

The Auditor-General
Audit Report No.24 2009–10
Performance Audit

Procurement of Explosive Ordnance for the Australian Defence Force

Department of Defence

Australian National Audit Office

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Canberra ACT
10 March 2010

Dear Mr President
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Defence in accordance with the authority contained in the *Auditor-General Act 1997*. I present the report of this audit and the accompanying brochure. The report is titled *Procurement of Explosive Ordnance for the Australian Defence Force*.

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

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office (ANAO). The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits and financial statement audits of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Australian Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

For further information contact:
The Publications Manager
Australian National Audit Office
GPO Box 707
Canberra ACT 2601

Telephone: (02) 6203 7505
Fax: (02) 6203 7519
Email: webmaster@anao.gov.au

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Audit Team

Natalie Whiteley
Kim Murray
Greg Little
Fran Holbert

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Abbreviations

ACP	Agreement Change Proposal
ADF	Australian Defence Force
ANAO	Australian National Audit Office
ARMS	Audit Recommendation Management System
CDF	Chief of the Defence Force
CDG	Capability Development Group
CEO	Chief Executive Officer
CJLOG	Chief of the Joint Logistics Command
CJOPS	Chief of Joint Operations
COMSARM	Computer System for Armaments
COSC	Chiefs of Services Committee
DEOC	Defence Explosive Ordnance Committee
DMO	Defence Materiel Organisation
FMS	United States Government Foreign Military Sale
GWEO	Guided Weapons and Explosive Ordnance Branch, the predecessor to the current Munitions Branch
HEOD	Head of Explosive Ordnance Division
IMP	Item Management Plan
JALO	Joint Ammunition and Logistics Organisation
JLC	Joint Logistics Command

JOC	Joint Operations Command
JP	Joint Project
KPI	Key Performance Indicator
MAA	Materiel Acquisition Agreement
MAB	Management Audit Branch
MARAP	Medium Artillery Replacement Ammunition Project
MSA	Materiel Sustainment Agreement
PBR	Payment Basis Review
PCB	Procurement and Contracting Branch
ROMAN	Resource Output Management and Accounting Network
RTS	Raise Train Sustain
SAMS	Strategic Agreement for Munitions Supply
SGB	Strategic Governance Board
SOP	Standard Operating Procedure
SPO	Systems Project Office
SRP	Strategic Reform Program
VCDF	Vice Chief of the Defence Force

Summary and Recommendations

Summary

Introduction

1. The effective management of explosive ordnance is integral to military capability and essential to the operations of the Australian Defence Force (ADF). The procurement activities managed by the Defence Materiel Organisation (DMO), which involve significant levels of ongoing expenditure, are central to ensuring the ongoing availability of explosive ordnance¹ to the ADF. The DMO's sustainment budget for explosive ordnance for 2008–09 was \$425.8 million² of which 85.6 per cent, or \$364.7 million, was spent on non-guided explosive ordnance. Of the expenditure on non-guided explosive ordnance, \$238.3 million was for Army.
2. Following the 2003 *Defence Procurement Review*³, the arrangements for the management of explosive ordnance were changed, with functions that were previously the responsibility of the Joint Ammunition and Logistics Organisation (JALO) reallocated between Defence and DMO.⁴ Under this arrangement, logistics issues such as warehousing and distribution became the responsibility of Joint Logistics Command (JLC) in Defence⁵ while the DMO retained responsibility for the procurement and through life support of explosive ordnance.

¹ Explosive ordnance includes: bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature. Source: Defence Policy for the Management of Explosive Ordnance, DI(G) LOG 4-1-013 (in draft).

² The DMO's forecasted explosive ordnance sustainment budget for 2009-10 is \$345 million.

³ Also known as the Kinnaird Review.

⁴ JALO was established in 1998 in response to a recommendation in the 1997 Defence Efficiency Review and merged the single service explosive ordnance management system into a single tri-service organisation. 'The Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)', 14 December 2007, p. 9.

⁵ In March 2008, the Chief of the Defence Force (CDF) appointed the Vice Chief of the Defence Force (VCDF) as the single point of accountability within Defence for explosive ordnance. Subsequently, in April 2008, the Explosive Ordnance Branch within Joint Logistics Command was established to, amongst other things, undertake some logistics functions and implement governance for Defence explosive ordnance and weapons security.

3. Initially the Guided Weapons and Explosive Ordnance (GWEO) Branch in the Electronic and Weapon Systems Division managed the explosive ordnance functions retained within the DMO. In February 2008, the Explosive Ordnance Division was established within the DMO to provide a dedicated focus to the ongoing reform of acquisition and sustainment of explosive ordnance.

4. The procurement and through life support of explosive ordnance for the ADF is a complex process and includes:

- fulfilling the explosive ordnance requirements of a variety of stakeholders within available funding;
- developing procurement strategies that are responsive to market conditions, reflect differing supplier arrangements and take into account varying and sometimes extended procurement lead times;
- ensuring effective administration of domestic manufacturing arrangements, which were put in place to ensure the continuity of supply of certain types of explosive ordnance to the ADF; and
- optimising, to the extent possible, explosive ordnance inventory holdings including ensuring that inventory is held at appropriate levels of serviceability.⁶

5. In May 2006, ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)* found that extensive improvements were 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. The report concluded that addressing the issues identified by the audit would require the effective implementation of long term remediation strategies by Defence and the DMO.

6. Since the 2005–06 audit, a number of subsequent reviews and studies have concluded that Defence's explosive ordnance arrangements are

⁶ The successful conduct of these activities is reliant on the availability of a sufficient number of appropriately skilled personnel to undertake them, supported by clear policy, procedures and lines of accountability.

characterised by fragmented lines of accountability, structures and practices and an absence of a Defence wide 'end-to-end system perspective'.⁷

7. Given the ongoing high tempo of operations for the ADF and the materiality (both in terms of financial investment and capability) of explosive ordnance, the ANAO considered it timely to conduct another audit of Defence and the DMO's procurement of explosive ordnance, particularly for Army. This audit provided the ANAO with the opportunity to assess Defence and the DMO's current administration of this key function, including the agencies' progress towards implementing the recommendations of the 2005–06 audit, and other developments in the explosive ordnance domain since the previous audit tabled in May 2006.

Previous ANAO audits

8. This audit is the sixth ANAO performance audit of the explosive ordnance area in Defence since 1987.⁸ Four of these previous audits, including the 2005–06 audit, dealt specifically with the procurement of explosive ordnance. The findings and recommendations of these audits encompassed stockholding policy, procurement planning, stock management procedures, serviceability of explosive ordnance, contract management and financial management.⁹ The 2005–06 audit report made 15 recommendations related to the areas of procurement planning, financial management, inventory management, contract management, and safety and suitability for service assessments. In addition to the four previous ANAO performance audits that specifically addressed explosive ordnance procurement, two other ANAO

⁷ Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*.

⁸ The preceding five audits were: Auditor-General, Efficiency Audit Report, *Department of Defence: RAAF explosive ordnance*, December 1987; Efficiency Audit Report, *Department of Defence: safety principles for explosives*, April 1988; ANAO Audit Report No.5 1993–94, *Explosive Ordnance*, Department of Defence, September 1993; ANAO Audit Report No.8 1995–96, *Explosive Ordnance*, Department of Defence, November 1995; ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*, May 2006.

⁹ Since 1987 the explosive ordnance domain has undergone significant changes in structure. In February 1998, as result of the 1997 Defence Efficiency Review, Defence fundamentally changed all aspects of explosive ordnance management through the establishment of the Joint Ammunition Logistics Organisation (JALO). The JALO assumed responsibility for most explosive ordnance functions for the Services, and established new structures and processes to discharge these responsibilities. As noted in paragraph 2, further significant restructuring was undertaken in response to the 2003 Kinnaird review. Accordingly, it is difficult to draw direct comparisons between the findings of ANAO audits pre-dating these restructures and the findings of more recent performance audits.

performance audit reports conducted in the last decade have included significant findings related to explosive ordnance. These include:

- ANAO Audit Report No.30 2002–03, *Defence Ordnance Safety and Suitability for Service*: This audit noted that significant proportions of explosive ordnance inventory could be regarded as legacy ordnance.¹⁰ In response to ANAO concerns raised during this audit, the DMO agreed that there was a need to take urgent action to address the legacy explosive ordnance issues. However, subsequently Audit Report No.40 2005–06 found that there had been limited progress in this area.
- ANAO Audit Report No.3 2006–07, *Management of Army Minor Capital Equipment Procurement Projects*: This audit found a lack of transparency in the slippage from the original service date in the Medium Artillery Replacement Ammunition Project (MARAP), a high value Army minor capital equipment project procuring explosive ordnance.¹¹ The audit report noted that there are a range of complexities associated with this project including linkages to unapproved Major Capital Acquisitions, and issues surrounding domestic manufacturing capability and projects intended to replenish explosive ordnance warstocks through Joint Project (JP) 2085.

Audit objective, scope and criteria

9. The objective of this audit was to examine the effectiveness of Defence and the DMO's management of procurement and through life support arrangements to meet the explosive ordnance requirements of the ADF, particularly the non-guided munitions requirements of Army. This included a

¹⁰ Legacy explosive ordnance is ordnance currently in service for which there is no clearly identifiable audit trail regarding its safety and suitability for service assessment (See footnote 114 for further explanation of this term).

¹¹ This Army Minor project is for the acquisition of a new family of 155mm munitions to provide a significant increase in operational capability for combat force indirect firepower in terms of lethality, range and coverage. Introduction into service of this ammunition will enhance the in-service M198 155mm Howitzer capability. The project is linked to LAND 17 [major capital equipment project], which aims to enhance or replace the 155 mm platform [see footnote 69 for a description of the project]. The principal aim of the project is to ensure that munitions acquired will not be obsolescent, or technologically inferior, on introduction of any LAND 17 155mm Howitzers. Any integration and transition issues will be the responsibility of LAND 17. Subsequent to the Minor project, stock holdings of MARAP ammunition will be procured. Source: ANAO Audit Report No.3 2006–07, *Management of Army Minor Capital Equipment Procurement Projects*, p. 55.

review of the progress of Defence and the DMO in implementing the recommendations of ANAO Audit Report No.40 2005–06.¹²

10. The audit scope covered:

- the explosive ordnance procurement and through life support arrangements for which the DMO retained responsibility following the 2003 Defence Procurement Review;
- the procurement of non-guided munitions for Army, which represents the largest proportion of expenditure of the annual explosive ordnance sustainment budget;¹³ and
- Defence and the DMO's progress in implementing the recommendations of the 2005–06 performance audit report.

11. The high level audit criteria, based on the findings and recommendations of the previous audit, and taking into account any outcomes or developments that have occurred subsequently, were:

- Defence and the DMO have appropriate processes to forecast demand for,¹⁴ and plan procurements of, explosive ordnance for training and contingency requirements;
- the DMO has implemented appropriate arrangements for inventory management of explosive ordnance, including to ensure that the serviceability of explosive ordnance inventory is maintained;
- the DMO has implemented effective contract management processes to procure explosive ordnance from domestic and overseas suppliers;
- the DMO effectively manages the budgets for recurrent explosive ordnance procurement and the replenishment of explosive ordnance reserve stocks; and

¹² As per the 2005–06 ANAO audit report of the procurement of explosive ordnance, the scope of this audit did not include a review of explosive ordnance distribution and warehousing processes and control arrangements which are managed by the Joint Logistics Command within Defence.

¹³ DMO's Explosive Ordnance Division also manages a range of other major capital acquisition projects involving the acquisition of guided munitions for the three Services, including but not limited to AIR 5409, JP 2070, AIR 5418, AIR 5349 Phase 2 and SEA 1390 Phase 4B. Given this audit's focus on the procurement of non-guided munitions for Army, these projects are not covered in this audit report. However, the ANAO currently has underway a performance audit of the acquisition of the replacement lightweight torpedo under JP 2070 which is expected to table later this financial year.

¹⁴ In the context of the ADF this process is referred to as 'requirements determination'.

- the DMO and Defence have effective processes in place to monitor the implementation of ANAO audit recommendations.

Conclusion

12. The procurement and through life support arrangements for explosive ordnance is a complex activity and is a critical input into ADF capability. A series of performance audits conducted by the ANAO over a number of years has reported on Defence's management of explosive ordnance procurement. In particular, the ANAO's 2005–06 performance audit of the procurement of explosive ordnance¹⁵ identified that improvements were required in the areas of procurement planning (in particular the determination of explosive ordnance requirements to inform this activity); inventory management; contract management; financial management; and safety and suitability for service assessments.

13. In the 2005–06 audit report the ANAO made 15 recommendations which were directed towards addressing the issues identified above. This audit identified that only four of the recommendations of the 2005–06 audit report had been fully implemented¹⁶ but all 15 of these recommendations had been closed as complete in Defence's system for managing recommendations. Defence and the DMO have since informed the ANAO that they have improved their internal control arrangements surrounding the monitoring and closure of audit recommendations.

14. Since the 2005–06 audit report was tabled, Defence and the DMO have worked to gain an increased understanding of the issues that need to be addressed to improve performance in the explosive ordnance domain through a series of reviews. These reviews have encompassed explosive ordnance management processes within Defence and the DMO. The findings and recommendations of these reviews have had a high degree of similarity to

¹⁵ ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*.

¹⁶ Of the remaining 11 recommendations, one of the recommendations was substantially implemented, three of the recommendations were partially implemented, two demonstrated limited progress, and two were not implemented. One of the recommendations was overtaken by events as the recommendation was framed around processes that the DMO had in place to address serviceability issues at the end of the previous audit that are no longer ongoing. Two of the recommendations were unable to be assessed as Government decisions on the areas covered in these recommendations were still under consideration.

those contained in the ANAO's performance audits and confirm the need for ongoing improvement.

15. As a result of the ANAO's work in this current audit, which focused on the procurement of non-guided explosive ordnance for Army, the ANAO identified there were a range of ongoing issues which detracted from the effective procurement of explosive ordnance for the ADF. These range from moderately significant issues, including the adequacy of the DMO's management of prepayments to suppliers, to issues with greater significance such as the management of the serviceability of explosive ordnance inventory, explosive ordnance requirements determination and the strategic management of domestic manufacturing arrangements. Cumulatively, the impact of these issues is substantial. In this light, there remains considerable scope for improvement in the management of explosive ordnance and it will be important for Defence and the DMO to effectively implement the current reform programs underway that seek to remediate them (see paragraph 23).

16. Inventory serviceability is an area requiring ongoing attention. At 30 June 2009, Defence's total stock holdings of explosive ordnance inventory were valued at \$2.9 billion with some 42 per cent of the value of the explosive ordnance inventory categorised as other than 'serviceable'¹⁷ by the DMO. At 30 June 2009, the value of Army explosive ordnance inventory categorised as other than 'serviceable' was 57 per cent of the Army explosive ordnance inventory stock holdings valued at \$437.7 million. The DMO informed the ANAO in October 2009 that it has recently developed a staged approach to addressing the other than 'serviceable' inventory and has been undertaking for some time a disposals backlog project which aims to progressively address this element of other than 'serviceable' explosive ordnance.

