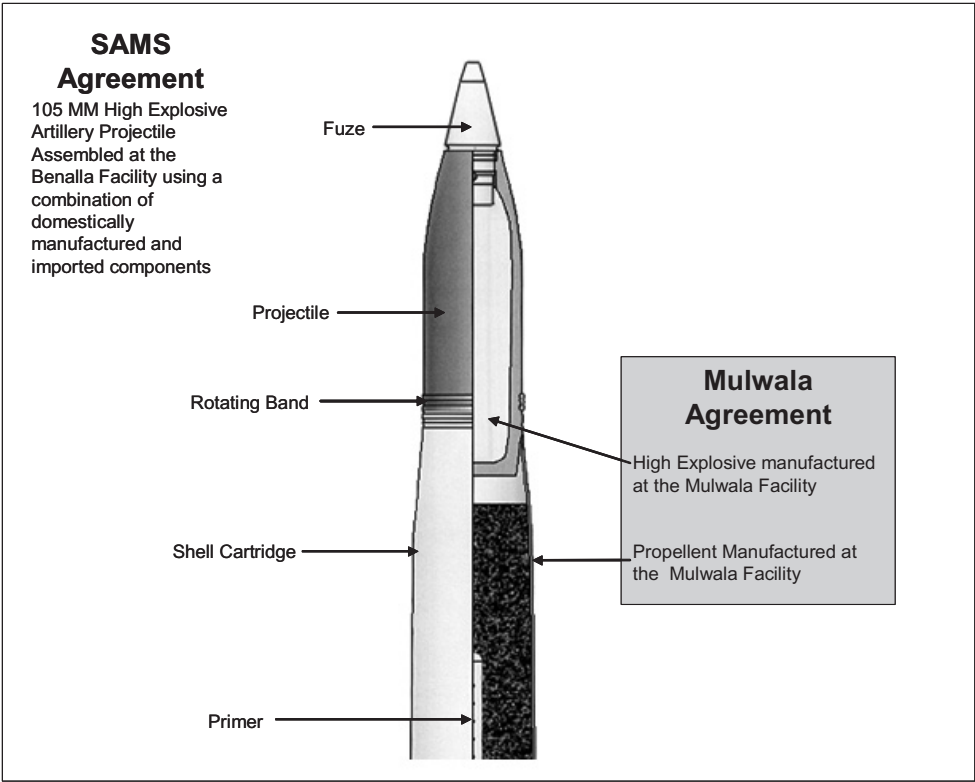
**4.6** Mulwala's product is either supplied to the Benalla Facility for incorporation into ammunition purchased by Defence; supplied directly to

<sup>51</sup> ADI indicated that it was also intended to maximise the use of the Mulwala Facility to supply propellants and explosives.

Defence as a finished product; or is sold into the commercial propellant and specialty chemicals market. Figure 4.1 illustrates the components supplied to the Benalla facility under the Mulwala Agreement and those manufactured or assembled under the SAMS Agreement using a 105mm high explosive artillery round as an example.

**Figure 4.1**

**Components of a 105mm high explosive artillery round**



Source: Adapted from DMO documentation.

**4.7** The Mulwala Agreement requires the DMO to pay the supplier approximately \$31 million per annum. This figure comprised \$25.8 million in the form of a capability payment in 2005; and approximately \$5 million per annum paid to ADI for repairs and maintenance to plants, buildings and infrastructure associated with the capability being a government owned facility. The capability payment covers overhead costs and expenses such as

rent, repairs maintenance and capital improvements. The production cost of propellant and high explosive is additional to the capability payment<sup>52</sup>.

**4.8** Propellant and high explosive are supplied to the Benalla Facility at a transfer price which is the sum of direct material costs and variable production costs<sup>53</sup>. Transfer prices and capability payments are reviewed annually through a Payment Basis Review process, involving a submission by ADI, which is reviewed by Defence cost investigators.

**4.9** The provisions of the Mulwala Agreement required ADI and the DMO to undertake a Strategic Review into the modernisation of the Mulwala Facility. The 1999 Review was commissioned to consider the strategic requirements of Defence; identify improvements required to the Mulwala Facility to ensure compliance with applicable laws; and improvements necessary to ensure the suppliers ability to meet Defence requirements and generate additional commercial sales.

**4.10** The preferred option identified in the Strategic Review was for the replacement of essential nitrocellulose<sup>54</sup>, solvent and propellant processes at the Mulwala Facility by purchasing turnkey<sup>55</sup> plants. The estimated initial capital cost was in the order of \$150 million over five years, with an estimated amortised accrual cost of just under \$1.4 billion over 30 years. Defence calculated in 1999 that this represented an \$18 million per annum premium over the estimated net present value of imported products. The upgrade is scheduled for completion by 2010–11.

**4.11** At the time of audit fieldwork the DMO was seeking and evaluating tenders for the redevelopment of the Mulwala Facility.

## Strategic Agreement for Munitions Supply (SAMS)

**4.12** The 1998 SAMS Agreement replaced the 1993 Long Term Agreement with Australian Defence Industries. The SAMS Agreement details the required capability of the Benalla Facility including the types and quantities of

<sup>52</sup> Neither the Mulwala capability payment nor the price of propellant or high explosive supplied to the Benalla Facility includes a profit component. Where ADI make commercial sales, using parts of the Mulwala Facility funded by the DMO, profit sharing arrangements apply as consideration for making munitions products for the DMO. The ratio of profit sharing between ADI and the DMO is calculated based on the value of profit derived.

<sup>53</sup> Variable production costs include labour at cost and variable overhead costs.

<sup>54</sup> Nitrocellulose is a highly flammable material used in the manufacture of propellant.

<sup>55</sup> Turnkey refers to a supply of equipment in a state ready for operation.

ammunition produced; whether ammunition components are to be sourced domestically or imported; and production lead-times<sup>56</sup>. Subject to certain requirements being met, the Agreement provides ADI with exclusive supply rights for the munitions identified in the Agreement. The Agreement also sets out a plan for an additional munitions production capability to be installed at the Facility.

**4.13** Examples of some of the munitions manufactured under the SAMS Agreement for Army include 5.56mm ammunition used by the Austeyr rifle, 25mm ammunition used by the Australian Light Armoured Vehicle (ASLAV) and 105mm artillery ammunition. A combination of domestic and imported components is a characteristic of most munitions manufactured at the Benalla Facility.

**4.14** The SAMS Agreement is subject to review in 2008, 2015 and every ten years thereafter. Alternatively, the DMO may terminate the Agreement by giving three years notice, at the end of the initial term in 2015, or the end of the current term thereafter. Subject to all moneys being paid on termination of the Agreement, the DMO has the right to exercise a bargain purchase option to acquire the Benalla Facility for one dollar.

**4.15** The SAMS Agreement requires the DMO Contract Authority and an ADI counterpart to meet twice yearly, and the ADI Chief Executive Officer and the Secretary of the Department of Defence, or their alternates, to meet annually (Review Meetings). The purpose of these meetings is to consider a range of contract management issues including changes to capability; amendments to the SAMS Agreement; quality management; forecasting and planning; audits; and performance issues. The SAMS Agreement also requires representatives of the DMO and ADI to meet quarterly to discuss the progress of contracts for the supply of munitions placed under the SAMS Agreement (Contract Progression Meetings).

**4.16** In October 2005, the DMO advised the ANAO that a review had commenced into the SAMS Agreement (the SAMS Review). The DMO indicated to the ANAO that a statement of principles for the SAMS Review had been negotiated with the supplier in December 2005, and that the DMO had signed off on the statement and it was being considered by the supplier. The DMO advised that it had undertaken a detailed examination of the cost model, payment structure and the performance and incentive regime under

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<sup>56</sup> Defence advised that the annual quantities in the SAMS Agreement were determined under the 1993 LTA and represented the forecast steady-state requirements of Defence in 2004–05.

the Agreement, with a view to identifying specific opportunities to improve productivity and efficiency of munitions supply under the Agreement<sup>57</sup>.

## Security over the SAMS Agreement

**4.17** The Government, ADI and entities providing finance for the purchase of ADI shares<sup>58</sup> entered into a Multi-Party Deed in November 1999. The Multi-Party Deed takes precedence over any other SAMS document and provides security over the Benalla Facility to the financial bond holder<sup>59</sup>. Defence advised that approximately \$22.8 million of the \$50 million annual capability payment passes directly to the bond holders as interest payments on the investment for constructing the Benalla Facility.

**4.18** The SAMS Agreement provides that the DMO agrees to suspend its right to abate any of the capability payments or terminate the SAMS Agreement for a period defined in the Multi-Party Deed. During this period the Bond Trustee can submit a plan to remedy the associated default or identify a replacement operator for the Benalla Facility. Additionally, the Multi-Party Deed limits the DMO's capacity to exercise other rights where a Bond Party considers that the exercise of those rights may prejudice any Bond Party.

**4.19** The DMO advised the ANAO that the implications of the Multi-Party Deed are being examined in the context of the SAMS Review and will be addressed in the course of negotiations with the supplier, and if appropriate with the bond holders.

## Amending the SAMS Agreement

**4.20** Amendments to the SAMS Agreement may only occur in accordance with arrangements set out in the Agreement. Under these provisions the supplier prepares an Agreement Change Proposal, which the DMO can either accept or reject.

<sup>57</sup> The DMO advised that a project manager has been appointed and a detailed review is to commence with ADI in the first quarter of 2006.

<sup>58</sup> ADI advised the ANAO that it is important to note the role played by the SAMS Agreement in determining the value the Australian Government extracted from the sale of ADI. Along with the other assets the shareholders paid nearly \$350 million to the Australian Government to secure the income stream and profit generated under the SAMS Agreement. In fact, the purchaser raised funds from the bond holders using the SAMS Agreement as security, leading to the Multi-Party Deed.

<sup>59</sup> The Multi-Party Deed requires that during the security period the DMO, subject to certain conditions, shall pay all amounts which would otherwise be payable in respect of the SAMS Agreement into an account specified by the Bond Trustee.

**4.21** The DMO has not had an up to date version of the SAMS Agreement since 2000. The version of the SAMS Agreement provided to the ANAO, in early 2005, did not incorporate any of the 20 accepted Agreement Change Proposals, the first of which was approved in mid 2000. The June 2004 Contract Progression Meeting agreed that a team comprising DMO and ADI representatives would be established to develop a timeframe for the incorporation of outstanding amendments into the SAMS Agreement. Documentation indicates that the production of an up to date SAMS Agreement has been a recurring topic at Contract Progression Meetings since 2001.

**4.22** The February 2005 Contract Progression Meeting identified that the accepted Agreement Change Proposals were at various stages of development and that some attachments were either missing or yet to be completed. The ANAO also identified a number of areas where practices had diverged from the requirements of the SAMS Agreement without an Agreement Change Proposal being developed to formalise these arrangements.

**4.23** In October 2005, the DMO advised the ANAO that the terms of reference for the SAMS Review included establishing a SAMS Agreement Baseline. This Baseline is to incorporate all accepted Agreement Change Proposals into the SAMS Agreement, and also other amendments which may have been agreed but not formally processed in accordance with the SAMS Agreement.

**4.24** The absence of an up to date contract calls into question the basis on which the contract has been able to be effectively administered by the DMO. The financial and legal risk to Defence and the DMO from the absence of a valid contract for over five years is considerable. An October 2005, legal opinion obtained by the DMO advised that reconstructing the SAMS Agreement based on the information available, with any clarity or accuracy, must in all respects be regarded as almost impossible without at least the application of significant legal and commercial resources, which may in any event prove unproductive. In December 2005, the DMO advised that based on records held by the DMO and ADI, a 2005 baseline had been prepared by DMO's legal advisers and is being reviewed by DMO as part of a package of materials which will form the basis for the SAMS Review and renegotiation.

## Recommendation No.6

**4.25** The ANAO recommends that the Defence Materiel Organisation complete a SAMS Agreement remediation programme to:

- (a) update the SAMS Agreement to reflect an agreed contract baseline between the parties; and
- (b) implement version control arrangements to ensure that the SAMS Agreement remains up to date and available to staff.

### *Agency response*

**4.26** Defence and DMO agreed to all parts of the recommendation and commented that:

- (a) Agreed. The DMO has signed a Statement of Principles with ADI for the review of the SAMS Agreement.
- (b) Agreed. The DMO has reverted to the current contracted obligations in accordance with the SAMS contract.

## **Payment arrangements under the SAMS Agreement**

**4.27** Payments made by Defence<sup>60</sup> under the SAMS Agreement are in two forms, namely a capability payment; and payments made for the delivery of specific munitions orders<sup>61</sup>. Both types of payments are established through an annual Payments Basis Review and in line with amendments to the SAMS Agreement.

### *Capability payment*

**4.28** The supplier receives a Capability payment in the order of \$50 million per annum from the DMO to maintain the capability to manufacture explosive ordnance at the Benalla Facility. By July 2005, the DMO had paid the supplier in the order of \$265 million in capability payments under the SAMS Agreement. Army, as the primary user of ammunition supplied under the SAMS Agreement, is apportioned the largest proportion of the capability payment.

<sup>60</sup> ADI advised the ANAO that the essential factor in reducing the cost of maintaining the capability is to maximize utilisation, and this can only be done by continuously keeping the capability relevant to the changing needs of the ADF through careful planning and analysis.

<sup>61</sup> The price payable for munitions procured under the SAMS Agreement is based on the adjusted prime cost. This incorporates direct material and labour costs, ADI's share of associated savings and additional costs incurred as a result of inaccuracies in the DMO's forecast requirements.



**4.29** The capability payment represents the sum of the total return on and of the investment, regular overhead costs, the suppliers share of regular overhead savings and unrecovered prime costs<sup>62</sup>. During the initial term of the Agreement the rate of return is derived by adding an average ten year bond rate to a constant margin for risk. At the time the Contract was signed, in 1999, the total return payable by Defence<sup>63</sup> was estimated at \$591.1 million over the initial term of the Agreement. This was based on an initial investment of \$176.8 million. Extension of the SAMS Agreement beyond the initial term is contingent on the supplier and the DMO agreeing to a satisfactory pricing methodology.

**4.30** The capability payment comprises two components. The first component represents 80 per cent of the total capability payment, and is paid in two equal instalments on 1 July and 1 January each financial year. The capability payment remains payable irrespective of whether the DMO places any contracts for munitions in a financial year with the supplier.

**4.31** The remaining component of the capability payment is incentive based. The incentive component is based on the percentage that actual deliveries in a month represent of scheduled deliveries, and is paid in monthly instalments. Where deliveries do not occur as scheduled, a portion of the capability payment is withheld until the month when the delivery occurs. If there are no deliveries scheduled for a month, the capability payment for that month is payable in full.

**4.32** Where the supplier uses the production capability established under the SAMS Agreement to make commercial sales, the DMO shares the related profits equally with the supplier. The DMO's share of the profit from commercial sales is calculated through the Payment Basis Review process, and is subtracted from the capability payment. The resultant reduction to the capability payment has been less than one per cent of the capability payment in all instances<sup>64</sup>.

### *Payment Basis Reviews*

**4.33** The purpose of the Payment Basis Review is to calculate the capability payment and contract prices that will apply to future deliveries under the

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<sup>62</sup> Unrecovered prime costs involve the transfer of direct costs to indirect costs due to low volume orders.

<sup>63</sup> SAMS Agreement - Schedule 4, Annexure C, Appendix 1

<sup>64</sup> ADI indicated that a range or intellectual property and other legislative restrictions have implications on the capacity to generate commercial sales.



SAMS Agreement (see Figure 4.2). This is achieved by adjusting a series of costs and benchmarks associated with the SAMS Agreement<sup>65</sup>. The supplier submits a detailed report containing costs, savings and calculations associated with the SAMS Agreement one month prior to the conduct of a Payment Basis Review. This data is cost investigated by the DMO in liaison with the supplier.

**4.34** Prior to late 2004, the SAMS Agreement provided that Payment Basis Reviews were to be conducted annually on or about 31 August. The ANAO examined the 2002 Payment Basis Review, which was submitted by the supplier in December 2002 and was approved by the DMO, subject to cost investigation, in May 2003. The ANAO was unable identify any mechanisms within the Agreement for the DMO to give provisional approval to a Payment Basis Review.

**4.35** The cost investigation for the 2003 Payment Basis Review, for which the supplier submitted documentation in December 2003, was not finalised until December 2004. The DMO advised that the delay was due to structural changes in the DMO resulting in cost investigators, which previously provided direct support to the GWEO Branch, becoming a shared resource. In June 2005, the cost investigation was not complete for the 2004 Payment Basis Review. Reasons identified by the DMO as contributing to the delay included the lack of suitably qualified DMO staff and inadequate coordination of activities with the supplier<sup>66</sup>.

**4.36** The supplier did not provide the 2004 Payment Basis Review submission to the DMO until February 2005, some five months after the due date. The submission indicated that a factor contributing to this delay was the lack of confirmation of required quantities, through requests for quotations, by the DMO for delivery in the relevant year. The SAMS Agreement required this information to be provided to the supplier by 1 July 2004. This did not occur until November 2004. The late submission of request for quotations by the DMO has been a recurring issue since the 1999 Payment Basis Review. The DMO advised the ANAO that the SAMS Review will investigate mechanisms to more clearly articulate arrangements to resolve situations where there is a delay in completing a Payment Basis Review.