17. The 2005–06 ANAO audit of explosive ordnance found that, at the time, funding that was being allocated to the procurement of explosive ordnance during the financial year was being expended through significant prepayments to suppliers with limited or no associated benefits for the Commonwealth from advancing the payments. Accordingly, the ANAO recommended that the DMO's business processes be strengthened to include in the business cases for

¹⁷ Other than 'serviceable' includes explosive ordnance stock that is beyond repair or potentially serviceable. Potentially serviceable stock includes items identified as repairable, items that have a contingency certification and can be used in a limited fashion, items that are life expired, items that are pending inspection, or items that require Explosive Ordnance Division approval to sentence or the provision of technical data.

such prepayments a risk analysis to determine the likelihood of associated benefits being realised. In other words, there should be a business benefit to the DMO from making prepayments in recognition of interest foregone by the Commonwealth and the inherent risks in advancing payments ahead of the receipt of supplies.¹⁸

18. Through this audit the ANAO sought to confirm that the issues previously identified surrounding prepayments had been addressed. The DMO has introduced changes to its prepayments Standard Operating Procedures (SOP) that addressed the intent of the ANAO's recommendation. However, the ANAO obtained a sample of prepayments from the DMO and noted that differing approaches to prepayments were being adopted based on the supplier.

19. Many prepayments for explosive ordnance relate to purchases under the Foreign Military Sale (FMS) system¹⁹ and the Strategic Agreement for Munitions Supply (SAMS).²⁰ The ANAO acknowledges that the DMO has limited capacity to alter payment arrangements under either the FMS system or the SAMS Agreement, both of which involve some level of prepayment. The ANAO also accepts that the substitute processes²¹ the DMO has indicated it has in place in relation to these purchases, if properly applied, should provide the protection envisaged by Recommendation No.12 of the previous audit.

20. The DMO informed the ANAO that, of the \$29.18 million in prepayments for commercial purchases for Army in 2008–09, only one transaction was a genuine prepayment. This was a \$28.55 million prepayment for 25 millimetre (mm) ammunition.²² The DMO provided the ANAO with

¹⁸ The Finance Circular No. 2004/14 *Discounts for prepayment and early payment* advises that to calculate the whole of government cost of the interest foregone in accepting the prepayment, agencies should use the Reserve Bank of Australia cash rate target. In addition, agencies need to take into account other costs and risks that may arise due to the prepayment.

¹⁹ Foreign Military Sales (FMS) is a government-to-government sales arrangement under which the United States (US) Defense Department negotiates and manages an FMS "case" for the acquisition of US technology on behalf of the Australian Government.

²⁰ For example, DMO informed the ANAO that of the \$97.6 million for Army operations explosive ordnance expenditure for 2008–09, \$51.2 million represented prepayments made during 2008–09. This was comprised of \$0.66 million in SAMS contracted milestone prepayments; \$21 million in FMS prepayments and \$29.18 million in prepayments for commercial purchases.

²¹ See paragraph 6.20 for details of these processes.

²² DMO informed the ANAO that the remainder of the \$29.2 million, some \$0.6 million, represented a data mismatch due the receipting issues associated with COMSARM and ROMAN as outlined in paragraph 6.19.

supporting documentation and a copy of the risk assessment for this prepayment. The supporting documentation supplied by the DMO did not include all the required information as identified by the prepayment SOP and did not include calculations required under the Finance Circular No. 2004/14 *Discounts for prepayment and early payment*. Accordingly, there would be benefit in the DMO reviewing whether current practices give sufficient weight to the business benefits to the Commonwealth of the DMO making such prepayments for explosive ordnance.

21. The explosive ordnance requirements determination process is an area where significant improvement is required and this is supported by a number of Defence reviews. This process is central to inventory management and procurement planning, and is primarily focused on enunciating the explosive ordnance requirements to enable alignment of the procurement processes with the training and operational requirements. While the requirements determination process has been the subject of ongoing review and improvement efforts, further work is required to improve the coordination, timing and quality of forecasts provided to the DMO to inform procurement planning. The 2008 appointment of the Vice Chief of the Defence Force (VCDF) as the single point of accountability for explosive ordnance provides an opportunity to improve the requirements determination process. In particular, it offers the opportunity to achieve better coordination of the inputs to this process from the various stakeholders in the explosive ordnance domain within Defence in order to improve the quality and timing of the forecasts of explosive ordnance requirements provided to the DMO.

22. Domestic manufacturing arrangements for explosive ordnance currently represent an area of significant expenditure that needs to be more strategically managed. The domestic explosive ordnance manufacturing arrangements established under the SAMS and Mulwala Agreements constitute a key measure for ensuring continuity of supply of certain types of munitions.²³ Defence spends an average of \$20 million on SAMS items each year and, in 2008–09, paid capability payments to the contractor, Thales

²³ Under the SAMS Agreement, Thales Australia is required to maintain a capability to manufacture certain types and quantities of explosive ordnance required by the ADF. This manufacturing capability is located at a munitions manufacturing facility near Benalla in Victoria. The Mulwala Agreement relates to a Defence owned, Thales Australia operated, propellant and high explosive production facility located at Mulwala in southern New South Wales. Under the terms of the Mulwala Agreement, Thales is required to supply propellant and high explosive to the Benalla munitions factory while the SAMS Agreement, or any contract for this, is in force.

Australia²⁴, of \$63.2 million²⁵ and \$29.7 million under the SAMS and Mulwala Agreements respectively.²⁶ In accordance with the provisions of the SAMS and Mulwala Agreements, the DMO informed the contractor in 2008 that these agreements would not be extended beyond 2015. In the period between now and 2015, Defence is obliged under these agreements to continue to make substantial annual capability payments to the contractor. In addition, in 2007 Defence commenced the Mulwala Redevelopment Project at a cost of \$431 million to remediate and improve the Mulwala facility. At the time of the audit, there was an absence of strategic planning surrounding domestic manufacturing arrangements and an absence of contemporary investment analysis to support the decision to enter into a contract for the upgrade to the Mulwala facility.

23. With the establishment in 2008 of Explosive Ordnance Division in the DMO, and of Explosive Ordnance Branch in Joint Logistics Command in Defence, there have been a number of reforms introduced to address the ongoing issues. As many of these reforms are still in the early phases of development, and many of these issues have remained unresolved for a long time despite earlier efforts to address them, it is too early to confirm that these reforms will provide enduring improvement to Defence and the DMO's management of the procurement and sustainment of explosive ordnance.²⁷

²⁴ At the time of the previous ANAO audit the SAMS and Mulwala agreements were between the Commonwealth and ADI Limited. At that time, ADI Limited was a joint venture between Transfield Holdings (an Australian company) and Thomson-CSF (a French company, partially owned by the French Government, which was renamed Thales in December 2000). In October 2006, the Australian Foreign Investment Review Board approved Thales' acquisition of the remaining 50 per cent stake in ADI Limited which was subsequently renamed Thales Australia.

²⁵ The capability payment amount is indexed annually.

²⁶ The DMO advised the ANAO that capability payments made by the DMO to Thales in respect of the Mulwala Facility totalled \$27.2 million in 2007–08, \$29.7 million in 2008–09 and the estimated commitment for capability payments for 2009–10 is \$34.5 million.

²⁷ The ANAO notes that there are a range of reforms occurring within Defence across the explosive ordnance domain. Given that this audit focuses on the procurement and through life support of explosive ordnance arrangements managed by the DMO, this audit comments on the reforms occurring within DMO and generally only comments on the reforms outside the DMO insofar as they directly impact on the activities of DMO.

24. The Government is seeking to derive substantial savings through the Strategic Reform Program²⁸ (SRP) to fund necessary investments in Defence. Over the 10 years to 2019, Defence aims to deliver through the SRP gross savings of around \$20 billion. The DMO's major contribution to the overall SRP is entitled the Smart Sustainment Program.²⁹ In total, \$180.2 million has been identified to be saved in respect of explosive ordnance under this program over the 10 year time-frame of the SRP, with the savings target for explosive ordnance within the non-equipment procurement stream expected to be \$132.2 million, and the savings to be achieved through the reduction in excess holdings of explosive ordnance inventory expected to be \$48.0 million. The DMO informed the ANAO in January 2010 that 'while the total savings targets have been agreed, their phasing over the 10 year SRP period is still under review and negotiation with the Services'.

25. As identified in the *2008 Audit of the Defence Budget* and other work by Defence, there are clear opportunities to derive savings in the explosive domain. These savings need not be at the expense of capability but rather as a result of improvements in explosive ordnance management practices within Defence and the DMO. While some savings may be realisable in the short-term, there are likely to be costs associated with past explosive ordnance management practices that will continue to be incurred into the future including rebalancing inventory, addressing serviceability and personnel issues, and ongoing payments under domestic manufacturing arrangements.

²⁸ Defence's Strategic Reform Program brings together the work of the *Defence White Paper 2009* and other key reviews including the *2008 Audit of the Defence Budget*, with the aim to 'create the efficient and accountable Defence organisation required to deliver and sustain Force 2030 within the funding envelope agreed by Government'. Department of Defence, *The Strategic Reform Program: Delivering Force 2030*, p. 3, 2009. <<http://www.defence.gov.au/publications/reformbooklet.pdf>> [accessed 14 September 2009].

²⁹ This program focuses on three related elements namely maintenance reform, inventory reform and non-equipment reforms related to explosive ordnance, clothing and fuel. Specific savings related to explosive ordnance under the Smart Sustainment Program have been identified in two of these areas: non-equipment procurement and inventory management.

Key findings by Chapter

Progress of Reform in the Explosive Ordnance Domain (Chapter 2)

26. Defence's explosive ordnance environment has been the subject of a number of reviews³⁰ over the last decade. These reviews have highlighted a range of shortcomings in Defence and the DMO's management of explosive ordnance including in the areas of:

- governance and accountability related to explosive ordnance;
- procurement planning and requirements determination;
- contract management;
- personnel and training issues; and
- financial management.

27. In response to the findings and recommendations of these reviews, there have been a number of reform programs initiated within Defence and the DMO. These reforms have ranged from initiatives which have targeted specific areas in explosive ordnance management to strategic reforms of explosive ordnance arrangements within Defence and the DMO. Key amongst the strategic reforms was Chief of Defence Force (CDF) Directive 4/2008 in which CDF assigned the VCDF as the single point of accountability for explosive ordnance within Defence. Within the DMO, the primary strategic reform was the establishment of the Explosive Ordnance Division in February 2008, which comprises the Munitions Branch and the Guided Weapons Branch.

28. Prior to the establishment of Explosive Ordnance Division, there were a number of reform initiatives underway in the DMO. These sought to address technical, personnel and structural issues. The outcomes of these reforms are addressed in later parts of this report. Since the establishment of the Explosive Ordnance Division, a number of new and replacement explosive ordnance reform activities have commenced. The majority of these initiatives are still in their early stages and have yet to deliver enduring improvements in the explosive ordnance domain.

³⁰ The key reviews include the 2007 *Review of Policy and Procedures in Explosive Ordnance*, the 2008 *Audit of the Defence Budget*, and the explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*.

Recommendations of the 2005–06 ANAO performance audit report

29. Management Audit Branch (MAB), the area responsible for Defence's internal audit function, uses a database known as the Audit Recommendation Management System (ARMS) to record progress in implementing recommendations for both internal and external reviews undertaken in Defence and the DMO, including the timeframe and reasons for closing particular recommendations. In contrast to the ANAO's findings in this audit (as summarised in Table S 1), including that only four of the recommendations of the 2005–06 audit report had been fully implemented, the status of all 15 recommendations from the previous ANAO audit report were recorded as closed in the ARMS database prior to fieldwork commencing for this audit. The reasons set out in ARMS for this are included in the relevant chapters of the report, where the individual recommendations are discussed in detail.

Table S 1

ANAO assessment of Defence and the DMO's progress in implementing the recommendations of ANAO Audit Report No.40 2005–06

Assessment of recommendation	Number of recommendations
Implementation complete	4
Substantially implemented	1
Partially implemented	3
Limited progress	2
Not implemented	2
Overtaken by events	1
Unable to assess	2

Source: ANAO assessment

30. Given the discrepancy between the ANAO's findings in relation to the progress in implementing the recommendations and the status of the recommendations as recorded in the ARMS database, Defence and the DMO have now implemented improvements to procedures for monitoring the implementation and authorising closure of ANAO recommendations.

Requirements Determination (Chapter 3)

31. The requirements determination process is a fundamental input to the effective management of explosive ordnance inventory within Defence. For any given type of explosive ordnance there are three key elements that the requirements determination process assists in informing, namely the quantity

to be acquired; the re-order point; and how much safety stock needs to be maintained for uncertainty. The requirements determination process for the management of explosive ordnance in Defence requires the DMO to engage with a range of stakeholders to plan procurement activities, as listed below.

- Joint Operations Command (JOC) determines the explosive ordnance requirements to support ADF operations and joint activities.
- Capability Managers in the Services³¹ determine Raise Train Sustain (RTS) requirements³² and provide input into the Materiel Sustainment Agreements (MSAs) with the DMO.
- VCDF is responsible for the determination of reserve stock requirements.
- Capability Development Group (CDG) is the coordinating body for the explosive ordnance requirements to be procured as part of the process of acquiring a new weapons capability under a Materiel Acquisition Agreement (MAA) with the DMO.³³

32. Table S 2 summarises the ANAO’s assessment of Defence and the DMO’s progress in implementation of the recommendations from the ANAO Audit Report No.40 2005–06 covered in Chapter 3.

Table S 2

ANAO assessment of Recommendations Numbers 1, 2 and 3 from ANAO Report No.40 2005–06

Recommendation	ANAO Assessment
Recommendation No.1 The ANAO recommends that the JP 2085 Phase 1B Equipment Acquisition Strategy be updated by the Defence Materiel Organisation to include all procurements of new explosive ordnance types under that project phase.	Implementation complete. The JP 2085 Phase 1B Equipment Acquisition Strategy was updated by the DMO in accordance with the recommendation.

³¹ The Chiefs of Navy, Army and Air Force.

³² Raise, Train, Sustain requirements refers to the Services’ resource needs, including explosive ordnance, to conduct training to support the ADF’s capability.

³³ MAAs cover DMO’s acquisition services to Defence for both minor and major capital equipment projects.

Recommendation	ANAO Assessment
<p>Recommendation No.2</p> <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>Partially implemented. The ANAO notes that since the previous ANAO audit report there have been attempts within the DMO to improve internal requirements determination processes, however these remediation plans are still in early stages of development. The ANAO also notes that Recommendation No.2(b) focused on performance measures in the Materiel Sustainment Agreements, which are no longer regarded by Defence as an appropriate measure of sustainment. Therefore recommendation 2(b) is assessed as being overtaken by events.</p>
<p>Recommendation No.3</p> <p>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.</p>	<p>Limited progress. The ANAO examined two major capital equipment projects to assess this recommendation: Land 17 Artillery Replacement Project and Land 40 Phase 2 Direct Fire Support Weapon. The ANAO found that the second pass approval documentation for Land 17 and Land 40 Ph 2 did not clearly identify the explosive ordnance required for these projects.</p>

Source: ANAO assessment

33. All of the recommendations in Table S 2 relate to elements of the requirements determination process. Recommendation No.1 in that table related to Project JP 2085 which is intended to build up explosive ordnance inventory holdings. Recommendation No.3 was concerned with adjusting inventory holdings to reflect the changing requirements brought about by the introduction of weapons platforms through major capital acquisitions.