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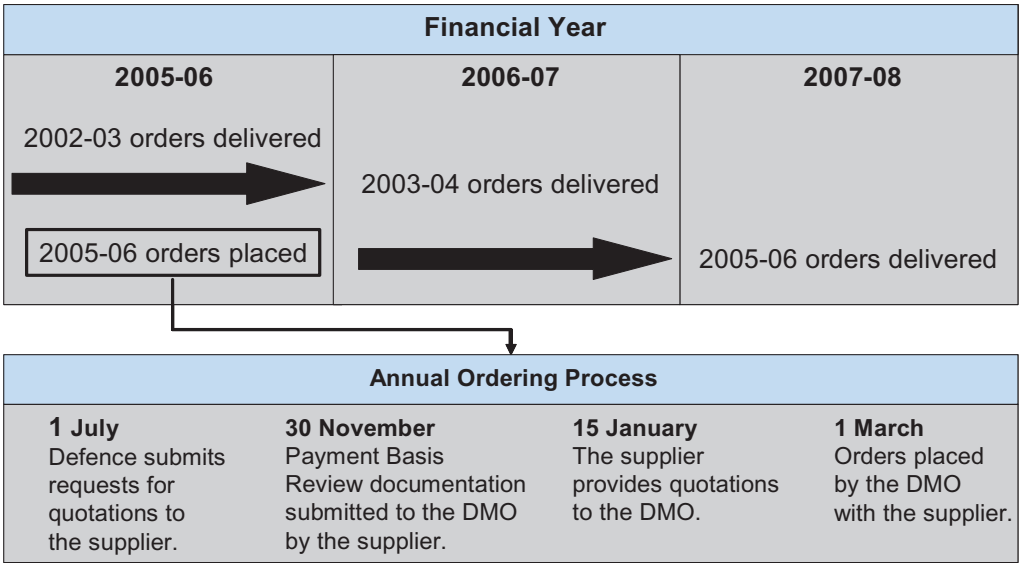
<sup>65</sup> These include recalculating the benchmark and adjusted regular prime cost; resetting the rate of return; verifying the project investment and total return; determining each party's share of any savings; and determining the DMO's share of profit on commercial sales.

<sup>66</sup> In March 2006, the ANAO was advised that the resource allocation issue, with respect to cost investigators, had been resolved between Defence and the DMO.

**4.37** An Agreement Change Proposal, approved in late 2004, shifted the Payment Basis Review date from 31 August to 30 November<sup>67</sup>. The requirement for Defence to submit requests for quotation by 1 July was unchanged. The deadline for the supplier to submit quotations was extended from 15 October to 15 January, and Defence order placement from 30 November to 1 March (see Figure 4.2).

**Figure 4.2**

**Annual ordering cycle: 2005–06 to 2007–08**



**Note:** Under the provisions of the SAMS Agreement the DMO is required to provide ADI with indicative planning data on projected munitions requirements and revisions for the ensuing five year period by 28 February each year.

**Source:** Adapted from DMO documentation.

**4.38** The MSA between the Chief of Army and the Chief Executive Officer of the DMO includes an explosive ordnance requirements process timeline. Army is required to provide the DMO with initial explosive ordnance consumption forecasts in December 2005 for 2006–07. Final explosive ordnance requirements for 2006–07 are to be agreed between the DMO and Army by June 2006.

**4.39** Table 4.2 compares the timeframes set out in the MSA to the requirements to submit requests for quotations and orders for munitions under the SAMS Agreement. The deadline for agreement between Army and the DMO on the annual explosive ordnance requirements occurs some time after

<sup>67</sup> This change was due to the availability of Australian Bureau of Statistics indices used to escalate benchmarks.

deliveries for that year are required to be identified to the supplier under the SAMS Agreement. Defence acknowledged, in October 2005, that the timings between the SAMS Agreement and the MSA were not in alignment and negotiations were underway between the DMO and the Services to address this issue<sup>68</sup>.

**Table 4.2**

**Comparison between SAMS Agreement and MSA deadlines: 2006–07**

Process	Agreement	Due Date	Requirement
<b>Forecast requirements</b>	SAMS	1 July 2004	The DMO is required to submit Requests for Quotations to the supplier for explosive ordnance to be delivered in 2006-07.
	MSA	December 2005	Army is required to provide explosive ordnance consumption forecasts for 2006-07 to the DMO.
<b>Actual requirements</b>	SAMS	1 March 2005	The DMO is required to place orders with the supplier for deliveries in 2006-07.
	MSA	May/June 2006	Army and the DMO to agree on final explosive ordnance requirements for 2006-07.

Source: Adapted from DMO documentation.

## Recommendation No.7

**4.40** The ANAO recommends that the Defence Material Organisation and Defence develop planning processes to determine explosive ordnance requirements that align deliveries of explosive ordnance under the SAMS Agreement to Army's planned explosive ordnance consumption.

### Agency response

**4.41** Defence and DMO response: Agreed.

## Performance management

**4.42** Following a Payment Basis Review, the SAMS Agreement is required to be amended by an Agreement Change Proposal to include updated cost and savings data. The version of the SAMS Agreement provided to the ANAO did not include this data beyond 1999–2000. The 1999–2000 data had been inserted under another provision within the Agreement.

<sup>68</sup> In December 2005, the DMO indicated that GWEO Branch and ADI are planning changes to the Payment Basis Review timings to align with revised Materiel Sustainment Agreement timings.

**4.43** The Payment Basis Review submissions following the cost investigation for both the 2002 and 2003 are not identified as Agreement Change Proposals. The DMO advised the ANAO that in 2001 it was agreed with the supplier that Payment Basis Review data would not be included in the SAMS Agreement through Agreement Change Proposals as this was considered a duplication of information available through working papers. The ANAO was unable to identify an Agreement Change Proposal which amended the SAMS Agreement to remove the requirement to include the outcomes of Payment Basis Reviews in the Agreement. The DMO advised the ANAO that agreement was reached between the parties without an Agreement Change Proposal being executed to formalise the change.

**4.44** The 2000 Payment Basis Review documentation was the last that included detailed cost data in the format set out in the SAMS Agreement. Since that Payment Basis Review it has become increasingly difficult to derive key cost data from the agreed outcomes of the Payment Basis Review Process which are co-signed by the DMO and the supplier. A 2004 Review of the SAMS Agreement noted that numerous variations to this cost data, held by various personnel, created difficulties in identifying the correct version. In December 2005, the DMO indicated that from the completion of the 2004 Payment Basis Review, the DMO will adhere to the prescribed SAMS Agreement requirements.

**4.45** As the Benalla Facility was not fully operational at the time of execution of the SAMS Agreement the setting of productivity targets was regarded to be unrealistic<sup>69</sup>. The SAMS Agreement provides that the DMO and the supplier shall agree to a cost reduction target by 30 June 2003 for inclusion in a schedule to the SAMS Agreement. Once agreed, that target was to be reviewed by subsequent Payment Basis Reviews. In mid 2005, the DMO advised the ANAO that this target had not been set.

**4.46** Since late 2004, the DMO and the supplier have been involved in discussions regarding costs associated with the SAMS Agreement. The ANAO considers that the ineffective maintenance of Payment Basis Review cost data has adversely impacted upon Defences negotiating position and the effective stewardship of Government resources. In December 2005, the DMO indicated that the cost reduction targets stipulated in the SAMS Agreement, including a

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<sup>69</sup> ADI advised the ANAO that a requirement of setting productivity targets was also to see a steady state ordering pattern develop. ADI indicated that DMO ordering has not done this, notwithstanding the fact that both the DMO and ADI agree that productivity is heavily influenced by the ordering pattern and product mix.

formal performance measurement structure, are being considered in the broader context of the SAMS Review.

## Recommendation No.8

**4.47** The ANAO recommends that the Defence Materiel Organisation reinstate mechanisms to record and update cost data in accordance with the requirements of the SAMS Agreement.

### *Agency response*

**4.48** Defence and DMO response: Agreed.

## **Changes to munitions produced under SAMS for Army**

**4.49** Agreement Change Proposals have removed some types of ammunition used by Army from the required production capability at the Benalla Facility. Others have introduced additional capabilities or expanded existing capability requirements. Additional capabilities have included the 81mm mortar and 25mm ammunition. Expanded capabilities have included an increased capacity to produce 5.56mm ammunition.

**4.50** The following case studies outline processes associated with the establishment of an 81mm mortar manufacturing capability and the expansion of the 5.56mm ammunition manufacturing capability. These case studies demonstrate a range of weaknesses in the DMO's management of changes to the capability of the Benalla Facility. These include inadequate analysis of costs; inadequately defined long-term forecasts of explosive ordnance requirements; and ineffective liaison between the DMO and Army in relation to these changes. In response to these case studies the DMO has indicated that strategic considerations are key factors in determining value for money.

## Case Study 1: Establishment of the 81mm mortar capability

**4.51** The SAMS Agreement envisaged the establishment of the 81mm mortar capability at the Benalla Facility. Army's 2001 Firepower Policy concluded that the 81mm mortar continued to be suited, subject to some limitations, to supporting infantry forces particularly in terrain that prevents the employment of towed or mounted indirect firepower. The Policy also identified that the 120mm mortar had a long-term capacity to support the enhanced combat force. The Firepower Policy identified that most European nations were discarding the 81mm mortar in all but niche roles, in favour of the 120mm mortar, as was the US Interim Brigade Combat Team. The 2000 Defence White Paper indicated that 20, 120mm mortar systems would be procured for mounting on ASLAVs in 2006.

**4.52** At a Contract Progression Meeting in early 2004 the supplier was requested to resubmit a mortar cartridge business case, which previously included both the 81mm and the 120mm mortar cartridge, to include only the 81mm mortar. This was provided to Defence in October 2004. In December 2004, an Agreement Change Proposal was signed to install the 81mm capability. The 2004 Agreement Change proposal indicated a total investment of \$4.9 million, and a total return on and of the investment of \$8.2 million. This figure does not include the cost of any mortar cartridges procured and associated overhead costs.

**4.53** Under the terms of the SAMS Agreement the DMO has the authority to undertake cost investigations of Agreement Change Proposals. The DMO were requested by the ANAO to provide copies of any cost investigations relating to this Agreement Change Proposal. The DMO advised the ANAO that this Agreement Change Proposal was not cost investigated prior to being accepted but that the investment would be reviewed as part of the annual Payments Basis Review process once the capability is established.

**4.54** The DMO did not have a business case or comprehensive financial analysis to support the establishment of the 81mm mortar capability.

## Case Study 2: Increasing the capacity to produce 5.56 mm ammunition

**4.55** In December 2003, an Agreement Change Proposal was signed to increase the existing single shift production capability to manufacture 5.56mm ammunition, by June 2006. The justification cited by the DMO for the increased capacity was forecast requirements out to 2007–08. The 2003 Agreement Change Proposal indicated a total investment of \$18 million, and a total return on and of the investment of \$30.3 million. This figure does not include the cost of ammunition procured and associated overhead costs.

**4.56** ANAO audit testing revealed that the DMO was not able to provide documentation to demonstrate the increased demand to justify the expanded capability. In support of the expanded capability, the DMO provided an undated spreadsheet, indicating a consumption forecast ranging from marginally higher than the existing single shift capacity to a much higher level of consumption based on the Explosive Ordnance Baseline, which is acknowledged as being beyond the consumption capacity of Army (see Chapter 2). No documentation could be provided by the DMO to indicate that Army agreed to this expansion in capability prior to the Agreement Change Proposal being approved.

**4.57** The DMO advised that the performance of the 5.56mm ammunition manufactured at the Benalla Facility is different to that available from other countries. The DMO indicated that the cost to trial and modify ball ammunition from another country to suit the Austeyr, also manufactured by the supplier, would be a costly and time consuming exercise. Blank ammunition represented a significant proportion of the forecast consumption relied upon by the DMO. The ANAO notes that over the period 2000 to 2005 the supplier was procuring some 5.56mm blank rounds for Defence from an overseas supplier.

**4.58** The DMO did not undertake a cost investigation prior to accepting the December 2003 Agreement Change Proposal. The DMO also indicated that it did not undertake a separate value for money assessment of the Agreement Change Proposal, citing Austeyr compatibility issues as the justification for the expansion to the capability.



## Recommendation No.9

4.59 The ANAO recommends that the Defence Materiel Organisation develop procedures to ensure that changes to the capability of the Benalla Facility are subject to long-term requirements forecasting and detailed financial analysis to confirm value for money.

### Agency response

4.60 Defence and DMO response: Agreed.

## Accounting for the SAMS Agreement

4.61 The 1999 SAMS Agreement<sup>70</sup> Amendment, and the Multi-Party Deed, raises important issues as to the classification of the arrangement in the accounts of Defence. *Australian Accounting Standard (AAS) 17-Leases* applies to the accounting for leases prior to 2005. AAS 17 requires that a lease must be classified as an operating or finance lease at the inception of a lease, and states that the classification of a lease is based on the economic substance of the lease. Where substantially all the benefits and risks relating to the leased asset pass to the lessee, the lease is classified as a finance lease<sup>71</sup>. A lease is classified as an operating lease if it does not transfer substantially all of the risks and rewards incidental to ownership to the lessee.

4.62 The pre-2005<sup>72</sup> Australian Accounting Standard for leases (AAS 17) included the following guidelines as to the transfer of substantially all of the risks and benefits associated with ownership, where both of the following criteria are satisfied:

- (a) the lease is a non-cancellable lease; and
- (b) either one or both of the following tests is met:
  - the lease term is for 75 per cent or more of the remaining economic life of the asset; or

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<sup>70</sup> Urgent Issues Group Interpretation 127 states that: 'An agreement is accounted for as a lease in accordance with AASB 117 when it conveys to the lessee in return for a payment the right to use an asset for an agreed period of time (Para 13).'

<sup>71</sup> Title may or may not be eventually transferred.

<sup>72</sup> Australian Accounting Standard Board (AASB) applicable lease standard for post 2005 is AASB 117. AASB 117 does not include the guidelines contained in AAS 17 but outlines examples and indicators of what constitutes a finance lease.



- the present value at the beginning of the lease term of the minimum lease payments equals or exceeds 90 per cent of the fair value of the leased asset at the inception of the lease.

**4.63** The lease standard states that a lease is regarded as non-cancellable<sup>73</sup> if upon cancellation the lessee incurs a penalty of a magnitude that is expected to discourage cancellation in normal circumstances. The SAMS Agreement provides that if it is cancelled due to either supplier or Commonwealth default, that other than any damages that may be claimed, the DMO shall pay an amount equal to the project investment at the date of termination. Where the Agreement is terminated at the convenience of the DMO, the DMO shall pay the outstanding project investment; a notional return on investment; amounts relating to unavoidable loss or damages as consequence of the termination; and amounts incurred as a result of redundancies associated with the termination.

**4.64** Given the interdependencies between the SAMS and the Mulwala Agreements, cancellation of the SAMS Agreement may effectively also terminate the Mulwala Agreement giving rise to the termination provisions of that Agreement. The ANAO considers that the application of the termination clauses within the SAMS Agreement, combined with the associated implications for the Mulwala Agreement and Defences reliance on the munitions sourced from the Benalla Facility, suggests that the SAMS Agreement be categorised as non-cancellable.

**4.65** AAS 17 sets out a range of circumstances where minimum lease payments may be considered to have exceeded 90 per cent of the fair value of the leased asset at the inception of the lease. As previously noted the payments to the supplier at inception were estimated at \$591.0 million based on the project investment opening balance of \$176.9 million. Defence has estimated the minimum lease payment under the SAMS Agreement capability payment at 117.5 per cent of the fair value of the Benalla Facility.

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<sup>73</sup> A 'non-cancellable lease' is a lease that is cancellable only upon the occurrence of some remote contingency; with the permission of the lessor; if the lessee enters into a new lease for the same or an equivalent asset with the same lessor; or upon payment by the lessee of such an additional amount that, at the inception of the lease, continuation of the lease is reasonably certain.

**4.66** The DMO has the option to purchase the Benalla Facility, at the end of the lease in 2015, for one dollar under clause 65.5 of the SAMS Agreement<sup>74</sup>. This constitutes a bargain purchase clause where the DMO has the option to purchase the asset at a price that will be sufficiently lower than the fair value of the asset<sup>75</sup>.

**4.67** The ANAO notes that the SAMS Agreement appears to have the characteristics of a finance lease and should be subject to the requisite accounting treatment<sup>76</sup>. The ANAO wrote to Defence in October 2005 in regard to this issue seeking further information to assist in determining the substance of the SAMS transaction.

**4.68** Defence advised the ANAO in October 2005 that they concluded that the SAMS Agreement was a lease that should be treated as an operating lease. This matter is the subject of ongoing dialogue between the ANAO and Defence. In March 2006, Defence advised that it was reviewing the accounting treatment of the SAMS Agreement as part of the 2005–06 financial statements process.

## Recommendation No.10

**4.69** The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the accounting treatment of the SAMS Agreement is in accordance with the relevant Australian Accounting Standard.

### *Agency response*

**4.70** Defence and DMO response: Agreed.

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<sup>74</sup> Clause 65.5 provides as follows: 'The Commonwealth has, and may (provided it has paid all moneys it is required to pay upon termination of this Agreement) exercised on the date of termination or the expiration of this Agreement, its option to acquire the Facility, the Benalla Site, and all fixtures, ADI fittings, moveables and equipment at the Benalla Site, free from any encumbrances for \$1 and any reasonable and substantiated adjustment (depreciated book value of the assets in question) reflecting ADI's own investment in the Benalla Site other than Project Investment on the date of termination or expiration as Project Investment will be dealt with in accordance with the termination provisions.'

<sup>75</sup> Clause 14 of the SAMS Agreement requires ADI to give priority to ADF requirements.

<sup>76</sup> Where a non-current asset is acquired by means of a finance lease, the asset is capitalised at the present value of the minimum lease payments at inception of the lease and a liability recognised for the same amount. Leased assets are amortised over the period of the lease. Lease payments are allocated between the principle component and the interest expense.

## 5. Overseas Supply

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*This chapter outlines the contract management processes used by the DMO to procure explosive ordnance from overseas suppliers.*

### Background

**5.1** The procurement of explosive ordnance from overseas suppliers is a complex process often involving the need for specific export licences, non-standard payment terms and a high degree of attention to shipping. Explosive ordnance is procured, by the DMO, from a range of overseas suppliers using a number of contracting methods. These methods are directly from overseas commercial suppliers; through ADI acting as an intermediary between the DMO and the overseas supplier; and from the US Government under Foreign Military Sales (FMS) arrangements.