34. Recommendation No.2 in Table S 2 focused on the interaction between Defence and the DMO for the requirements determination process and was one of the higher priority recommendations from the 2005–06 audit. Supporting the need for priority in this area was a series of reviews carried out subsequent to that audit including the 2007 *Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)*, the 2008 *Audit of the Defence Budget* and the explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*. All of these reviews commented that the requirements determination process was an area that needed to be improved.

35. Since the previous audit, there has been a focus on improving communication with the Services through high-level Explosive Ordnance Coordination meetings involving representatives from the Services and the DMO's Explosive Ordnance Division. However, this audit identified that requirements determination arrangements continue to be fragmented. Issues identified by the audit included planning horizons for Raise Train Sustain (RTS) requirements not being aligned to procurement lead times, insufficient forecasting of operational requirements and uncertainty surrounding reserve stock holdings. While there have been developments in the issues surrounding the operational requirements and reserve stock holdings during the course of this audit, the nature of explosive ordnance inventory management is such that the impact of these developments will not be able to be assessed for several years.

36. While better defining RTS, operations and reserve stockholding requirements may clarify some of the inputs to an inventory management strategy these elements cannot be considered in isolation of each other as they interact. For example, unplanned consumption in one area may limit availability in others. Additionally, there are a range of other inputs which need to be taken into account in developing an inventory management strategy. These include the serviceability of existing inventory, procurement lead times and differing supplier arrangements. All these inputs need to be consolidated at an appropriate level to optimise inventory holdings from a capability and value for money perspective. This audit identified that inventory management currently occurs within the Munitions Branch of Explosive Ordnance Division using an inventory management tool that has known deficiencies.

Sustainment of Explosive Ordnance (Chapter 4)

37. The responsibility for sustainment of explosive ordnance in Defence is shared across the DMO and JLC. JLC is responsible for warehousing, stock maintenance, national logistics and in-theatre support of explosive ordnance inventory. Munitions Branch in the Explosive Ordnance Division of the DMO is responsible for the management of inventory and addressing serviceability issues.³⁴

³⁴ Munitions Branch performs these responsibilities for non-guided explosive ordnance. Guided Weapons Branch in Explosive Ordnance Division performs these responsibilities for guided weapons, including the 155 mm Artillery and the Artillery Precision Guided Munitions (APGMs).

38. Table S 3 summarises the ANAO's assessment of Defence and the DMO's progress in implementation of the recommendations from the ANAO Audit Report No.40 2005–06 covered in Chapter 4.

Table S 3

ANAO assessment of Recommendations Numbers 4, 5 and 11 from ANAO Audit Report No.40 2005–06

Recommendation	ANAO assessment
Recommendation No.4 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.	Overtaken by events. The recommendation from the last audit was framed around processes that the DMO had in place to address serviceability issues at the end of the last audit. These processes are no longer ongoing so the recommendation can be regarded as having been overtaken by events.
Recommendation No.5 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.	Implementation complete. Targets were established in the workforce renewal strategy known as Project Pegasus, and there was monitoring against these targets for the duration of the program in the form of 'traffic-light' reports.
Recommendation No.11 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.	Limited progress. Following the tabling of the previous audit report, the DMO informed the ANAO that it would update its procedures. These amendments were approved and were to be formally incorporated at the next re-issue of the manual during 2007. However, during fieldwork for this audit the ANAO found that the Logistics Procedure Manual has not been updated since 2006. In addition, staff in the Munitions Branch informed the audit team that the Logistics Procedure Manual was out of date and not used by staff.

Source: ANAO assessment

39. While Recommendation No.4 and Recommendation No.5 from the previous audit are assessed as having been 'overtaken by events' and 'implementation complete' respectively, these assessments were made because the recommendations were framed around reforms that the DMO had in place at the time that are no longer ongoing. In both cases, these processes have been subsumed into other activities but the underlying issues giving rise to these recommendations remain.

40. Recommendation No.4 was focused on the serviceability of explosive ordnance. At 30 June 2009, Defence's total stock holdings of explosive ordnance inventory were valued at \$2.9 billion with some 42 per cent of the

value of the explosive ordnance inventory categorised as other than 'serviceable' by the DMO. At 30 June 2009, the value of Army explosive ordnance inventory categorised as other than 'serviceable' was 57 per cent of the Army explosive ordnance inventory stock holdings valued at \$437.7 million. While not directly comparable with the other than 'serviceable' figures in the previous audit, these figures suggest that strategies implemented to date have achieved only limited improvement in this key area of explosive ordnance inventory management.

41. During 2009, the DMO developed a staged approach to addressing the other than 'serviceable' inventory with phase 1 planning and scoping ongoing at the conclusion of audit fieldwork. The DMO has also been undertaking a disposals backlog project which is aimed at progressively addressing one element of other than 'serviceable' explosive ordnance.

42. The previous ANAO audit report identified skills shortages in explosive ordnance within Defence and the DMO as a major issue. Recommendation No.5 was linked to strategies the DMO had in place at that time. In June 2009, the explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009* identified skills shortages as an area of ongoing concern. Explosive Ordnance Division has established a Professionalisation Project with the aim of addressing skill shortages in the Division and difficulties associated with the attraction and retention of staff with engineering and technical skills. During the course of this audit the implementation date for completion of this Professionalisation Project slipped from May 2010 to June 2011, which was attributed by the DMO to scope growth in this Project.

Contract Management (Chapter 5)

43. The Mulwala Agreement and the SAMS Agreement are two interrelating contracts that were originally framed to guarantee the future of ADI (now Thales Australia)³⁵ as the Australian Defence Force's 'first choice

³⁵ At the time of the previous ANAO audit the SAMS and Mulwala agreements were between the Commonwealth and ADI Limited. At that time, ADI Limited was a joint venture between Transfield Holdings (an Australian company) and Thomson-CSF (a French company, partially owned by the French Government, which was renamed Thales in December 2000). In October 2006, the Australian Foreign Investment Review Board approved Thales' acquisition of the remaining 50 per cent stake in ADI Limited which was subsequently renamed Thales Australia.

source of a specified range³⁶ of explosive ordnance'.³⁷ The Munitions Branch of the Explosive Ordnance Division within the DMO is responsible for the ongoing management of these contracts.

44. The SAMS Agreement requires Thales Australia to maintain a capability to manufacture certain types and quantities of explosive ordnance required by the ADF. This manufacturing capability is located at a munitions manufacturing facility near Benalla in Victoria known as the 'Benalla Facility'. The SAMS Agreement covers the provision of 13 of the approximately 830 explosive ordnance items in Defence's inventory.³⁸ Defence spends an average of \$20 million on SAMS items each year. In addition to payments for the delivery of specific munitions orders, Defence is required to make capability payments³⁹ to the supplier of \$63.2 million per year (indexed annually) to retain an agreed level of manufacturing capability.

45. The Mulwala Agreement relates to a Defence owned, Thales Australia operated, propellant and high explosive production facility located at the Mulwala Facility in southern New South Wales. The Mulwala Facility's product is supplied to the Benalla Facility for incorporation into ammunition purchased by Defence; supplied to Defence as a finished product; or sold into the commercial propellant and specialty chemicals market. Under the Mulwala Agreement, Defence pays a capability payment to the supplier of \$29.7 million per year (indexed annually) to retain an agreed level of production capability.

46. Table S 4 summarises the ANAO's assessment of Defence and the DMO's progress in implementation of the recommendations from the ANAO Audit Report No.40 2005–06 covered in Chapter 5.

³⁶ Primarily 5.56 mm, .50 cal, 20 mm and 25 mm ammunition natures, 105 mm artillery ammunition, 5"/54 naval gun ammunitions and Mk 82/Mk 84 bombs and the F1 grenade. Source: Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, p. 3.

³⁷ Department of Defence, explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, para. 13, p. 3.

³⁸ *ibid.*

³⁹ 80 per cent of this capability payment is fixed and the remaining 20 per cent is incentive based.

Table S 4

ANAO assessment of Recommendations Numbers 6, 7, 8, 9 and 10 from ANAO Audit Report No.40 2005–06

Recommendation	ANAO Assessment
<p>Recommendation No.6</p> <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>Not implemented. The SAMS Agreement remediation program did not deliver an updated contract agreed to by both parties. Additionally, in June 2009, the DMO informed the ANAO that while a baseline version of the SAMS Agreement and a version control table was created in the DMO's quality management system, the system has not been used to manage version control for the SAMS Agreement.</p>
<p>Recommendation No.7</p> <p>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.</p>	<p>Not implemented. The timings in the SAMS Agreement and the Army MSA remain the same as those reported in the previous audit.</p>
<p>Recommendation No.8</p> <p>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.</p>	<p>Partially implemented. Agreement Change Proposal (ACP) 26 removes the contractual requirement to create and agree to an ACP to incorporate the results of approved annual Payment Basis Reviews into the Agreement and treats an approved Payment Basis Review report as an ACP. However, the ANAO notes that an ACP is a proposal to make a change to the SAMS Agreement, not a change to the agreement itself. The SAMS Agreement has not been updated to reflect the outcomes of the various ACPs agreed to by the DMO and the supplier.</p>
<p>Recommendation No.9</p> <p>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.</p>	<p>Unable to assess. The ANAO is unable to assess whether Recommendation No.9 has been implemented as investment proposals for the changes to the capability of the Benalla facility were still being developed in late August 2009.</p>

Recommendation	ANAO Assessment
<p>Recommendation No.10</p> <p>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.</p>	<p>Implementation complete. Defence's financial statements have reported the SAMS Agreement as a finance lease since 2005–06.</p>

Source: ANAO assessment

47. As Table S 4 illustrates, the DMO was unable to overcome many of the contract management issues identified by the last audit. Since the 2005–06 audit there have been several significant developments in the area of domestic explosive ordnance manufacture.

48. The SAMS Renegotiation Project was established in January 2006 to review and renegotiate the SAMS Agreement. The objective of the renegotiation project was to 'deliver a negotiated SAMS contract that better aligns risk and returns in keeping with contemporary expectations'. The SAMS Renegotiation Project failed to achieve this aim.

49. Defence has acknowledged that 'both Benalla and Mulwala are under utilised, with capability often based on increasingly irrelevant items, and an inability to meet preparedness requirements'.⁴⁰ The SAMS agreement required the DMO to advise the contractor whether the DMO intended to extend that agreement beyond 2015 by the end of June 2008.⁴¹ Consequently, the DMO undertook work to inform this decision and provided advice to the Chief Executive Officer (CEO) of the DMO in June 2008 recommending that the CEO allow the SAMS Agreement to expire at the end of its initial term in June 2015. The CEO of the DMO accepted this recommendation and advised the contractor accordingly. In December 2008, a recommendation was also agreed to by the CEO of the DMO that the Mulwala Agreement should also be

⁴⁰ Department of Defence, explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, para. 16, p. 3.

⁴¹ Under the terms of the SAMS Agreement, the Commonwealth was obliged to notify Thales by 30 June 2008 of its intention to: (a) terminate the agreement; (b) extend the initial term (30 June 2015) of the agreement for a further 10 years; or (c) allow the agreement to expire at the end of the initial term (30 June 2015).

allowed to expire in 2015⁴² with the contractor subsequently notified of this decision. Unless an alternative arrangement is negotiated, the DMO will continue to be liable for capability payments under the two agreements totalling more than \$92 million per annum (indexed annually) until they expire, and may be liable for additional payments upon expiry which have yet to be fully defined.

50. The Mulwala Redevelopment Project aims to replace the existing propellant manufacturing capability that dates back to the 1940s and includes the construction of new nitrocellulose, solvent and propellant production plants, a confined burn facility and a performance and safety testing centre. In March 2007, on the basis of a submission from Defence, the Parliamentary Standing Committee on Public Works recommended that a redevelopment of the propellant manufacturing facility at Mulwala proceed. The approved expenditure for the project is \$368 million with an additional \$63 million required for environmental remediation works. This Project was experiencing ongoing difficulty at the time of this audit.

51. In July 2009, the ANAO sought confirmation that the investment in the Mulwala facility had been reviewed to confirm that it remains consistent with contemporary requirements and developments in domestic manufacturing arrangements.⁴³ The DMO was unable to demonstrate any such review, relying on a 2001 decision by the Defence Capability Investment Committee. In January 2010, the DMO informed the ANAO that the inaugural meeting for the Project Management Stakeholder Group (PMSG) for the Mulwala Redevelopment Project was held in September 2009. This was more than two years after the contract was signed in June 2007 for the design and construction of the modernised facility. The minutes of the inaugural PMSG, and of the

⁴² Under the terms of the Mulwala Agreement, the Agreement is subject to review by the Commonwealth at the same time and in conjunction with any review of the SAMS Agreement. At each such review, the Commonwealth may: (a) terminate the agreement (b) extend the initial term for a further period of 10 years; or (c) notify Thales that the agreement will expire at the end of the initial term (30 June 2015). According to external advice received by the DMO in March 2008, the Commonwealth is likely to be liable to pay Thales a number of expiry payments upon the expiry of the SAMS and Mulwala Agreement at 30 June 2015. The expiry payments could not be accurately identified and quantified at this time.

⁴³ The origin of the decision to undertake this upgrade of the Mulwala facility was a Strategic Review into the modernisation of the Mulwala Facility undertaken in 1999. The 1999 Review was 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 supplier's ability to meet Defence requirements and generate additional commercial sales. The Review identified improvements required to modernise the facility and rectify significant occupational health and safety and environmental issues.

subsequent meeting in December 2009, indicate that these meetings had commenced considering the production capability at Mulwala. The ANAO notes that this has occurred eight years after the 2001 decision by the Defence Capability Investment Committee which set the rate of production for Mulwala.

52. The decision has been taken to allow the SAMS and Mulwala agreements to expire in mid-2015, at the end of their initial terms. In the period between now and when the agreements expire, the DMO will continue to make significant ongoing expenditure under these agreements and on redeveloping the Mulwala facility. There is currently uncertainty within Defence surrounding the form of future domestic manufacturing arrangements for explosive ordnance. In these circumstances, the ANAO considers there would be benefit in the DMO undertaking a strategic review of the domestic manufacturing arrangements to assess the benefits and viability of investment in domestic manufacturing capabilities. At the conclusion of the audit, the DMO was undertaking ongoing investigation and consideration of options to maintain a domestic manufacturing capability post 30 June 2015. The DMO informed the ANAO that options would be presented to Defence Capability Investment Committee in March 2010 prior to a submission to Government.

Financial Management (Chapter 6)

53. The 2005–06 ANAO audit report concluded that weaknesses in procurement planning for explosive ordnance contributed to a poor alignment between explosive ordnance budgets and actual expenditure and also noted that a significant proportion of Defence's prepayments related to procurement of explosive ordnance.

54. Table S 5 summarises the ANAO's assessment of Defence and the DMO's progress in implementation of the recommendations from the ANAO Audit Report No.40 2005–06 covered in Chapter 6.

Table S 5

ANAO assessment of Recommendations Numbers 12, 13, 14 and 15 from ANAO Audit Report No.40 2005–06

Recommendation	ANAO Assessment
<p>Recommendation No.12</p> <p>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.</p>	<p>Partially implemented. The DMO released the revised Standard Operating Procedure for the management of prepayments in February 2007.</p>
<p>Recommendation No.13</p> <p>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.</p>	<p>Unable to assess. Phases 2 and 3 of JP 2085 had not received second pass approval from Government at the time of audit fieldwork.</p>
<p>Recommendation No.14</p> <p>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.</p>	<p>Substantially implemented. In 2005–06 and 2007–08 the total expenditure on explosive ordnance for Army advised by the DMO is within 10 per cent of budget. The ANAO notes however that this is an area of ongoing reform in Explosive Ordnance Division.</p>
<p>Recommendation No.15</p> <p>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.</p>	<p>Implementation complete. The ANAO found that reconciliations between COMSARM^A and ROMAN^B are being completed and signed off on a timely basis.</p>

Source: ANAO assessment

Note:

^A COMSARM (Computer System for Armaments) is Defence's explosive ordnance inventory management system.

^B ROMAN (Resource Output Management and Accounting Network) is Defence's financial management information system.

55. A significant issue in the previous ANAO audit of explosive ordnance was that funding was being allocated to the procurement of explosive ordnance during the financial year. This funding was being expended through significant prepayments with limited or no associated benefits. That audit recommended that arrangements surrounding prepayments should be strengthened.

56. The ANAO considers that it remains important that prepayments are only undertaken in circumstances where there is a clear benefit to the

Commonwealth and risks are appropriately managed. Notwithstanding that the DMO introduced changes to its prepayments SOP that addressed the intent of the recommendation in the previous audit, the ANAO obtained a sample of prepayments from the DMO and noted that differing approaches to prepayments were being adopted based on the supplier.

57. The DMO informed the ANAO that of the \$97.6 million for Army operations explosive ordnance expenditure for 2008–09, \$51.2 million represented prepayments made during 2008–09. Some \$22 million of this \$51.2 million related to purchases under the FMS system and contracted milestone payments under the SAMS Agreement.⁴⁴ The ANAO acknowledges that the DMO has limited capacity to alter payment arrangements under the FMS system and the SAMS Agreement, both of which require some level of prepayment. The ANAO also accepts that the substitute processes⁴⁵ the DMO has indicated it has in place in relation to these purchases, if properly applied, should provide the protection envisaged by Recommendation No.12 of the previous audit.

58. The DMO informed the ANAO that, of the \$29.18 million in prepayments for commercial purchases in 2008–09, only one transaction was a genuine prepayment. This was a \$28.55 million prepayment for 25 mm ammunition.⁴⁶ The DMO provided the ANAO with supporting documentation and a copy of the risk assessment for this prepayment. The supporting documentation supplied by the DMO did not include all the required information as identified by the prepayment SOP and did not include calculations required under the Finance Circular No. 2004/14 *Discounts for prepayment and early payment*. Accordingly, there would be benefit in the DMO reviewing whether current practices give sufficient weight to the business benefits to the Commonwealth of the DMO making such prepayments for explosive ordnance.

59. Other recommendations in the previous audit report sought to address budgeting issues, as there was a poor alignment between budget allocations

⁴⁴ This \$22 million was comprised of \$0.66 million in SAMS contracted milestone payments and \$21.37 million in FMS prepayments.

⁴⁵ See paragraph 6.20 for details of these processes.

⁴⁶ DMO informed the ANAO that the remainder of the \$29.2 million, some \$0.6 million, represented a data mismatch due the receipting issues associated with COMSARM and ROMAN as outlined in paragraph 6.19.

and annual expenditure. The ANAO reviewed expenditure against budget allocations for 2005–06 and 2006–07 and all showed significant variance against the discrete lines of funding that combine to provide the entire annual explosive ordnance budget for Army. For 2007–08 and 2008–09, the variance across the lines of funding was significantly reduced. In 2008–09, the operations budget represented just over 60 per cent of the entire explosive ordnance budget allocation for that year, which was a significantly higher proportion than in the previous years. Of the \$97.6 million expended against the operations portion of the budget in 2008–09, \$51.2 million related to prepayments.

60. A February 2009 internal review of Munitions Branch procurement practices identified a number of less than adequate practices in relation to the contract and financial management within the branch, including a number of potential breaches of the Commonwealth and Defence financial management and accountability framework, and a limited awareness and use of the Defence Procurement Policy Manual. The Head of Explosive Ordnance Division accepted the findings of the report and requested monthly progress reports in addressing the findings and recommendations of the review from the Director-General of Munitions Branch. The final progress report, dated 31 August 2009, noted that: ‘the critical items are closed and only the ongoing items are being captured as part of normal business’.⁴⁷ A follow-up internal review of Munitions Branch procurement practices is planned for early 2010 to assure the efficacy of the remedial actions.

61. The Accurate Monthly Financial Reporting project is an ongoing initiative within the Explosive Ordnance Division which aims to improve reporting of prepayments; develop and manage budgets on an accruals basis; and introduce other improvements including Financial Management and Accountability Regulation (FMAR) 10 compliance and improvements to the reconciliation process.⁴⁸ The DMO informed the ANAO in November 2009 that there has been schedule slip in the Accurate Monthly Financial Reporting

⁴⁷ MUNITIONS/OUT/2009/829 – Munitions Branch Procurement Remediation Action Plan: Progress Report as at 31 August 2009.

⁴⁸ Regulation 10 of the *Financial Management and Accountability Regulations 1997* relates to the approval of future spending proposals and provides that, if any of the expenditure under a spending proposal is expenditure for which an appropriation of money is not authorised by the provisions of an existing law or a proposed law that is before the Parliament, an approver must not approve the proposal unless the Finance Minister (or delegate) has given written authorisation for the approval.

initiative due to the complexity of reconciliation activities and lack of staff knowledge due to staff turnover.

62. At the conclusion of the previous audit, the ANAO identified that the issues with procurement planning, financial management, inventory management, safety and suitability for service assessments, and contract management required the effective implementation of long term remediation strategies. At the time of that audit the DMO had a number of remediation activities underway and the ANAO acknowledged that this was a positive outcome noting that the DMO was in the initial phases in a process of ongoing reform.

63. This audit identified that there were a range of ongoing issues which detracted from the effective procurement of explosive ordnance for the ADF, a number of which had been identified by previous ANAO audits. In early 2008, structural changes to the way explosive ordnance procurement is managed by the DMO led to the establishment of the Explosive Ordnance Division and the implementation of an ongoing process of reform. Given the limited progress in addressing fundamental issues of explosive ordnance procurement over a long period of time, it is apparent that ongoing and future reform activities need to be closely monitored and refined to ensure that they are delivering enduring improvements.

Defence and the DMO's response

64. Defence and the DMO's response to the proposed audit report was as follows:

Defence welcomes the ANAO audit report on *Procurement of Explosive Ordnance for the ADF* which examined the effectiveness of Defence and DMO's management of procurement and through life support arrangements to meet the explosive ordnance requirements of the ADF. In particular this report reviewed the progress of Defence in implementing the recommendations of Audit Report No.40 2005–06 of *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*.

The procurement and through-life support of explosive ordnance is a complex process and Defence has implemented considerable changes following the ANAO's 2005–06 report. However, Defence accepts that reform must continue and agrees with the two recommendations in the audit.

Recommendations

The ANAO acknowledges the significant number of reform initiatives currently underway in Defence and the DMO in relation to the explosive ordnance domain and has taken this into account in formulating our recommendations in this report.

Recommendation No.1

Para 3.72

The ANAO recommends that Defence and the DMO develop processes for consolidating explosive ordnance inventory requirements of all stakeholders, at an appropriate level, to facilitate efforts to optimise explosive ordnance inventory holdings from both a capability and value for money perspective.

Defence and DMO Response: *Agreed.*

Recommendation No.2

Para 5.81

The ANAO recommends that Defence undertake a strategic review of domestic manufacturing arrangements to:

- evaluate the extent that value for money can be achieved from existing arrangements; and
- determine the ongoing viability of investment in domestic manufacturing capabilities.

Defence and DMO Response: *Agreed.*

Audit Findings and Conclusions

1. Introduction

This chapter provides background information on explosive ordnance management arrangements within the Department of Defence and the Defence Materiel Organisation (DMO), the 2005–06 ANAO audit report on the procurement of explosive ordnance⁴⁹ and the approach for this audit.

Background

1.1 The procurement of explosive ordnance⁵⁰ involves significant levels of expenditure (the DMO's sustainment budget for explosive ordnance in 2008–09, for all three Services⁵¹, was \$425.8 million)⁵² and has implications for the overall preparedness of the Australian Defence Force (ADF).⁵³ Defence considers explosive ordnance to be 'integral to military capability and essential to the operations' of the ADF.⁵⁴

1.2 Defence's draft policy for the management of explosive ordnance states:

...effective acquisition and whole-of-life management of EO [explosive ordnance] is critical to the generation of ADF capability and is the key to ensuring the right EO is available when it is required, at the right place, in the

⁴⁹ ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*.

⁵⁰ Explosive ordnance includes: bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature. Source: Defence Policy for the Management of Explosive Ordnance, DI(G) LOG 4-1-013 (in draft).

⁵¹ Services include the Army, Navy and Air Force.

⁵² \$364.7 million, or 85.6 per cent, of the total sustainment budget was spent on non-guided munitions sustainment. Of this, \$238.3 million was spent on the sustainment of non-guided munitions for Army. The audit therefore focused on Army as the largest user of explosive ordnance and the procurement of non-guided munitions as the primary type of explosive ordnance used by Army. In addition, the DMO is responsible for managing the Explosive Ordnance Reserve Stocks replenishment project known as Joint Project 2085 (JP2085) Phase 1B. JP2085 Phase 1B has a total approved budget of \$216 million, cumulative project expenditure of \$184 million to 30 June 2009 and an expected expenditure of \$18 million in 2009–10. The project is aimed at re-establishing warstock requirements on top of normal operating stock replenishment activity. The ANAO notes that Explosive Ordnance Division manages a range of other major capital acquisition projects including but not limited to AIR 5409, JP 2070, AIR 5418, AIR 5349 Phase 2 and SEA 1390 Phase 4B. Given this audit's focus on the procurement of non-guided munitions for Army, these projects are not covered in this audit report.

⁵³ The DMO's forecasted explosive ordnance sustainment budget for 2009–10 is \$345 million.

⁵⁴ Defence Policy for the Management of Explosive Ordnance, DI(G) LOG 4-1-013 (in draft).

right condition and in the required quantities to enable the ADF to conduct its operations and activities.⁵⁵

1.3 However, the task of effectively managing the acquisition and whole of life management of the ADF's explosive ordnance requirements has proven over many years to be both complex and challenging. Defence has conducted a wide range of reviews over time, particularly in the last decade, to identify the aspects requiring remediation and, similarly, a number of reform programs have been introduced seeking to implement the required improvements.

1.4 The ANAO has also conducted performance audits in this area with the most recent being ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)* tabled in May 2006.⁵⁶ That audit found that extensive improvements were 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. The report made 15 recommendations related to the areas of procurement planning, financial management, inventory management, contract management, and safety and suitability for service assessments.

1.5 The report concluded that addressing the issues identified by the audit would require the effective implementation of long term remediation strategies. The DMO acknowledged the audit report in its 2005–06 Annual Report, stating that:

The ANAO report noted work already commenced to improve procurement and management of explosive ordnance and the DMO is currently implementing the recommendations.⁵⁷

1.6 In its 2005–06 Annual Report, the DMO also commented that a high operational tempo and the associated rapid acquisitions and replenishments procurements placed extreme pressures on resources. In particular:

The most significant issue facing the sustainment of explosive ordnance is the DMO's ability to sustain the technical integrity of its explosive ordnance inventory, while maintaining the ever increasing level of operational support for overseas operations.⁵⁸

⁵⁵ *ibid.*

⁵⁶ See the section commencing at paragraph 1.17 for a discussion of other relevant ANAO audits.

⁵⁷ Department of Defence, *Annual Report 2005–06, Volume Two – Defence Material Organisation*, p. 42.

⁵⁸ *ibid.*

1.7 Since the 2005–06 ANAO performance audit, a number of subsequent reviews and studies have concluded that Defence’s explosive ordnance arrangements are characterised by fragmented lines of accountability, structures and practices and an absence of a Defence wide ‘end-to-end system perspective’.⁵⁹ These reviews, and the subsequent reform programs instituted by Defence and the DMO, are considered in more detail in Chapter 2.

1.8 Given the ongoing high tempo of operations the ADF has experienced since 2000-01, and the materiality (both in terms of financial investment and capability) of explosive ordnance, the ANAO considered it timely to conduct another audit of Defence and the DMO’s procurement of explosive ordnance, particularly for Army. This audit provided the ANAO with the opportunity to assess Defence and the DMO’s current administration of this key function, including the agencies’ progress towards implementing the recommendations of the 2005–06 audit and other developments in the explosive ordnance domain since the previous audit tabled in Parliament in May 2006.

Complexity of the explosive ordnance management task

1.9 As noted in paragraph 1.3, the procurement and through life support of explosive ordnance is a complex process. It involves extended lead times and the commitment of significant levels of resourcing. There are a range of factors that contribute to the complexity of the explosive ordnance management task facing Defence and the DMO including the number of stakeholders requiring explosive ordnance. The primary users are Army, Navy and Air Force for Raise, Train, Sustain activities; and Joint Operations Command for operations.

1.10 However, the volume of explosive ordnance required to be held by Defence is not only driven by consumption to undertake current and planned activities of these primary users. In addition, an appropriate volume of explosive ordnance inventory has to be held to meet possible contingencies. Determining the required quantities is not a simple task and can involve a range of subjective judgements based on perceived risks.⁶⁰ Errors in

⁵⁹ Department of Defence, explosive ordnance component of the ‘Logistics Companion Review’ to the *Defence White Paper 2009*.

⁶⁰ Requirements determination is defined by Defence as ‘the process which establishes the quantity of an item of supply to be procured; [comprising] assessment, requirement computation and procurement determination’. Defence Instructions (General) LOG 06-4 ‘Australian Defence Force requirements determination and management of reserve stocks’, 30 August 2005.

judgements in this area can introduce strategic risk where insufficient quantities are held and create waste where excessive quantities are acquired.

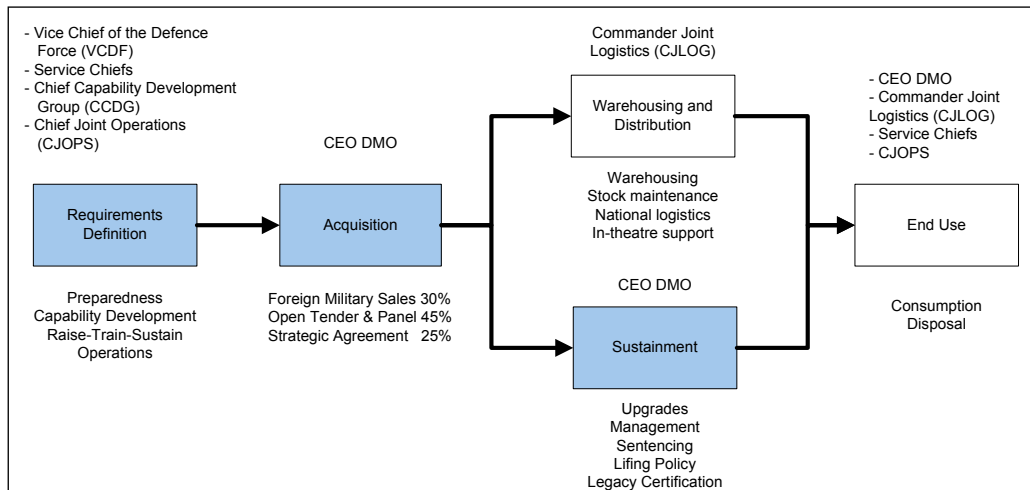
1.11 A key factor in determining the volume of explosive ordnance that is required to be held for consumption and contingencies is the range of procurement arrangements that apply to different types of explosive ordnance. For the ADF, these procurement arrangements include domestic manufacturing arrangements established to ensure continuity of supply for key types of explosive ordnance, government to government acquisitions and acquisitions from overseas commercial organisations.