**5.2** In some instances, explosive ordnance is also procured by ADI under the provisions of the SAMS Agreement, where the Agreement provides ADI with exclusive supply rights. The procurement of explosive ordnance is subject to a range of Defence and Government policies covering source selection, contracting and expenditure of public money.

### Procurements directly from overseas suppliers

**5.3** DMO policy requires contracts for overseas procurements to be negotiated on GWEO Branch's behalf by the Counsellor's Defence Material in the Australian Embassy in Washington (CONDMAT(W)) and the High Commission in London (CONDMAT(L)). The CONDMAT offices are the first point of contact for all matters relating to DMO projects, acquisition and through life support of Defence equipment in their respective jurisdictions. CONDMAT(W) has responsibility for procurement activities in the USA and Canada. CONDMAT(L) has responsibility for procurement activities in the United Kingdom and Europe.

**5.4** The ANAO reviewed GWEO Branch documentation for the procurement of Bolide missiles conducted through CONDMAT(L) in 2004. The contract value for this procurement was \$33.3 million. In the previous year a contract of \$26.6 million had been negotiated for the same missile type. The DMO initiated 90 per cent prepayments for both procurements. The missiles were of significant importance to Army from a capability perspective.

5.5 The ANAO noted that even though the Bolide missile procurement was significant in terms of value and capability, and high risk in terms of payment arrangements, the files held by the DMO did not provide an adequate audit trail of liaison between the GWEO Branch and the CONDMAT(L). A 2005 Review of contracting processes undertaken by the DMO identified that the GWEO Branch exercised limited control over explosive ordnance procurements conducted through the CONDMAT offices. The Review also identified that limited data is captured for reporting purposes on procurements made through the CONDMAT offices and that communication was variable in terms of timeliness and quality. The Review proposed that GWEO Branch contracting staff take on overall responsibility for procurement methods and contract terms.

5.6 The Review identified a range of issues surrounding contract management within the GWEO Branch. These included limited awareness and use of the Defence Procurement Policy Manual; unfamiliarity with the DMO's legal panel arrangements; uncertainty regarding who to contact for contracting and financial advice; and unfamiliarity with current financial delegations and procurement approval requirements. The Review also found the standard of contract file management to be inconsistent. The ANAO audit fieldwork supports these findings. The lack of attention to ensuring key decisions are appropriately recorded, and the basis upon which they have been made is transparent to decision makers, are matters of concern in ensuring effective management of large scale contracts.

5.7 The DMO advised the ANAO that as a result of the Review a number of measures have been taken to address the issues identified. These include:

- the introduction of a standardised GWEO Branch contracting suite based on the Australian Defence Suite of Contracting Templates (ASDEFCON) Complex Materiel Template<sup>77</sup> including a user guide and communication templates in August 2005;
- providing training to GWEO Branch contracting and procurement personnel in the use of the new template and other procurement issues including familiarisation with the Defence Procurement Policy Manual; and

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<sup>77</sup> ASDEFCON (Complex Materiel) is for use when undertaking complex acquisitions of equipment and supplies. ASDEFCON (Complex Materiel) consists of two volumes, each addressing a different level of complexity and risk.

- reissuing a range of directions to GWEO Branch personnel in relation to delegations and authority, prepayments, monthly reporting requirements, file management and record keeping, and approval for contract change proposals.

**5.8** The DMO advised the ANAO as follows in March 2006:

The procurement reform programme implemented at Defence Establishment Orchard Hills by the GWEO Branch includes the introduction of revised procurement rules to ensure consistency and compliance with Department and Government requirements. The reform programme was designed to meet the needs of GWEO Branch procurement staff and include a regime; whereby, the procurement training, policies and procedures are regularly reviewed and updated. Additionally, a Commercial Director with substantial contracting experience has been appointed to provide commercial advice on significant procurement proposals, and conducts regular reviews to monitor compliance. The GWEO Branch has also implemented a third party quality assurance framework to assure compliance with these requirements.

## Commercial management agreement purchases

**5.9** As an alternative to procuring through CONDMAT, the DMO established a standing offer arrangement to allow ADI to procure explosive ordnance on the DMO's behalf. The standing offer is in the form of a Management Agreement (Contract) between ADI and the DMO, with the first version executed in late 1999 and subsequently renegotiated in mid 2003.

**5.10** Several types of explosive ordnance have been procured under the Management Agreement for Army including the 81mm mortar; 25mm ammunition; and 155mm artillery ammunition. In mid 2004, an Agreement Change Proposal was submitted by ADI to incorporate the Management Agreement into the SAMS Agreement. In late 2004, the DMO decided not to approve the Agreement Change Proposal due to the SAMS Agreement being with ADI Munitions Proprietary Limited and the Management Agreement being with ADI Limited.

**5.11** The Management Agreement provides for both a negotiation fee and a management fee. The negotiation fee is based on expenditure incurred by ADI, not already covered under the SAMS or Mulwala Agreements. The negotiation fee remains payable where ADI is unable to identify a supplier or the DMO decides not to proceed with the procurement. Under the 1999 version of the Management Agreement, the management fee was based on a fixed percentage

of the supply contract price. In 2003, the management fee was changed to fixed dollar amounts for contract values falling within a series of bands.

**5.12** Defence policy is that Defence should only indemnify<sup>78</sup> a supplier in rare and exceptional circumstances and only following rigorous assessment. Under the indemnity provisions of the Management Agreement, ADI's liability is capped at the procurement management fee whereas the Australian Government's liability does not specify a maximum value. The Department of Finance and Administration revised its *Guidelines on Issuing and Managing Indemnities, Guarantees, Warranties and Letters of Comfort* in 2003. Those Guidelines state that any arrangement involving the provision of indemnity by the Government should not be entered into unless there are maximum financial limits on the potential claims.

**5.13** The July 2002 Defence Chief Executive Instruction on Insurance and Indemnities states that the delegation to bind the Government to indemnities is only provided to a limited number of senior personnel. Furthermore, that Instruction provides that Defence indemnification should only occur after consultation with Defence Legal Services. The DMO advised that for the 2003 version of the Management Agreement, legal advice was not sought regarding the indemnity and that an authorised delegate did not approve the indemnity contained in the Management Agreement.

**5.14** The DMO did not seek legal advice prior to signing the original, or subsequent version of the Management Agreement. In June 2005, the DMO received legal advice on the 2003 version of the Management Agreement. The legal advice identified a range of procurement policy matters associated with the Management Agreement. These included the negotiation fee not bearing any relationship to the complexity of the procurement and not providing certainty in terms of cost to the DMO; limited obligations on ADI to assure value for money or fulfil other Government procurement obligations; and the Agreement was not based on the standard Defence procurement template. Other weakness identified in the Management Agreement included the transfer of risk in relation to the supply contract from ADI to the DMO, and the absence of performance management criteria.

**5.15** The DMO advised the ANAO, in October 2005, that following the legal advice, a direction was issued in July 2005 to suspend the use of the ADI Management Agreement until the SAMS Review is completed.

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<sup>78</sup> An indemnity is a legally binding promise whereby a party undertakes to accept the risk of loss or damage other parties may suffer.



## Foreign Military Sales (FMS)

**5.16** CONDMAT(W) is Australia's accredited representative to the US Government for the purposes of Defence procurement<sup>79</sup>. The Letter of Request and the Letter of Offer and Acceptance are the formal bases for establishing an FMS procurement<sup>80</sup>.

**5.17** The US Government may furnish items procured through FMS arrangements from its own stocks or procure them under terms and conditions consistent with US Department of Defense regulations and procedures. An example of an FMS case reviewed is the acquisition of 155mm artillery ammunition (see Figure 5.1) outlined below (see Case Study 3).

**Figure 5.1**

**155mm artillery round being fired**



Source: Department of Defence.

<sup>79</sup> Under these arrangements quotes cannot be sought from both US commercial and FMS channels, as the US Government will not compete with its own industrial base.

<sup>80</sup> The purpose of the Letter of Request is to request defence articles, military construction and/or services from the US Government. Subject to US Department of Defense Approval, a Letter of Offer and Acceptance is provided to CONDMAT(W) which is forwarded to the contract manager, within the GWEO Branch. If accepted by the contract manager CONDMAT(W) signs the Letter of Offer and Acceptance which commits the Australian Government to the FMS Contract. The DMO contract managers are required to apply the same statutory and management processes to procurements through FMS that apply to all other procurements.

### Case Study 3: Artillery ammunition acquisition

**5.18** A Letter of Offer and Acceptance was signed in early 2000 with a value exceeding \$20 million for the procurement of several types of 155mm artillery ammunition and associated charge bags<sup>81</sup>. The procurement of this explosive ordnance was regarded to be high priority by Army.