1.12 A key input to explosive ordnance procurement decisions are changes to major capital equipment utilised by the Services. Procurement strategies need to adapt as equipment approaches the end of its service life to minimise waste and to ensure the timely availability of revised explosive ordnance requirements to facilitate the transition of new equipment into service.

1.13 Once procurement processes are complete, appropriate inventory management processes are required to ensure that explosive ordnance is retained at appropriate levels of serviceability. The development and implementation of such processes is not a simple task and must be informed by accurate information about the demand for the various types of explosive ordnance, resources available to address serviceability issues, and costs involved in storing explosive ordnance which cannot be cost effectively made serviceable. Serviceability, and the capacity to improve serviceability of particular types of explosive ordnance held in inventory, is also a key input to defining procurement strategies.

Explosive ordnance management structure

1.14 Figure 1.1 illustrates key phases in the explosive ordnance life cycle and the points of accountability for each stage within Defence and the DMO. This audit focused on the areas in the blue shaded boxes within the explosive ordnance life cycle. A more detailed overview of the audit objective and scope is provided in paragraphs 1.32 to 1.37.

Figure 1.1**Explosive Ordnance Life Cycle**

Source: Adapted from Department of Defence documentation.

1.15 In February 2008 the DMO established the Explosive Ordnance Division by separating functions for the acquisition and sustainment of explosive ordnance from the Electronic and Weapons System Division.⁶¹ The division was established to provide a dedicated focus to the ongoing reform of acquisition and sustainment of explosive ordnance.⁶² The division consists of a divisional executive team and two branches; Guided Weapons Branch⁶³ and Munitions Branch.⁶⁴ Given the focus of this audit on the procurement of non-guided munitions for Army, much of the fieldwork was limited to Munitions Branch and the Explosive Ordnance Executive area in Explosive Ordnance Division.

1.16 Figure 1.2 illustrates the high level structure and functions of the Explosive Ordnance Division within the DMO, including the areas of focus for this audit in the blue shaded boxes. A more detailed overview on the audit objective and scope is provided in paragraphs 1.32 to 1.37.

⁶¹ Department of Defence, *Explosive Ordnance Division, DMO*, c.2008.

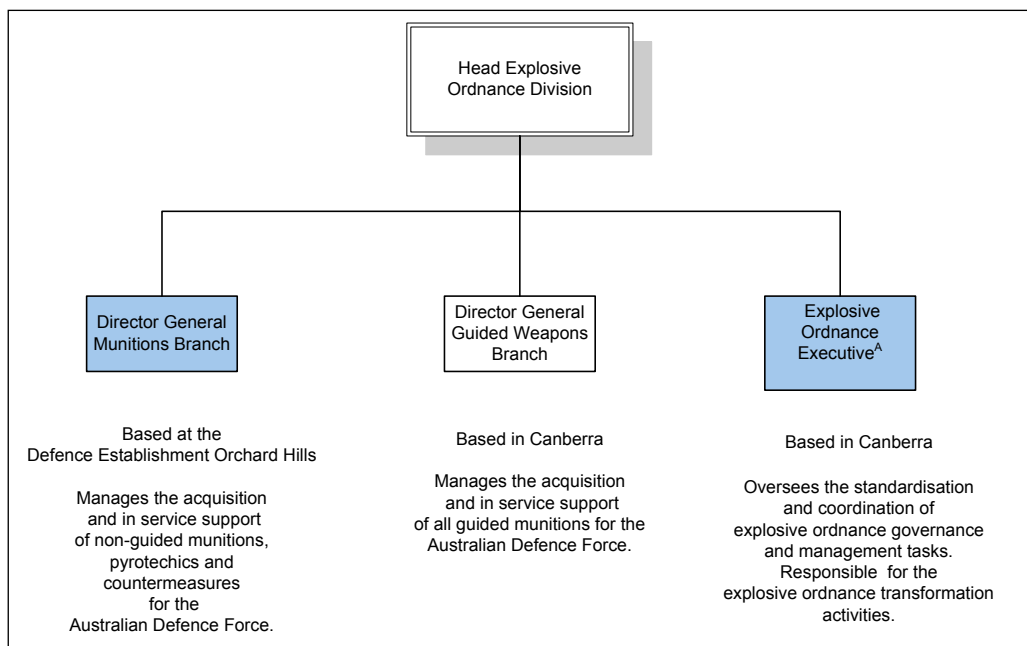
⁶² Department of Defence, *Annual Report 2007–08, Volume Two – Defence Materiel Organisation*, p. 6.

⁶³ Responsible for the more complex system-centric weapons.

⁶⁴ Responsible for less complex munitions. At the time of the 2005–06 audit report, Munitions Branch was called the Guided Weapons and Explosive Ordnance (GWEO) Branch.

Figure 1.2

The Explosive Ordnance Division within the DMO



Note:

^A The Explosive Ordnance Executive consists of the following positions: Chief of Staff of Explosive Ordnance Division, Director of Human resources, Director of Financial Management, Director of Logistics, Director of Engineering and Maintenance and Director of Explosive Ordnance Transformation. The Explosive Ordnance Transformation program is the major driver of reform initiatives in Explosive Ordnance Division. This is discussed further in paragraph 2.50.

Source: Adapted from Department of Defence documentation.

Previous ANAO audits in the explosive ordnance domain

1.17 This audit is the sixth ANAO performance audit of the explosive ordnance area in Defence since 1987.⁶⁵ Four of these audits focused specifically on the procurement of explosive ordnance:

- the Auditor General's 1987 Efficiency Audit Report *Department of Defence: Royal Australian Airforce (RAAF) explosive ordnance*;

⁶⁵ The preceding five audits were: Auditor-General, Efficiency Audit Report, *Department of Defence: RAAF explosive ordnance*, December 1987; Efficiency Audit Report, *Department of Defence: safety principles for explosives*, April 1988; Audit Report No.5 1993–94, *Explosive Ordnance*, Department of Defence, September 1993; Audit Report No.8 1995–96, *Explosive Ordnance*, Department of Defence, November 1995; ANAO Audit Report No.40 2005–06, *Procurement of explosive ordnance for the Australian Defence Force (Army)*, May 2006.

- the ANAO Audit Report No.5 1993–94, *Explosive Ordnance*;
- the ANAO Audit Report No.8 1995–96, *Explosive Ordnance*; and
- the ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*.

1.18 Between them, these audits made 69 recommendations covering a range of areas in explosive ordnance stock management. All of these audits highlighted the explosive ordnance stockholding policy, including the processes around forecasting demand for explosive ordnance, as a priority.

1.19 The ANAO notes that since 1987, the explosive ordnance domain has undergone significant changes in structure. In February 1998, as a result of the 1997 Defence Efficiency Review, Defence fundamentally changed all aspects of explosive ordnance management through the establishment of the Joint Ammunition Logistics Organisation (JALO). The JALO assumed responsibility for most explosive ordnance functions for the Services, and established new structures and processes to discharge these responsibilities. JALO was an element of Support Command Australia which subsequently became Joint Logistics Command (JLC). JLC, headed by the Chief of Joint Logistics Command (CJLOG), is responsible for many functions ranging from ADF strategic logistics and operational level logistic support to ADF operations through to equipment management.

1.20 In 2003, as a result of the Defence Procurement Review conducted by Mr Malcolm Kinnaird AO (the Kinnaird Review), there was another restructure of explosive ordnance management in Defence and the DMO. The Kinnaird Review noted that:

The functions covering strategic logistics and operational level logistics support, for which CJLOG [Chief Joint Logistics Command] is responsible directly to CDF [Chief of the Defence Force], do not sit neatly with the core business of the DMO, which is the acquisition of defence equipment and the provision of through-life-support.⁶⁶

1.21 As a result of the Kinnaird Review, functions that were previously the responsibility of the JALO were reallocated between Defence and the DMO. Under this arrangement logistics issues such as warehousing and distribution

⁶⁶ Department of Defence, *Procurement Review 2003*, 15 August 2003, p. 45. <<http://www.defence.gov.au/publications/dpr180903.pdf>> [accessed 23 November 2009].

became the responsibility of JLC in Defence while the DMO retained responsibility for the procurement and through life support of explosive ordnance. Given the extent of the restructures undertaken in Defence and the DMO following the 1997 Defence Efficiency Review and the Kinnaird Review, it is difficult to draw direct comparisons between the findings of ANAO audits pre-dating these restructures and the findings of more recent performance audits.

1.22 The ANAO Audit Report No.40 2005–06, *Procurement of Explosive Ordnance for the Australian Defence Force (Army)* however focused on the parts of the DMO dealing with the procurement of explosive ordnance in a post-Kinnaird Review environment. As discussed in paragraph 1.3, the 2005–06 performance audit found that extensive improvements were required to the management of explosive ordnance within Defence and the DMO and made 15 recommendations to this end.

1.23 The scope of this 2009–10 audit included an assessment by the ANAO of Defence and the DMO's progress towards implementing the recommendations of the 2005–06 ANAO audit on explosive ordnance. Accordingly, on 6 March 2009, the ANAO requested a status update from Defence on the implementation of recommendations made in the 2005–06 audit report. Defence referred this request on to the DMO. On 29 May 2009, the DMO provided the ANAO with the organisation's assessment of the status of implementation of the recommendations from the previous audit. The ANAO's summary assessment of the extent to which Defence and the DMO have implemented these recommendations is included in Chapter 2 (commencing at paragraph 2.53). The DMO's assessments of progress, together with the ANAO's detailed assessments and findings are included in the relevant chapters of this report.

Other ANAO reports

1.24 In addition to the ANAO performance audits (discussed in paragraphs 1.17 to 1.18) that focused specifically on explosive ordnance, two other ANAO performance audit reports tabled since the 2002 have included significant findings related to explosive ordnance.

1.25 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.⁶⁷ In response to ANAO concerns raised during this audit, the DMO agreed that there was a need to take urgent action to address the legacy explosive ordnance issues. However, subsequently, Audit Report No.40 2005–06 found that there had been limited progress in this area.

1.26 The 2005–06 audit also reported the DMO's acknowledgement in 2005 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.

1.27 The ANAO Audit Report No.3 2006–07, *Management of Army Minor Capital Equipment Procurement Projects* found a lack of transparency in the slippage from the original service date in the Medium Artillery Replacement Ammunition Project (MARAP), a high value Army minor capital equipment project procuring explosive ordnance.⁶⁸

1.28 The original in service date for the explosive ordnance to be acquired under MARAP was 2005–06, based on an initial equipment order date of December 2004. In 2005 Defence revised the in service date to 2007–08. However, as at February 2006, the acquisition strategy had not been finalised. In November 2009, Defence informed the ANAO that:

MARAP, the Army Minor Project to deliver Medium Artillery Replacement Ammunition, has been subject to funds re-prioritisation and reduction. It will now deliver at least one nature of medium artillery ammunition once the

⁶⁷ Legacy explosive ordnance is ordnance currently in service for which there is no clearly identifiable audit trail regarding its safety and suitability for service assessment (See footnote 114 for further explanation of this term).

⁶⁸ This Army Minor project is for the acquisition of a new family of 155mm munitions to provide a significant increase in operational capability for combat force indirect firepower in terms of lethality, range and coverage. Introduction into service of this ammunition will enhance the in-service M198 155mm Howitzer capability. The project is linked to Land 17 [major capital equipment project], which aims to enhance or replace the 155 mm platform [see footnote 69 for a description of the project]. The principal aim of the project is to ensure that munitions acquired will not be obsolescent, or technologically inferior, on introduction of any Land 17 155mm Howitzers. Any integration and transition issues will be the responsibility of Land 17. Subsequent to the Minor project, stock holdings of MARAP ammunition will be procured. Source: ANAO Audit Report No.3 2006–07, *Management of Army Minor Capital Equipment Procurement Projects*, p. 55.

current scoping activity, which is being aligned with Government decisions regarding the LAND 17⁶⁹ capability, is completed.⁷⁰

1.29 ANAO Audit Report No.3 2006–07 noted that there are a range of complexities associated with this Army minor capital equipment project including linkages to unapproved Major Capital Acquisitions, and issues surrounding domestic manufacturing capability and projects intended to replenish explosive ordnance warstocks through Joint Project (JP) 2085. In this context the report stated that:

Defence advised that delays have been caused by the need to seek endorsement from Government about Major capital project LAND 17, due to linkages to future indigenous ammunition production, and that there was a clear need to hold off on progressing the Minor project until after the impact of the Government's decision on LAND 17 was known. It is expected that LAND 17 will be able to utilise the proposed MARAP family of ammunition. Defence advised in June 2006 that, 'following the acceptance testing for MARAP it is envisaged that the acquisition of the MARAP ammunition family will be supplemented by the Major capital project, JP 2085, together with Army Head Quarters (AHQ) Sustainment funding'.⁷¹

1.30 The ANAO reviewed second pass approval documentation for Land 17 as part of this audit. This review is set at paragraphs 3.22 to 3.31.

Parliamentary oversight of Defence explosive ordnance issues

1.31 On 8 August 2008, the Joint Committee of Public Accounts and Audit (JCPAA) tabled its report on the Committee's inquiry into financial reporting and acquisition at the Department of Defence, entitled *Report 411–Progress on equipment acquisition and financial reporting in Defence*.⁷² The DMO provided a remediation plan to the JCPAA, which is outlined in the Committee's report.

⁶⁹ Land 17 is intended to enhance the Australian Army indirect fire support system through the replacement or upgrade of the 105 mm Hamel Howitzer and 155 mm M198 Howitzer fleets when they reach the end of their service life. The objective for the project is to provide Army with new protected self-propelled guns, new lightweight towed guns, and a digitised, networked Battle Management System.

⁷⁰ Defence and DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 14.

⁷¹ ANAO Audit Report No.3 2006–07, *Management of Army Minor Capital Equipment Procurement Projects*, p. 56.

⁷² Commonwealth of Australia, Joint Committee of Public Accounts and Audit, *Report 411 Progress on equipment acquisition and financial reporting in Defence*, August 2008.

This plan includes a number of outcomes that were planned for 2006–07 which relate to explosive ordnance. Namely:

- continue the improvement in explosive ordnance inventory processing and reconciliation policies and procedures;
- implement financial reconciliation policies to improve the pricing accuracy of complex inventory assets; and
- continue the program of enhancing computer systems to automate accurate pricing of explosive ordnance assets.⁷³

Audit objective, scope and criteria

1.32 The objective of this audit was to examine the effectiveness of Defence and the DMO's management of procurement and through life support arrangements to meet the explosive ordnance requirements of the ADF, particularly the non-guided munitions requirements of Army. This included a review of the progress of Defence and the DMO in implementing the recommendations of ANAO Audit Report No.40 2005–06.⁷⁴

1.33 The explosive ordnance domain in Defence and the DMO has undergone significant restructuring in recent years, including following the 2003 Defence Procurement Review, with logistics issues such as warehousing and distribution becoming the responsibility of JLC in Defence⁷⁵ while the DMO retained responsibility for the procurement and through life support of explosive ordnance. Currently, Explosives Ordnance Division in the DMO is responsible for carrying out the DMO's explosive ordnance responsibilities.

1.34 Paragraph 1.1 points out that for the 2008–09 financial year the DMO's expenditure for the total explosive ordnance sustainment budget, for all three Services⁷⁶, was \$425.8 million⁷⁷, of which some \$364.7 million, or 85.6 per cent,

⁷³ Department of Defence, *Annual Report 2005–06, Volume Two - Defence Material Organisation*, p. 43.

⁷⁴ As per the previous audit on the procurement of explosive ordnance, the scope of this audit did not include a review of explosive ordnance distribution and warehousing processes and control arrangements within Defence.

⁷⁵ In March 2008, the Chief of the Defence Force (CDF) appointed the Vice Chief of the Defence Force (VCDF) as the single point of accountability within Defence for explosive ordnance. Subsequently, in April 2008, the Explosive Ordnance Branch within Joint Logistics Command was established to, amongst other things, implement logistic management and governance for Defence explosive ordnance and weapons.

⁷⁶ Services include the Army, Navy and Air Force.

⁷⁷ The DMO's forecasted explosive ordnance sustainment budget for 2009–10 is \$345 million.

was spent on non-guided munitions sustainment. Of this, \$238.3 million was spent on the sustainment of non-guided munitions for Army. The audit therefore focused on Army as the largest user of explosive ordnance and the procurement of non-guided munitions as the primary type of explosive ordnance used by Army.

1.35 Accordingly, the audit scope covered:

- the explosive ordnance procurement and through life support arrangements for which the DMO retained responsibility following the 2003 Defence Procurement Review;
- the procurement of non-guided munitions for Army, which represents the largest proportion of expenditure of the annual explosive ordnance sustainment budget; and
- Defence and the DMO's progress in implementing the recommendations of 2005–06 performance audit report.

1.36 Also included in the scope of the audit was the Explosive Ordnance Reserve Stocks replenishment project, known as JP 2085 Phase 1B, for which the Explosive Ordnance Division is also responsible. JP 2085 Phase 1B has a total approved budget of \$216 million, cumulative project expenditure of \$184 million to 30 June 2009 and an expected expenditure of \$18 million in 2009–10. The project is aimed at re-establishing warstock requirements on top of normal operating stock replenishment activity.

1.37 However, the Explosive Ordnance Division also manages a range of other major capital acquisition projects involving the acquisition of guided munitions for the three Services, including but not limited to AIR 5409, JP 2070, AIR 5418, AIR 5349 Phase 2 and SEA 1390 Phase 4B. Given this audit's focus on the procurement of non-guided munitions for Army, these projects are not covered in this audit report.

Audit criteria

1.38 The high level audit criteria, based on the findings and recommendations of the previous audit and taking into account any outcomes or developments that have occurred since, were:

- Defence and the DMO have appropriate processes to forecast demand for⁷⁸, and plan procurements of, explosive ordnance for training and contingency requirements;
- the DMO has implemented appropriate arrangements for inventory management of explosive ordnance, including to ensure that the serviceability of explosive ordnance inventory is maintained;
- Defence and the DMO have implemented effective contract management processes to procure explosive ordnance from domestic and overseas suppliers; and
- the DMO effectively manages the budgets for recurrent explosive ordnance procurement and the replenishment of explosive ordnance reserve stocks; and
- Defence and the DMO have effective processes in place to monitor the implementation of ANAO audit recommendations.

1.39 The audit was conducted in accordance with ANAO auditing standards at a cost to the ANAO of some \$435 000.

Report structure

1.40 The remainder of the audit report is organised into five chapters.

- Chapter 2 provides an overview of the reviews and internal audits that have occurred in the explosive ordnance domain within Defence and the DMO since Audit Report No.40 2005–06 was tabled in mid 2006. In addition, the chapter provides an overview of the history of reforms in the explosive ordnance domain since the last audit. It also provides an overview of the ANAO's evaluation of the extent to which the recommendations of the 2005–06 performance audit have been implemented and reports on improvements to Defence and the DMO's

⁷⁸ In the context of the ADF this process is referred to as 'requirements determination'.

monitoring processes for the implementation of ANAO recommendations.

- Chapter 3 provides an overview of the requirements determination process, including the roles of all the major stakeholders in the requirements determination process and assesses Defence and the DMO's progress in implementing recommendations 1, 2, and 3 from the previous audit report.
- Chapter 4 discusses aspects of sustainment of explosive ordnance including the serviceability of explosive ordnance both in the context of the extent to which Defence and the DMO have implemented recommendations 4, 5 and 11 from the 2005–06 ANAO audit report and in terms of other developments following the audit.
- Chapter 5 follows up on the implementation of recommendations 6 to 10 from the previous ANAO audit report and provides an overview of the major developments in the contracts for the domestic manufacture of munitions, high explosive and propellant since the 2005–06 ANAO audit. The chapter also provides an overview of the Mulwala Redevelopment project (Joint Project 2086 Phase 1).
- Chapter 6 examines financial management of explosive ordnance procurement including Defence and the DMO's progress in implementing recommendations 12, 13, 14 and 15 from the 2005–06 ANAO audit report.

2. Progress of Reform in the Explosive Ordnance Domain

This chapter provides an overview of the reviews and internal audits that have occurred in the explosive ordnance domain within Defence and the DMO since Audit Report No.40 2005–06 was tabled in mid 2006. In addition, the chapter provides an overview of the history of reforms in the explosive ordnance domain since the last audit. It also provides a summary of the ANAO's evaluation of the extent to which the recommendations of the 2005–06 performance audit have been implemented, and reports on improvements to Defence and the DMO's monitoring processes for the implementation of ANAO recommendations.

Reviews of explosive ordnance in Defence and the Defence Materiel Organisation

2.1 As discussed in Chapter 1, the journey to achieve Defence's objective of 'ensuring the right EO is available when it is required, at the right place, in the right condition and in the required quantities to enable the ADF to conduct its operations and activities' is a complex and challenging undertaking.⁷⁹

2.2 Accordingly, Defence's explosive ordnance environment has received considerable attention in the last decade with Defence initiating a broad range of reviews, studies and reform programs in the explosive ordnance domain in relation to a range of issues such as:

- organisational restructure;
- workforce skills;
- funding for explosive ordnance;
- explosive ordnance policies and procedures; and
- explosive ordnance infrastructure, security, storage and inventory management.

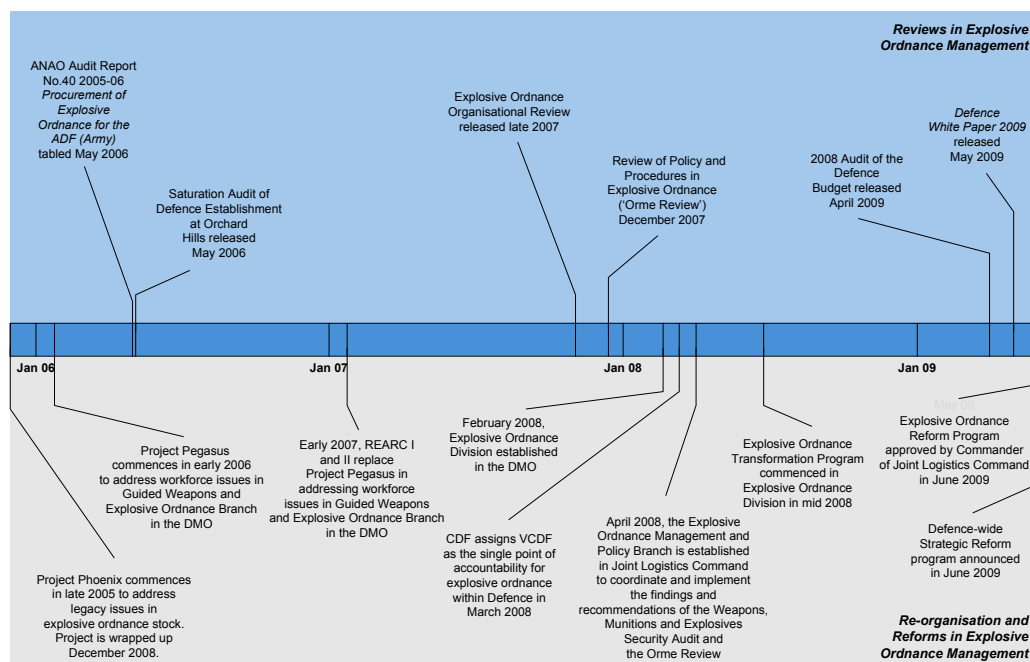
2.3 These reviews have ranged from Defence-wide strategic level reviews through to internal branch-level reviews focused on specific aspects of the day-to-day management of the procurement of explosive ordnance. Figure 2.1 illustrates the key explosive ordnance related reviews and reform programs

⁷⁹ Defence Policy for the Management of Explosive Ordnance, DI(G) LOG 4-1-013 (in draft).

within Defence and the DMO since the last audit. Also included are Project Pegasus⁸⁰ and Project Phoenix⁸¹ which were ongoing at the conclusion of the last audit.

Figure 2.1

Timeline of reviews and reform programs in explosive ordnance management since late 2005



Source: ANAO analysis

⁸⁰ Project Pegasus was developed in early 2006 in acknowledgement of the ageing workforce issues within the explosive ordnance domain within the DMO. The plan developed for this initiative encompassed a range of issues including a training and recruitment framework; the DMO's relationship with the primary domestic supplier of explosive ordnance to the ADF; the development of key workforce planning performance indicators; and technical data management.

⁸¹ DMO initiated Project Phoenix in June 2005 to 're-establish and maintain full technical integrity in the management and use' of the ADF explosive ordnance inventory. The aim of the project was to regain control of ADF Explosive Ordnance Systems such that the level of ongoing technical integrity is of the highest standards and thus assuring the safety of and the capability delivered to the combat forces of the ADF

2.4 Key events since the 2005–06 Audit Report which are included in Figure 2.1 are the:

- creation of the Explosive Ordnance Division within the DMO in February 2008; and
- issuing of the Chief of Defence Force (CDF) Directive 4/2008 in March 2008 in which the CDF assigned the Vice Chief of the Defence Force (VCDF) as the single point of accountability for explosive ordnance within Defence.

2.5 The reviews and reform programs illustrated in Figure 2.1 are discussed in the following sections as they highlight a range of shortcomings in Defence and the DMO's management of explosive ordnance in the areas of:

- governance and accountability related to explosive ordnance;
- procurement planning and requirements determination;
- contract management;
- personnel and training issues; and
- financial management.

Other internal reviews are discussed in the relevant parts of other chapters of the report.

2.6 Table 2.1 provides a summary of the key areas for improvement as identified in some of the Defence strategic level reviews, as well as some of the internal audits of explosive ordnance since the 2005–06 ANAO performance audit.

Table 2.1

Areas for improvement identified in Defence reviews incorporating explosive ordnance 2006 to 2009

Areas for improvement	Saturation Audit of Orchard Hills (May 2006)	Orme Review (December 2007)	Explosive Ordnance Organisational Review (2007)	2008 Audit of Defence Budget (April 2009)	Logistics Companion Review to Defence White Paper 2009 (May 2009)
Governance and accountability	✓	✓	✓		✓
Procurement planning	✓	✓	✓	✓	✓
Inventory management		✓		✓	✓
Contract management	✓	✓			✓
Financial management	✓	✓		✓	✓
Personnel and training	✓	✓	✓		✓
Policy and procedures	✓	✓	✓	✓	✓

Source: ANAO analysis

Note: There have also been multiple internal lower-level reviews undertaken in the explosive ordnance domain from 2006 to 2009.

Saturation Audit of the Defence Establishment Orchard Hills (2006)

2.7 In May 2006, Defence's Management Audit Branch (MAB) completed an internal audit of the Defence Establishment of Orchard Hills (DEOH). DEOH is the primary site for the activities associated with the management of the acquisition and in service support of non-guided explosive ordnance for the ADF. The Munitions Branch of the Explosive Ordnance Division within the DMO is located at DEOH. The internal audit examined the controls in place to manage the risks associated with the management and administration of the financial, personnel, procurement, logistics and associated functions at the DEOH.⁸²

2.8 The following were among the findings of the internal audit that were directly related to explosive ordnance management:

- Robust EO [explosive ordnance] consumption plans need to be developed with each of the Services, reflecting the reality of consumption and aligned with the Program of Major Service Activities and Defence Management and Finance Plan. Dialogue between GWEO [Guided Weapons and Explosive Ordnance Branch]⁸³ and the Services to this end has taken place through working level meetings; however, work is still required to develop properly informed consumption plans.
- MAB notes that a Draft DI (G) [Defence Instruction (General)] on ADF EO Management is being developed that will provide the required high level policy and guidance.
- Current operational tempo has required the rapid acquisition of EO in a tight market, while maintaining the full and rigorous requirements of ADF Technical Regulations. These accelerated activities are taking precedence over the routine program of planned procurement, which may cause deficiencies in the ADF's EO capability if the current operational tempo is maintained. Acquisition to meet operational demands can result in conflict between the achievement of 'normal' and 'supplemented' budgets.⁸⁴

⁸² Department of Defence, Management Audit Branch, 'Saturation Audit of Defence Establishment Orchard Hills', 3 May 2006.

⁸³ On 1 June 2008 GWEO became Munitions Branch (MunB).

⁸⁴ Department of Defence, Management Audit Branch, 'Saturation Audit of Defence Establishment Orchard Hills', 3 May 2006, p. 37.

Review of Defence Policies and Procedures for the Management of Explosive Ordnance (the ‘Orme Review’) (2007)

2.9 On 12 September 2007 a Defence employee was severely injured in a grenade incident at the Joint Proof and Experimentation Centre, Graytown, Victoria.⁸⁵ As part of the response to this incident, the then Secretary of Defence and the Chief of the Defence Force directed Policy Development Division within the Department of Defence to conduct a review of policy and procedures for the management of explosive ordnance in Defence.

2.10 The ‘Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)’ (also known as the Orme Review) was conducted by the then First Assistant Secretary, Policy Development, Department of Defence and the subsequent report was provided in December 2007.

2.11 One of the findings of the Orme Review noted the ‘extensive’⁸⁶ reviews of explosive ordnance within Defence and the DMO in recent years and that:

...while many of these reviews have made useful findings and recommendations on aspects of the EO domain, in aggregate they have not addressed the need for a simpler business model with clear accountabilities.⁸⁷

2.12 Additionally the review found:

The EO [explosive ordnance] domain is fragmented and the lines of accountability unclear. There is considerable frustration stemming from poor communication. Extant guidance is not clear or well understood. Conflicting views on the roles of different parts of the organisation further impede planning processes. End users have limited confidence in the ability of our acquisition and inventory management practices to meet the ADF’s requirements.