**5.19** Documentation indicates that propellant bags have a life expectancy of 15 years after which inspection and sampling is required to determine the remaining life. In 2000 this FMS contract was amended to delete a variant being supplied from the US inventory due to its age and condition. In 2001, the DMO accepted charge bags against a line on this FMS contract that were manufactured in 1987. The DMO indicated that the inspection conducted in accordance with the required procedures at receipt of these charge bags assessed them to be 'serviceable'.

**5.20** In March 2002, an Army unit reported that 29 bags, from an issue of 210 bags, were found to be rotted. An inspection in mid 2002 was subsequently conducted on these charge bags in accordance with the required procedures. This inspection assessed the charge bags to be 'serviceable'. This procedure did not require the separation of the charge bags into individual units to enable the inspection of the area between the charge bags.

**5.21** In 2004, an Army unit reported that 25 bags, out of 270 bags issued, were rotted. Following this report, a further inspection was conducted involving the inspection of the individual charge bags. This level of inspection revealed that every individual charge bag was rotted in the area between the charge bags.

**5.22** The DMO advised that 70 per cent of the charge bags were fired as full charges with the remaining 30 per cent sentenced for disposal. The DMO advised that by the time the second incident arose the warranty period had lapsed; therefore there was no opportunity to claim a refund. The total cost of these charge bags was identified as \$233 000 on the FMS contract.

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<sup>81</sup> M198 Howitzer 155mm munitions comprise separate components including the projectile and the propelling charges (charge bags). The propelling charges are an assembly of separate calico bags containing propellant. The bags are secured as a set, and can be used as a set, or separated into smaller increments.



## Recommendation No.11

5.23 The ANAO recommends that the Defence Materiel Organisation review processes for the acceptance of explosive ordnance to ensure that the level of initial receipt inspection is consistent with the risks associated with the procurement source.

### *Agency response*

5.24 Defence and DMO response: Agreed.

## 6. Financial Management

*This chapter outlines the DMO's management of the budgets for recurrent explosive ordnance procurement and the replenishment of explosive ordnance reserve stocks.*

### Explosive ordnance budget framework

**6.1** Table 6.1 compares annual explosive ordnance budgeted expenditure to actual expenditure for the three financial years ending 2004–05. The table does not include explosive ordnance funding sourced from Major Capital Equipment Acquisition Projects<sup>82</sup>. The payments of approximately \$80 million per annum, paid to ADI in accordance with the SAMS and Mulwala Agreements are also not included, nor is expenditure associated with the Mulwala redevelopment.

**Table 6.1**

#### Explosive ordnance budgeted versus actual expenditure

Budget Year	2002-03	2003-04	2004-05
Initial budget	\$141.6m	\$194.2m	\$186.5m
Revised budget	\$232.9m	\$237.5m	\$137.5m <sup>a</sup>
Actual Expenditure	\$245.5m	\$248.5m	\$144.2m <sup>b</sup>
Comparison of initial budget to actual expenditure	173%	128%	77%
Comparison of revised budget to actual expenditure	106%	105%	105%

Notes:

- a) The revised allocation reflects the decision to hand-back funding (\$47.8 million) associated with 28 high risk payments. Of the overall amount, \$33 million was associated with four payments scheduled for June 2005.
- b) The over expenditure against the revised budget (\$137.5 million) derives from one of the four payments mentioned above, ultimately occurring as contracted in June 2005.

Source: DMO.

**6.2** The budgets for all three financial years include approximately \$60 million in logistics shortfall funding. Some \$71 million to replenish explosive ordnance war stocks was also committed and largely expended during these three years. Figures provided are for Army, Navy and Air Force.

**6.3** The above table indicates a lack of alignment between initial budget estimates and actual expenditure in all years. Variances range from a 73 per cent over achievement in 2002–03, largely due to an increase of \$91.3

<sup>82</sup> Other than Project JP 2085 Phase 1B to replenish explosive ordnance reserve stocks.

million to the budget during the financial year, to 23 per cent under achievement in 2004–05. Expenditure in both 2002–03 and 2003–04 comprised significant DMO initiated prepayments made in the latter stages of those financial years. Prepayments of \$20.9 million allocated for the replenishment of explosive ordnance reserve stocks in 2002–03, and \$44.9 million of Project JP 2085 Phase 1B funding in 2003–04 were also identified.

## Prepayment policy

**6.4** The DMO policy considers that prepayments are appropriate where at least one of the following applies:

- the prepayment is required as part of the procurement process or trading agreement;
- it can be demonstrated that the prepayment obtains the best value for money outcome for Defence; or
- there is an identifiable benefit to Defence.

**6.5** Defence Chief Executive Instruction 2.4, *Payment of Accounts* states that prepayments should only be made where the benefits outweigh the costs and associated risks. Finance Circular No 2004/14, *Discounts for Prepayment and Early Payment*, notes the requirement to ensure that the discount provided is larger than the interest forsaken and/or relevant opportunity costs.

**6.6** Defence policy provides that the approving delegate must ensure supporting documentation for a prepayment is prepared and retained. It further states that the approving delegate should ensure that appropriate processes are in place to properly identify and record a prepayment, and that risk identification and mitigation strategies are in place.

## 2002–03 expenditure

**6.7** In 2002–03, the DMO exceeded its initial explosive ordnance budget by three-quarters (see Table 6.1). The DMO advised that the additional expenditure was as a result of additional funding being allocated to explosive ordnance procurement in March 2003. This additional funding comprised some \$20.9 million to replenish high-priority explosive ordnance reserve stocks and \$60 million for the first year of the logistics shortfall funding allocation.

**6.8** Prepayments made late in 2002–03 by the DMO contributed significantly to the level of expenditure of these additional funds. The 2002–03 Defence Annual Report identified a \$145 million increase in non-capital

prepayments relating to explosive ordnance and munitions production, software licenses and a range of other support contracts. The DMO, at the time, regarded achieving this level of expenditure as a positive outcome.

**6.9** The ANAO reviewed a number of explosive ordnance procurements conducted in 2002–03 involving prepayments. Procurements utilising the \$20.9 million allocated to the replenishment of explosive ordnance reserve stocks were examined. These prepayments contributed to 20 per cent of the expenditure increase. DMO documentation indicates that the procurement plan for these additional reserve stocks required contracts to be placed within the financial year, incorporating advance payment arrangements. The ANAO was unable to identify any benefits or discounts derived by the DMO for initiating these prepayments.

*First tranche of Bolide missile prepayments*

**6.10** The procurement of Bolide missiles in 2002–03 also involved utilising an underspend of sustainment funding (see Table 6.2). The DMO initiated a 90 per cent prepayment just prior to the end of 2002–03. The DMO indicated that the prepayments were regarded as an exercise in risk management to redress a priority capability deficiency, at the earliest possible opportunity.

**6.11** The ANAO notes that documentation clearly indicates that the priority to expend funds was a key consideration in deciding to proceed with the prepayment, and that a 20 per cent prepayment was all that was required to secure the contract.

**Table 6.2**

**Bolide missile prepayments versus delivery**

Percentage prepayment	Value of the order	Date paid	Final scheduled delivery
90	\$26.6 million	June 2003	Fourth quarter 2005

Source: DMO.

**6.12** The business case to justify the 90 per cent prepayment identified that the DMO needed to achieve an overall discount of 6.45 per cent. To achieve this the DMO negotiated the following benefits into the contract:

- bringing forward the delivery of the first three batches of missiles by six months;
- negotiating a clause into the contract stating that if either of the first two batches of missiles were delivered late, and missed the next

scheduled ammunition shipment, that the supplier would air freight one of those batches to Australia at its own cost;

- obtaining an increase of 25 missiles on top of the original buy; and
- obtaining training in Australia free of charge.

**6.13** A number of these benefits did not eventuate. DMO documentation indicates that the timely delivery of the first three batches were critical to obtaining the required discount<sup>83</sup>. The ANAO considers that relying on a specific delivery date for a new generation of missile, in order to achieve a required discount, was a high risk option. The ANAO notes that the first two deliveries were delayed by four to five months and that the DMO did not seek to have either of the shipments air freighted to Australia<sup>84</sup>.

**6.14** Defence advised the ANAO that the prepayment approach was undertaken as a means to gain additional missiles. While Defence was able to negotiate additional missiles into the contract, the ANAO notes that the ability to achieve this result was partially facilitated by utilising the exchange rate listed on Defences general ledger system (ROMAN) rather than the rate stipulated by the Contractor. Defence documentation indicates that by utilising the ROMAN exchange rate, in accordance with Defence Policy, rather than the rate provided by the Contractor, Defence was able to obtain an additional six missiles within the available funding. These missiles were not excluded from calculation of the benefit derived for the prepayment.

**6.15** In order to achieve expenditure against the Bolide missile contract prior to the end of the financial year, the DMO signed the contract without the technical data requirements being resolved with the Contractor. The DMO advised the ANAO that the reason for this was that aspects of required documentation had been dependent on test firings and other issues such as modifications to software to be undertaken during production of the missiles.

**6.16** Analysis of the business case developed by CONDMAT(L) indicates that contractual price escalations were not factored into the DMO's

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<sup>83</sup> Defence advised the ANAO that the supplier 'pulled out all stops' to rectify the delay. Defence also had technical concerns over the Factory Acceptance Test firings, leading to changes to the installed software baseline and therefore did not want to take delivery of any missiles until these technical issues were resolved.