...There is no single point of visibility across the many parts of the EO domain, particularly in terms of requirements definition, funding and inventory status...⁸⁸

⁸⁵ In 1998 a soldier was killed as a result of the initiation of a fragmentation grenade. A Legacy Explosive Ordnance Project was established following a Board of Inquiry into the soldier’s death.

⁸⁶ Department of Defence, ‘Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)’, 14 December 2007, p. 2.

⁸⁷ *ibid.*

⁸⁸ *ibid.*

2.13 One of the main actions taken in response to the Orme Review was the appointment by the CDF of the VCDF as the single point of accountability for explosive ordnance in Defence via Directive 4/2008. This Directive states that in the VCDF's capacity as the Joint Capability Manager: 'through CJLOG, you [VCDF] are to be the single point of accountability to assure the efficient and effective management of the EO domain'.⁸⁹

2.14 In addition, the Explosive Ordnance Management Branch was established in JLC in April 2008 to address the recommendations of the Orme Review.⁹⁰ Defence informed the ANAO that the Director General of the Explosive Ordnance Branch (DGEO) within JLC provides regular progress reports to the Defence Explosive Ordnance Committee (DEOC)⁹¹ on progress against the recommendations of the Orme Review.

2.15 Defence informed the ANAO that, as of July 2009, the only outstanding recommendation from the Orme Review was the development of the Explosive Ordnance Roadmap. The Explosive Ordnance Roadmap is discussed further in Table 2.3.

2.16 The Explosive Ordnance Branch in JLC initiated the development of an Explosive Ordnance Reform Program. This was considered by the Defence Explosive Ordnance Committee at its March 2009 meeting and was subsequently approved by CJLOG on 4 June 2009. The initiatives of the Explosive Ordnance Reform Program, and the current status of these initiatives, are outlined in Table 2.3.

⁸⁹ Department of Defence, Explosive Ordnance Reform Program, June 2009, Annex A: Extract of Directive 4/2008 to VCDF, 11 March 2008.

⁹⁰ Department of Defence, *Defence Annual Report 2007–08*, Volume 1, p. 158.

⁹¹ The DEOC is a two-star advisory committee with the primary objective of supporting Commander Joint Logistics (CJLOG) (acting on behalf of the VCDF as the single point of accountability for the Defence-wide management of explosive ordnance) and Chief Capability Development Group (CCDG), as the single point of accountability for the explosive ordnance requirements to support new capability. The DEOC has representation from Chief of Joint Operations (CJOPS), Capability Development Group (CDG), the DMO, the Services, the Strategy, Coordination and Governance Group (SCG) and the Chief Finance Officer Group; with Defence Services Group (DSG) and Defence, Science and Technology Organisation (DSTO) as permanently invited members. The DEOC is chaired by CJLOG.

Explosive Ordnance Organisational Review (2007)

2.17 In late 2006, the Capability Development Group (CDG) within the Department of Defence, commissioned a review by an external consultant of the organisations responsible for the management of explosive ordnance within Defence with the aim of ‘assessing the ability of Defence EO [explosive ordnance] management organisations to meet future capability requirements and, where possible, consider alternative management structures for the provision of the required capability’.⁹²

2.18 The consultant’s resulting report stated that Defence’s ‘delivery of the ADF’s EO [explosive ordnance] capability is characterised by a large number of organisations with potentially, competing priorities’ and found ‘a number of issues, in many cases organisationally based, that may be contributing to the less than effective and/or efficient delivery of the ADF’s EO’.⁹³

2.19 Table 2.2 illustrates the major issues identified in the review.

Table 2.2

Major findings from 2007 Explosive Ordnance Organisational Review

Issue	Major Findings
<i>Operational Support</i>	<ul style="list-style-type: none">• No evidence of organisational shift or procedural improvement in the management of explosive ordnance in response to the existing high operational tempo.• Insufficient staff available to undertake both peacetime training requirements and operational support functions.
<i>Rapid Procurement</i>	<ul style="list-style-type: none">• The areas of Defence involved in rapid procurement of explosive ordnance are not structured, staffed, skilled and experienced enough to effectively manage this task.

⁹² The review was commissioned in response to the Defence Capability Committee’s (DCC) tasking the Director General Capability and Plans (DGCP) within the Capability Development Group with investigating the ‘possibility of developing a coherent and unified approach to procurement of ammunition for both training and war stock purposes’. Source: Department of Defence, ‘An Overview of the Provision of the Explosive Ordnance Capability to the ADF’, 2007, p. ii.

⁹³ Department of Defence, ‘An Overview of the Provision of the Explosive Ordnance Capability to the ADF’, Novare Services Pty Ltd, Report Number NPS/2160, Revision 1.1, 2007, p. ii.

Issue	Major Findings
<i>Personnel</i>	<ul style="list-style-type: none"> • Insufficient appropriately trained personnel available to carry out existing processes and procedures. • Skills shortages particularly in areas with engineering or technical functions. • The current approach to workforce planning is unlikely to result in the required number of personnel with the depth of skill necessary to meet increasing complexity of, and governance requirements within, the explosive ordnance area.
<i>Experience</i>	<ul style="list-style-type: none"> • No effective measures undertaken in Defence to compensate for the loss of the technical explosive ordnance experience base. • This lack of experience is likely to be magnified in an environment of increasingly complex inventory and continuing high operational tempo.
<i>Capability Sponsorship</i>	<ul style="list-style-type: none"> • Explosive ordnance procurement policy lacks the rigour required to coordinate the effects of major capital acquisition, in-service acquisition, minor capital acquisition and procurement activities in support of urgent operational requirements.

Source: Department of Defence, 'An Overview of the Provision of the Explosive Ordnance Capability to the ADF', 2007, pp. ii-iii.

2.20 The consultant's report also noted that 'the review team was also to conduct a review of personnel requirements within organisations responsible for EO [explosive ordnance] management, though the necessary data to conduct this activity was unable to be supplied'.⁹⁴

2008 Audit of the Defence Budget

2.21 The *2008 Audit of the Defence Budget*⁹⁵ was a far reaching review of Defence's finances, operations and management processes. One of the objectives of the audit was to recommend to Ministers better ways to manage the Defence budget.

⁹⁴ *ibid.*

⁹⁵ Department of Defence, *2008 Audit of the Defence Budget*, April 2009. Also known as the 'Pappas Review'. <<http://www.defence.gov.au/publications/DefenceBudgetAudit.pdf>> [accessed 18 November 2009].

2.22 The audit identified the lack of clear and accurate explosive ordnance holding targets and future consumption requirements for both operational and Raise, Train, Sustain activities within Defence.⁹⁶ The audit recommended that:

...clear requirement thresholds for explosive ordnance are set by capability managers; demand requirements are more accurately forecast, communicated and harmonised between operational and 'raise train sustain' activities; and customers provide the clear performance characteristics required, but do not engage in direct product specification. Informed by these requirements, the DMO should further develop the skills necessary to minimise the impact of movements in the spot price of munitions and manage inventory more closely to demand.⁹⁷

2.23 This issue is discussed further in Chapter 3.

Defence White Paper 2009

2.24 In February 2008, the then Minister for Defence announced the commissioning of a new Defence White Paper along with a series of accompanying reviews (Companion Reviews) to be conducted across a range of Defence areas to underpin the new White Paper. The *Defence White Paper 2009* was released on 2 May 2009.

2.25 One of the underpinning reviews to the *Defence White Paper 2009* was the Logistics Companion Review which included an explosive ordnance component. In the Logistics Companion Review, Defence acknowledges that, in line with the findings of the 2007 Orme Review, with regard to management of explosive ordnance 'current approaches and practices are fragmented, and lack an end-to-end system perspective and single points of accountability'.⁹⁸

2.26 Defence also noted in the Logistics Companion Review that:

The current situation of national EO [explosive ordnance] holding is demonstrated by two key points:

- a) There is inadequate EO available to satisfy ADF preparedness requirements. Of the \$1,370m [million] of the EO necessary to achieve

⁹⁶ This finding is consistent with the findings of a number of preceding reviews and audits discussed in this chapter.

⁹⁷ Department of Defence, *2008 Audit of the Defence Budget*, op. cit., p. 138.

⁹⁸ Department of Defence, explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, p. 1.

current preparedness requirements Defence currently holds only approximately \$400m [million].

- b) The current stock profile of the total \$3.1 bn [billion] EO inventory is not aligned with the ADF's actual EO requirements.⁹⁹

2.27 An Explosive Ordnance Reserve Stock Study was conducted by Defence during 2009 to ensure that the *Defence White Paper 2009* is now used as the planning basis for explosive ordnance reserve stock requirements. Following the completion of the study, the final report was endorsed by the DEOC on 23 October 2009 and was approved by the Chief of Services Committee (COSC)¹⁰⁰ on 25 November 2009.

2.28 The explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009* made the following 11 recommendations:

- a) Optimisation of inventory based on preparedness and operational requirements, and criticality and security of supply.
- b) Australia continue to maintain an indigenous EO [explosive ordnance] manufacturing industry.
- c) Defence invest in the indigenous industry capability as a strategic cost-risk decision to reduce the need for acquiring and stockpiling warstocks.
- d) Defence pursue opportunities with global suppliers to participate in the global supply chain rather than only as a customer of it.
- e) Wholesale facilities at Jennings be closed and stocks be relocated to Myambat.
- f) The existing major retail facilities be maintained and enhanced, and the network of minor retail facilities be aligned with ADF training areas.
- g) A guided weapons maintenance facility be constructed at Garden Island, WA to reduce capability risk and storage and distribution costs.

⁹⁹ *ibid.*, para. 10, p. 2.

¹⁰⁰ The Chiefs of Service Committee (COSC) provides military advice to the CDF to assist him to discharge his responsibilities in command of the Defence Force.

- h) JPEU [Joint Proof and Experimental Unit]¹⁰¹ be consolidated at either Port Wakefield or a green field site.
- i) A whole-of-Defence approach be taken to the development of the EO workforce.
- j) Defence integrate EO workforce development with industry where appropriate.
- k) An integrated information system to support the Defence-wide management and accounting of EO be developed as part of the integrated JP 2077¹⁰² Phase 2E.¹⁰³

Reform of the explosive ordnance management functions performed outside of the DMO

2.29 To address one of the key findings of the Orme Review¹⁰⁴, in March 2008 the VCDF was appointed as the single point of accountability for explosive ordnance in Defence.¹⁰⁵ The VCDF subsequently delegated day-to-day management responsibility for this role to the CJLOG.¹⁰⁶

2.30 The Orme Review led to the creation of the Explosive Ordnance Management and Policy Branch (EO Branch) in Joint Logistics Command. The EO Branch's mandate includes 'reviewing EO governance arrangements on a whole-of-life-cycle, whole-of-Defence basis and providing assurance of EO management through CJLOG to VCDF'.¹⁰⁷ The EO Branch is seeking to achieve this through the Explosive Ordnance Reform Program which:

...aims to establish a whole-of-life-cycle, whole-of-Defence, integrated EO Governance Framework that:

¹⁰¹ The Joint Proof and Experimental Unit undertakes static and dynamic weapon systems testing involving high explosive ordnance.

¹⁰² JP (Joint Project) 2077 aims to incrementally upgrade and enhance Defence's logistics information systems to ensure leading edge support continues to be provided in support of warfighting and corporate objectives.

¹⁰³ Department of Defence, explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, para. 28, pp. 5-6.

¹⁰⁴ The Orme Review found that the explosive ordnance domain was 'fragmented and lines of accountability unclear'. Source: Department of Defence, 'The Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)', 14 December 2007, p. 2.

¹⁰⁵ Department of Defence, Joint Logistics Command, 'Explosive Ordnance Reform Program (Draft)', March 2009, p. 3.

¹⁰⁶ *ibid.*

¹⁰⁷ *ibid.*

- a) provides a management system to effectively communicate EO policy, process and procedure;
- b) integrates and aligns EO practices; and
- c) provides a means for identifying and actioning improvement opportunities.¹⁰⁸

2.31 Defence informed the ANAO that the DEOC endorsed the Explosive Ordnance Reform Program in March 2009 and it was subsequently approved by CJLOG on 4 June 2009.

2.32 Table 2.3 provides a summary of the major explosive ordnance reform initiatives that Defence have advised are currently under way including the initiatives being undertaken as part of the Explosive Ordnance Reform Program. Many of these reforms are focused on explosive ordnance activities that are conducted in the Defence organisation, but not in the DMO, and as such the reforms are beyond the scope of this audit. However, activities such as the Explosive Ordnance Reserve Stock Study outlined in Table 2.3 will have a direct impact on the procurement and through life support arrangements for explosive ordnance administered by the DMO. This is discussed further in Chapter 3.

¹⁰⁸ *ibid.*

Table 2.3

Status of Defence's Explosive Ordnance Reform Initiatives

Reform Initiative	Description	Planned Completion Date	Defence's advice on the current status of the initiative
Explosive Ordnance (EO) Reserve Stock Study	The determination of agreed EO reserve stock requirements is fundamental to the preparation of the 2009 Chief of the Defence Force Preparedness Directive. The EO Reserve Stock Study was initiated to address concerns with the credibility of the EO reserve stock requirements in 2006 Chief of Defence Force Preparedness Directive. The study was undertaken in accordance with the methodology approved by COSC, and was cognisant of the priorities of the <i>Defence White Paper 2009</i> .	Nov 2009	<ul style="list-style-type: none"> Approved by COSC on 25 November 2009.
EO Reform Program - EO Incident Reporting and Management	The aim of the EO Incident Reporting and Management Project is to identify and implement opportunities to increase the effectiveness and efficiency of the reporting and management of EO incidents, and reduce the number of incidents through the identification and reform of systemic issues.	Dec 2011	<ul style="list-style-type: none"> Objectives, end state and scope of the project, and the establishment of a working group, were all agreed by DEOC on 23 October 2009. Working Group held first meeting on 4 November 2009.
EO Reform Program - EO Training	The aim of the EO Training Reform Project is to develop and implement an EO Training Framework which delivers a flexible but rigorous and structured training system for the whole-of Defence EO domain. EO training across Defence will be standardised and improved by leveraging off reforms currently underway in each of the Services and the DMO. The	2013	<ul style="list-style-type: none"> At the 23 Oct 09 meeting DEOC agreed to the proposed EO Training Framework; that the EO Manager Joint training be invited to present regular reports to the DEOC; and the proposal to undertake EOD training rationalisation as a pilot activity under the EO Training Project. The outcomes from the pilot activity will be used

Reform Initiative	Description	Planned Completion Date	Defence's advice on the current status of the initiative
	project will improve training planning and delivery, and promote the development of a qualified and competent EO workforce.		to inform future actions and to reform the expected completion date.
EO Reform Program - EO Performance Measures Framework	To enable C.JLOG to provide an assurance to VCDF that EO is being managed and accounted for appropriately within Defence, performance indicators against which the management of EO can be measured in an objective manner are to be developed.	2012	<ul style="list-style-type: none"> The Performance Measures concept of 7 high level measures, and the establishment of a working group, were agreed by DEOC on 23 October 2009. Performance measures for Safety, Security and Governance will be the first areas to be addressed. The first working group is planned for Nov 2009.
EO Assurance Board (EOAB)	The EOAB replaces the Ordnance Safety Review Board (OSRB). The OSRB has been disbanded as its original purpose has been largely subsumed by various regulatory and organisational changes wrought by CDF Directive No 4/2008. The primary purpose of the EOAB is to, through independent review, provide assurance that all EO introduced into service, used in approved trials and held in inventory meets the minimum specified EO safety requirements.	Oct 2009	<ul style="list-style-type: none"> The VCDF established the Explosive Ordnance Assurance Board (EOAB) on 26 Oct 09. The EOAB held its first meeting on 27 Oct 09. The policy governing the EOAB is detailed in a revision to DI(G) LOG 4-1-006, Safety of Explosive Ordnance, which is currently being staffed for approval. Until the revised policy is approved, the EOAB draws its authority from VCDF Directive No 3/2009 of 26 October 09.
EO Lead Technical Regulation Authority	CDF Directive No 4/2008 established the EO Branch in JLC and initiated a review to streamline technical regulation of EO.	Jun 2009	<ul style="list-style-type: none"> DEOC agreed at their 17 June 09 Meeting that RAAF be the lead technical regulatory authority for organisations that design, manufacture or maintain ADF EO. Directorate of Ordnance Safety (DOS) remains the Technical Regulator for the storage and transport of EO under a

Reform Initiative	Description	Planned Completion Date	Defence's advice on the current status of the initiative
EO Reform Program - EO Roadmap [^]	In accordance with CDF Directive 4/2008, an EO Roadmap is to be developed and maintained to provide strategic guidance to Defence, to support the delivery and continuous improvement of EO capability.	Aug 2010	<p>delegation from CJLOG.</p> <ul style="list-style-type: none"> The aim, scope, objective and methodology of the EO Roadmap Scoping Paper was agreed by DEOC on 23 October 2009 with minor amendments.