<sup>84</sup> Defence advised the ANAO that the issue of air freighting the first delivery to Australia was investigated, once the delay became known, and that it was not enforced for several reasons. These reasons included that it was deemed inappropriate because it would have lost goodwill with the supplier of a Major Capital Equipment Project; it did not have 'material' benefit to Defence; and the airfreight delivery clause could equally be applied to the next larger delivery of missiles.

calculations of the discount achieved. The ANAO notes that escalations would impact on the value of the discount offered and would normally have been taken into consideration. The value of these escalations, in December 2005, totalled some \$432 000. Further cost escalations are also likely against this contract.

**6.17** The ANAO was unable to identify documentation of risk analysis and mitigation strategies developed in support of this procurement, as required by both the Department of Finance and Administration and Defence Guidelines. In December 2005, the DMO advised that there was limited risk in contracting with a major global defence supplier negating the need for a liquidated damages clause.

## **Recommendation No.12**

**6.18** The ANAO recommends that the Defence Materiel Organisation include a risk analysis in prepayment business cases to determine the likelihood of associated benefits being realised.

### *Agency response*

**6.19** Defence and DMO response: Agreed. The recently developed GWEO business case template will be modified to include this requirement.

## **2003–04 expenditure**

**6.20** In 2003–04, the GWEO Branch exceeded its initial explosive ordnance budget by \$54.3 million (see Table 6.1), a variance primarily explained by the provision of an additional \$50.1 million in Project JP 2085 funding. The ANAO identified eight procurements involving sustainment funding where the DMO initiated 100 per cent prepayments for 5.56mm and .50 calibre ammunition. These payments were made in May and June 2004 and totalled \$17 million. In one case the DMO advised the supplier of the intent to make a prepayment prior to having received the quotation.

**6.21** The method used to advise the supplier of the intent to make these prepayments was via an email. Quotations provided by the supplier prior to the email detailed payment schedules in line with the provision of the SAMS Agreement. These schedules comprised four milestone payments, commencing in early May 2004 and concluding in June 2006. The ANAO notes that if payments had remained in line with these schedules, the DMO would have been able to retain 80 per cent of the funds for an additional two years.

**6.22** The DMO did not seek, nor did it obtain, any discount or benefit in exchange for these prepayments. The DMO did not develop risk identification and mitigation plans in support of these prepayments.

**6.23** Under the provisions of the SAMS Agreement, the supplier may request advance payments. The practice of the DMO actually volunteering prepayments for a milestone based contract seems inconsistent with the intent of the Agreement. The Agreement provides for monthly incentive payments to the supplier for making deliveries as scheduled. Voluntary prepayments, until exhausted, may negate the cash flow implications of the DMO withholding the incentive payment for late delivery of orders. The ANAO considers that the making of these prepayments is not justifiable, from a value for money perspective, when milestone payment clauses within the Agreement allow the DMO to defer payment to later dates.

### **Project JP 2085 Phase 1B expenditure - 2003–04**

**6.24** During audit fieldwork, the ANAO identified 12 Project JP 2085 Phase 1B cases involving 100 per cent prepayments made within two months of the end of the 2003–04 financial year<sup>85</sup>. These covered nine separate types of explosive ordnance and totalled 90 per cent (\$44.9 million) of the budgeted \$50.1 million.

**6.25** Several procurements made utilising Project JP 2085 funding were sourced through contracts made under the SAMS Agreement. These involved 100 per cent prepayments which were not supported by documentation and were also inconsistent with the terms of the SAMS Agreement. In two of these cases the DMO advised the supplier of the intent to make the prepayments, totalling nearly \$200 000, prior to receiving quotations.

**6.26** Some of these prepayments were made for explosive ordnance to be delivered three years after the prepayment. In all but one case (outlined below) the DMO did not seek any benefit for the prepayment. In all cases, the ANAO was unable to confirm that risk identification and mitigation strategies were developed.

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<sup>85</sup> ANAO Audit Report No.59, 2003–04 *Defence's Project Bushranger: Acquisition of Infantry Mobility Vehicles* recommended that Defence re-examine expenditure processes for capital acquisition projects to ensure that advance payments are made in accordance with Commonwealth Procurement Policy of obtaining value for money, rather than meeting a budget expenditure target.

# Recommendation No.13

6.27 The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the allocation of funding for future phases of Project JP 2085 are aligned with standard contract payment requirements.

## Agency response

6.28 Defence and DMO response: Agreed.

## Second tranche of Bolide missile prepayments

6.29 A significant proportion of the Project JP 2085 expenditure in 2003–04 related to a further procurement of Bolide missiles. Issues raised by the ANAO in relation to the first tranche of Bolide acquisitions (2002–03) were again evident in 2003–04. As with the previous Bolide missile tranche, the DMO initiated a 90 per cent prepayment in the latter months of the financial year in order to expend funds (see Table 6.3). A 20 per cent prepayment would have secured the contract.

Table 6.3

Bolide missile prepayments versus delivery

Percentage prepayment	Value of the order	Date paid	Final scheduled delivery
90	\$33.3 million	June 2004	August 2006

Source: DMO.

6.30 The business case to justify the prepayment identified that the DMO needed to obtain an overall discount rate of 8.45 per cent. To achieve this the DMO negotiated the following benefits into the contract:

- obtaining a training package for Project Land 19-Short Range Air Defence Weapon System free of charge;
- the inspection and repair of nine RBS-70 missiles to be carried out free of charge;
- delaying the initial payment by three months, and bringing forward some missile deliveries by a few weeks; and
- obtaining an increase of 17 missiles to the original order.

6.31 The ANAO reviewed the above benefits in order to provide assurance that they will allow the DMO to achieve the desired rate of return. The ANAO notes that the Land 19 Project Office confirmed that the training would provide a benefit. However, documentation indicates that a full analysis of the cost of



training had not been conducted at that time of the prepayment; as a result the capacity to validate the cost of this training with certainty was not possible.

**6.32** The ANAO was unable to establish a clear audit trail in relation to the value of the repairs to missiles included in the discount calculations. DMO documentation estimated that the inspection and repair of 11 missiles would obtain a total savings of \$542 000. The business case, developed to justify the prepayment, used figures provided by the Contractor which indicated a cost of some \$521 134 to repair nine missiles. DMO documentation estimated the cost to repair nine missiles to be \$360 000.

**6.33** As with the 2002–03 missile procurement the DMO did not identify all technical data required to perform the safety and suitability for service assessment. DMO documentation states that an opportunity had been missed by not including the provision of safety data in the Bolide contract and that the unavailability of this data may impinge on the introduction-into-service timetable.

**6.34** The ANAO also notes that contractual price escalations were not factored into the DMO's prepayment calculations. Defence advised the ANAO that the price escalation amount would have been payable regardless.

## **2004–05 expenditure**

**6.35** In 2004–05, the DMO underspent its explosive ordnance sustainment budget by 23 per cent or \$42.3 million (see Table 6.1). The ANAO reviewed the monthly budget phasings during 2004–05, for explosive ordnance procurements, and identified significant variations in the planned expenditure during that financial year. Based on the DMO monthly revised budget, up until March 2005, a high level of expenditure was planned to occur in June of that financial year. However, planned expenditure for June 2005 was significantly reduced between March and June 2005.

**6.36** In March 2005, the GWEO Branch proposed to return \$47.8 million in sustainment funding to the Defence Budget that was allocated for expenditure in 2004–05<sup>86</sup>. Several reasons were cited as contributing to this hand-back, including contracts with delivery dates towards the end of the year; suppliers not delivering orders on time or orders being cancelled by the supplier; technical and serviceability issues; and weaknesses in liaison arrangements between the GWEO Branch and CONDMAT(L).

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<sup>86</sup> This hand-back was calculated based on an estimated budget expenditure of \$135 million.

## Recommendation No.14

**6.37** The ANAO recommends that the Defence Materiel Organisation review in-year and future-year budget and contract management processes for explosive ordnance procurement to improve the alignment between budgeted and actual expenditure.

### *Agency response*

**6.38** Defence and DMO response: Agreed.

## Prepayment adjustments

**6.39** In 2003–04, the ANAO identified that the explosive ordnance prepayment figures provided by the DMO did not reconcile. The end of financial year balance for explosive ordnance prepayments for 2003–04 was recorded in the financial statements at \$129.7 million. The figure provided to the ANAO indicated a balance of \$137.5 million, a difference of \$7.8 million.

**6.40** The primary factor identified by the GWEO Branch as contributing to this variance was a discrepancy between Defences General Ledger system, (ROMAN) and its explosive ordnance inventory management system, (COMSARM). In 2003–04, the DMO advised the ANAO that it would develop supplementary controls over the systems to ensure that explosive ordnance prepayment discrepancies between ROMAN and COMSARM were corrected. Defence stated that one of the issues associated with balancing COMSARM and ROMAN is that payments are made through ROMAN for explosive ordnance which is yet to arrive in Australia, and be recorded in COMSARM.

**6.41** In March 2005, the DMO initiated an internal audit<sup>87</sup> on the recording of prepayments for explosive ordnance. The June 2005 internal audit report identified that the previous method to determine the value of prepayments was not accurate. The report concluded that revised arrangements, implemented by the GWEO Branch, would ensure that explosive ordnance prepayments are reliably identified and accurately recorded, but that further work was required to achieve conformance with the relevant accounting standard. The report identified that the revised process significantly increased the ROMAN capital prepayment account for explosive ordnance by \$103.4 million to \$207.5 million.

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<sup>87</sup> In July 2005, the DMO requested an additional internal audit into the current status of risks associated with prepayments. This audit is planned to occur in the first quarter of 2006.

**6.42** The DMO subsequently confirmed the actual adjustment to prepayments to be \$98 million. The prepayment balance at the end of 2004–05 for explosive ordnance was \$204 million or 30 per cent of the \$684 million of prepayments identified in the 2004–05 Defence Annual Report. That Report included a prior year adjustment of \$83 million attributed to certain explosive ordnance prepayments being treated as expenses.

## Recommendation No.15

**6.43** The ANAO recommends that the Defence Materiel Organisation review the effectiveness of internal control arrangements within the Guided Weapons and Explosive Ordnance Branch having regard to reporting, reviewing and approving of financial reconciliations.

### *Agency response*

**6.44** Defence and DMO response: Agreed.

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Ian McPhee  
Auditor-General

Canberra ACT  
17 May 2006



# Appendices



## Appendix 1: Defence and DMO Response



Australian Government

Department of Defence  
Inspector-General Group

2005/1012433/3  
IG 145/06

**4** May 2006

Mr Colin Cronin  
Executive Director  
Performance Audit Services  
Australian National Audit Office  
GPO Box 707  
Canberra ACT 2601

Dear Mr Cronin,

**ANAO PERFORMANCE AUDIT ON THE PROCUREMENT OF EXPLOSIVE ORDNANCE  
FOR THE AUSTRALIAN DEFENCE FORCE (ARMY)**

1. On 11 April 2006 the ANAO sought a Defence and DMO response to the section 19 draft report on the Procurement of Explosive Ordnance for the Australian Defence Force (Army).
2. Attached is the Defence and DMO response to the draft report, and recommendations, including a short summary to be used in preparation for the brochure (see Annex A).
3. In summary, Defence and DMO agree with all 15 recommendations contained in the section 19 draft report. To a large degree, the issues raised by ANAO in the section 19 draft report, and included in the report's recommendations, have been identified by Defence and remedial action commenced. A number of the recommendations are now substantially completed.
4. My point of contact in this matter is Mr Joel Goodisson (Tel: (02) 6266 4192, Fax: (02) 6266 4592 or email: joel.goodisson@defence.gov.au ).

Yours sincerely,

*C Neumann*

Claude Neumann  
Inspector General

Annex:

- A. Defence and DMO comment and response to Recommendations.

**DEFENCE AND DMO RESPONSE TO THE ANAO REPORT ON THE  
PROCUREMENT OF EXPLOSIVE ORDNANCE FOR THE  
AUSTRALIAN  
DEFENCE FORCE (ARMY).**

The Department of Defence's management of explosive ordnance for the Australian Defence Force has undergone significant review and reform since 1998 when the management of explosive ordnance for all three Services was brought under a single entity. Initial reforms centred on improving technical integrity of decision making and data management which are ongoing. More recent reforms have included changes to financial, business and logistics management, and the remediation of explosive ordnance requirements definition processes. The changes have played an important role in improving the overall management of the procurement of explosive ordnance for the Australian Defence Force. Much of the remediation work was commenced by Defence prior to and during the ANAO audit.

The 15 recommendations arising out of the ANAO report are consistent with the broad approach adopted by Defence regarding the reform of the procurement of explosive ordnance for the Australian Defence Force. The ANAO acknowledges Defence's efforts throughout their report into the *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*. Defence recognises the importance of ongoing assurance and continuous improvement activity in relation to the management of the procurement of explosive ordnance for the Australian Defence Force.



No	Recommendation	Management Response
<b>Recommendation No.1</b>  <b>Para 2.12</b>	The ANAO recommends that the JP 2085 1B Equipment Acquisition Strategy be updated by the Defence Materiel Organisation to include all procurements of new explosive ordnance types under that Project Phase.	Agreed. The JP2085 Phase 1B Acquisition Strategy will be updated progressively as details of natures to be procured are finalised.
<b>Recommendation No.2</b>  <b>Para 2.22</b>	<p>The ANAO recommends that the Defence Materiel Organisation and Defence:</p> <p>(a) establish requirements determination processes to identify longer-term inventory line item stockholding levels necessary to fulfil operating and reserve explosive ordnance requirements; and</p> <p>(b) incorporate performance measures, based on agreed inventory levels, into future Materiel Sustainment Agreements for explosive ordnance.</p>	<p>(a) Agreed. Work commenced in 2004 to better define the policy and related processes.</p> <p>(b) Agreed. Rudimentary performance measures are currently included in the MSA schedules for Explosive Ordnance. These will be improved in future MSAs.</p>
<b>Recommendation No.3</b>  <b>Para 2.31</b>	The ANAO recommends that to improve the transparency of costs associated with Major Capital Equipment Project proposals, Defence and the Defence Materiel Organisation include, in the second pass approval documentation, analysis of initial project funding to procure explosive ordnance required to support new weapons platforms including those associated with safety and suitability for service assessments.	Agreed. The current Capability Development processes require in-depth analysis of all costs, including explosive ordnance.
<b>Recommendation No.4</b>  <b>Para 3.15</b>	The ANAO recommends that the Defence Materiel Organisation develop specific performance indicators and establish procedures to monitor the effectiveness of processes to improve the serviceability of all explosive ordnance.	Agreed.

<b>Recommendation No.5</b>  <b>Para 3.20</b>	The ANAO recommends that the Defence Materiel Organisation establish appropriate targets for the implementation of the workforce renewal strategy and implement processes to monitor progress against these targets.	Agreed.
<b>Recommendation No.6</b>  <b>Para 4.25</b>	<p>The ANAO recommends that the Defence Materiel Organisation complete a SAMS Agreement remediation programme to:</p> <p>(a) update the SAMS Agreement to reflect an agreed contract baseline between the parties; and</p> <p>(b) implement version control arrangements to ensure that the SAMS Agreement remains up to date and available to staff.</p>	<p>(a) Agreed. The DM0 has signed a Statement of Principles with ADI for the review of the SAMS Agreement.</p> <p>(b) Agreed. The DM0 has reverted to the current contracted obligations in accordance with the SAMS contract.</p>
<b>Recommendation No.7</b>  <b>Para 4.39</b>	The ANAO recommends that the Defence Materiel Organisation and Defence develop planning processes to determine explosive ordnance requirements that align deliveries of explosive ordnance under the SAMS Agreement to Army's planned explosive ordnance consumption.	Agreed.
<b>Recommendation No.8</b>  <b>Para 4.45</b>	The ANAO recommends that the Defence Materiel Organisation reinstate mechanisms to record and update cost data in accordance with the requirements of the SAMS Agreement.	Agreed.
<b>Recommendation No.9</b>  <b>Para 4.56</b>	<p>The ANAO recommends that the Defence Materiel Organisation develop procedures to</p> <p>(a) ensure that changes to the capability of the Benalla Facility are subject to long-term requirements forecasting, and</p> <p>(b) detailed financial analysis to confirm value for money.</p>	<p>(a) Agreed.</p> <p>(b) Agreed.</p>

<b>Recommendation No.10</b>  <b>Para 4.65</b>	The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the accounting treatment of the SAMS Agreement is in accordance with the relevant Australian Accounting Standard.	Agreed.
<b>Recommendation No.11</b>  <b>Para 5.23</b>	The ANAO recommends that the Defence Materiel Organisation review processes for the acceptance of explosive ordnance to ensure that the level of initial receipt inspection is consistent with the risks associated with the procurement source.	Agreed.
<b>Recommendation No.12</b>  <b>Para 6.18</b>	The ANAO recommends that the Defence Materiel Organisation include a risk analysis in prepayment business cases to determine the likelihood of associated benefits being realized.	Agreed. The recently developed GWEO business case template will be modified to include this requirement
<b>Recommendation No.13</b>  <b>Para 6.26</b>	The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the allocation of funding for future phases of Project JP 2085 are aligned with standard contract payment requirements.	Agreed.
<b>Recommendation No.14</b>  <b>Para 6.35</b>	The ANAO recommends that the Defence Materiel Organisation review in-year and future year budget and contract management processes for explosive ordnance procurement to improve the alignment between budgeted and actual expenditure.	Agreed.
<b>Recommendation No.15</b>  <b>Para 6.40</b>	The ANAO recommends that the Defence Materiel Organisation review the effectiveness of internal control arrangements within the Guided Weapons and Explosive Ordnance Branch having regard to reporting, reviewing and approving of financial reconciliations.	Agreed.

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