Note[^] The Joint ADF Explosive Ordnance Roadmap (the EO Roadmap) was developed by the Capability Development Group (CDG) in 2006. While the EO Roadmap was not submitted for higher committee endorsement within Defence, it was published and used as a reference source and to provide guidance to Defence staff working within the explosive ordnance domain.

Source: Defence and the DMO, Response to Issues Papers, Attachment 1, 6 November 2009, p. 13.

Reform of the explosive ordnance domain in the DMO

2.33 At the completion of the 2005–06 audit, there were a number of reform activities underway within the DMO and, since that audit was completed, there have been further reform initiatives. The remainder of this chapter outlines the outcomes of these reforms and the status of ongoing reforms.

2.34 The Defence response to the 2005–06 audit stated as follows:

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.¹⁰⁹

2.35 Accordingly, the ANAO acknowledged in the conclusion of that audit that remediation activities were underway but commented that the issues identified would require the implementation of long term remediation strategies. Two of these remediation activities, then underway, were Project Phoenix and Project Pegasus.

Project Phoenix (2005 to 2008)

2.36 The predecessor to the Munitions Branch, Guided Weapons and Explosive Ordnance Branch (GWEO), initiated Project Phoenix in June 2005 to ‘re-establish and maintain full technical integrity in the management and use’ of the ADF explosive ordnance inventory.¹¹⁰ The aim of the project was:

...to regain control of ADF Explosive Ordnance Systems such that the level of ongoing technical integrity is of the highest standards and thus assuring the safety of and the capability delivered to the combat forces of the ADF.¹¹¹

¹⁰⁹ ANAO Audit Report No.40 2005–06, op. cit, p. 13.

¹¹⁰ Three Defence reports between late 1999 and mid 2000 ‘highlighted a significant number of Configuration Items (CIs) [see footnote 113 for an explanation of this term] that fail to comply with the Australian Defence Force’s (ADF) requirements for Introduction Into Service (IIS) of Explosive Ordnance (EO). Defence had historically accepted ‘the properties and safety of an EO item because of a lack of known faults or technical issues during its service life. However, the Defence Legal Office and the Australian Government Solicitor deemed this customary practice ‘legally untenable’ and ‘does not provide an adequate basis for establishing the technical integrity of EO’. Source: Department of Defence, ‘Project Phoenix Scoping Study’, October 2005, p. 4.

¹¹¹ Department of Defence, ‘Project Phoenix Scoping Study’, October 2005, p. 4.

The scoping study for the project stated that the project was to run for five years from 2005–06.¹¹²

2.37 The ADF managed over 2000 explosive ordnance Configuration Items¹¹³ when Project Phoenix commenced in November 2005. According to the DMO closure minute for Project Phoenix, the explosive ordnance legacy listing¹¹⁴ consisted of approximately 1500 Configuration Items when Project Phoenix commenced and 850 items¹¹⁵ at the time the project was closed in December 2008.¹¹⁶ Accordingly, 75 per cent of Configuration Items managed by the ADF in 2005 were legacy items and at closure of Project Phoenix in December 2008 this figure was reduced to around 43 per cent.

2.38 Project Phoenix consisted of five separate project modules:

Module 1 – Configuration Item (CI) Rationalisation and Prioritisation;

Module 2 – Recovery of regulations, policy, processes and procedures (RP3);

Module 3 – Recovery of CI data;

Module 4 – Recovery of Systems; and

Module 5 – Integration of the CI [Configuration Item] back into the IPT [Integrated Project Team].¹¹⁷

2.39 Further information on Project Phoenix is included in Chapter 4.

¹¹² *ibid.*

¹¹³ A Configuration Item is 'An aggregation of hardware, firmware, software, processed materials, services, or any of its discrete portions, that is designated for configuration management and treated as a single entity in the configuration management process'. Source: Department of Defence, 'Project Phoenix Scoping Study', October 2005, p. 8.

¹¹⁴ The 'explosive ordnance legacy listing' is the list of all natures [a nature refers to a grouping of explosive ordnance by type e.g. 25 mm small arms ammunition] identified as Legacy Explosive Ordnance. Legacy Explosive Ordnance is defined as:

- a. Configuration Items (CIs) currently in-service with the ADF as of 19 April 2005, where in-service explosive ordnance (EO) is defined as EO that has been accepted (either formally or tacitly) into service with Defence before this date; and
- b. CIs currently in-service which do not have an Explosive Ordnance Design Certificate (EODC) developed in accordance with Engineering Procedures.

¹¹⁵ Chief Engineer (CENGR) Munitions Branch decided that it would not be cost effective to proceed with the technical integrity recovery of approximately 850 explosive ordnance items categorised as obsolete and excluded by Munitions Engineering Group.

¹¹⁶ Department of Defence, Defence Materiel Organisation, Minute 'Phoenix Project Closure', 2006/1150304/1, p. 1.

¹¹⁷ Department of Defence, 'Project Phoenix Scoping Study', October 2005, p. 1.

Project Pegasus (2006 to 2007)

2.40 Project Pegasus, also known as the GWEO Branch Renewal Program, was developed in early 2006 in acknowledgement of the ageing workforce issues within the explosive ordnance domain within the DMO. The plan developed for this initiative encompassed a range of issues including a training and recruitment framework; the DMO's relationship with the primary domestic supplier of explosive ordnance to the ADF; the development of key workforce planning performance indicators; and technical data management.

2.41 The 2005–06 ANAO performance audit report noted:

...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.¹¹⁸

2.42 The DMO informed the ANAO in November 2009 that it had initiated the Pegasus Program to address six key areas including cultural change, processes and procedures, workforce attraction and retention, GWEO training frameworks, accommodation and GWEO recruitment. The DMO further informed the ANAO that, with the formation of the Explosive Ordnance Division in February 2008, the various areas which had been the focus of the Pegasus Program were then allocated to elements of the new structure. While some of these areas are being progressed as part of normal Explosive Ordnance Division business, some, including the training frameworks, are being progressed under the Explosive Ordnance Division Professionalisation Project. This project is discussed later in the report in paragraphs 4.39 to 4.43.

2.43 The ANAO's assessment of the DMO's progress in implementing the recommendation made in relation to Project Pegasus from the previous audit report (Recommendation No.5) is discussed in Chapter 4.

Branch Enterprise Re-architecture program (REARC) (2007 to 2008)

2.44 The GWEO Branch Enterprise Re-architecture (REARC) program commenced in May 2007 in response to a 'health check' conducted by the executive team of GWEO which, amongst other things, determined that the

¹¹⁸ ANAO Report No.40 2005–06, op. cit., p. 47.

expected outcome of the then existing Reconstitution Program¹¹⁹ was going to result in a GWEO branch structure that would:

...be inadequate for the purposes of providing the required output in an environment of ever-changing priority, high operational tempo, expectation of rapid response, and increased governance.¹²⁰

2.45 The primary aim of REARC was to:

Transform GWEO into a customer focused organisation, with enhanced capability to cope with the escalating demand driven by the increased operation tempo of the ADF's deployments.¹²¹

2.46 The REARC program included work on organisational renewal, human resources functions, processes and procedures, and management systems with a view to implementing a 'whole of business enterprise re-architecture'.¹²²

2.47 Expectations of the REARC program within the DMO included that the 'resultant GWEO Branch must be characterised by flexibility, accountability, and singular focus on customer requirements'.¹²³ Further, the DMO required that:

...'the REARC must provide an organisation that is aligned, as appropriate, with 'standard' SPO [Systems Program Office] structures and that represents a "best practice" framework for the delivery of numerous outputs for numerous customers'.¹²⁴

2.48 The REARC program was concluded when the Explosive Ordnance Division was established in February 2008. The DMO advised that the REARC program has resulted in a new organisational structure for the GWEO Branch's successor, the Munitions Branch, from December 2008. This new structure is

¹¹⁹ The Reconstitution Program was a branch restructuring program within GWEO that the branch was migrating to in early 2007. REARC was to be 'an adjunct to the ongoing Reconstitution activities'. Source: Department of Defence, Defence Materiel Organisation, DGGWEO, 'GWEO Branch Re-architecture', minute to GWEO staff, 28 May 2007.

¹²⁰ Department of Defence, Defence Materiel Organisation, DGGWEO, 'GWEO Branch Re-architecture', minute to GWEO staff, 28 May 2007.

¹²¹ Department of Defence, Defence Materiel Organisation, 'Explosive Ordnance Division Munitions Branch, Business Transformation Consultation Strategy/Communications Plan', 29 April 2008.

¹²² *ibid.*

¹²³ Department of Defence, Defence Materiel Organisation, DGGWEO, 'GWEO Branch Re-architecture', minute to GWEO staff, 28 May 2007.

¹²⁴ *ibid.*

based around the functional areas of Acquisition and Sustainment Logistics Management, Engineering, Commercial and Business Support.

Establishment of the Explosive Ordnance Division within the DMO

2.49 As discussed in Chapter 1, the DMO established the Explosive Ordnance Division in February 2008 through the separation of responsibilities for the acquisition and sustainment of explosive ordnance from the Electronic and Weapons System Division. The aim of the division is to provide a dedicated focus to the ongoing reform of acquisition and sustainment of explosive ordnance.¹²⁵

DMO's Explosive Ordnance Transformation Program

2.50 The establishment of the Explosive Ordnance Division in the DMO has resulted in a number of new and replacement explosive ordnance reform activities within the DMO. During fieldwork, the DMO informed the ANAO that there is no documented overarching plan to guide the current reforms being undertaken within the Explosive Ordnance Division under the banner of the Explosive Ordnance Transformation Program. The progress of the reform initiatives is tracked in monthly project reports provided to the Head of Explosive Ordnance Division. The monthly reporting process has been in place since April 2009.

2.51 The elements and progress of the Explosive Ordnance Transformation Program are set out in Table 2.4. As a result of an Explosive Ordnance Division Planning Day held in late October 2009, the scope and the expected completion dates for most of the initiatives were revised. Table 2.4 provides both the initial expected completion date prior to the planning day, and the revised completion date for the Explosive Ordnance Division reform initiatives.

2.52 Given most of the initiatives under the Explosive Ordnance Transformation Program have undergone changes to the project scope and expected completion dates, and that the projects are in varying states of maturity, it is difficult to assess at this stage whether the issues will be successfully resolved in the expected timeframe.

¹²⁵ Department of Defence, *Annual Report 2007–08, Volume Two – Defence Materiel Organisation*, p. 6.

Table 2.4

Explosive Ordnance Reform Initiatives in the DMO

Reform Initiative	Description	Initial expected completion date	Revised expected completion date	DMO comments on the status of the project
Accurate Monthly Financial Reporting	<p>The objectives of this project include:</p> <ul style="list-style-type: none"> improved commentary on financial reporting; improved reporting against prepayments; including explanations of deviations in monthly financial reporting; developing and managing budgets on an accruals basis; and other improvements including FMAR 10 compliance and improvements to the reconciliation process. 	Feb 2010	Feb 2010 (no change)	The DMO has advised there has been schedule slip in this project due to the complexity of reconciliation activities and the lack of staff knowledge due to staff turnover.
Professionalisation Project	The aim of the Professionalisation Project is to address the major personnel issues facing Explosive Ordnance Division including a lack of corporate governance, skill shortages, and difficulties with attraction and retention of staff particularly engineering and technical staff.	May 2010	Jun 2011	<p>The DMO advised that as of November 2009:</p> <ul style="list-style-type: none"> workforce analysis of 260 positions has been completed; approximately 108 job role profiles have been identified by discipline, level and rank; job role profiles have been developed; and all remaining Explosive Ordnance

Reform Initiative	Description	Initial expected completion date	Revised expected completion date	DMO comments on the status of the project
				<p>Division positions to have been aligned to job roles.</p> <p>The DMO further advised that this project has experienced schedule growth due to a revised implementation approach developed after the initial staff consultation and to accommodate the whole of the DMO Corporate Human Resource initiatives.</p>
Implementation of accredited Explosive Ordnance Division Business Management System	<p>The objective of this program is to attain AS/NZS ISO 9001:2008 certification for Explosive Ordnance Division, by developing a robust quality and compliance management framework which is integrated within the Business Management System (BMS). It will provide a Divisional framework of business processes and a baseline for continual improvement.</p>	Oct 2009	Mar 2010	<p>The DMO advised that as of November 2009:</p> <ul style="list-style-type: none"> • BMS has been rolled out across Explosive Ordnance Division, including the development of Standard Operating Procedures; • training in the BMS has been delivered throughout Explosive Ordnance Division; and • a working group of senior executives is in place to manage future development of the BMS. <p>The DMO further advised that this project has experienced schedule growth due to the inclusion of additional tasks to provide an assurance methodology.</p>

Reform Initiative	Description	Initial expected completion date	Revised expected completion date	DMO comments on the status of the project
Procurement Reform	As number of internal reviews identified issues in procurement in Guided Weapons Branch and Munitions Branch in Explosive Ordnance Division. The Procurement Reform initiative aims to provide a co-ordinated approach to addressing these issues across the division.	May 2010	May 2010	<p>The DMO advised that as of November 2009:</p> <ul style="list-style-type: none"> a standard operating procedure was developed for recording agreements and uploaded onto BMS; a complex procurements register has been developed; and workforce planning has been conducted and training has commenced. <p>The DMO further advised that this project has experienced schedule growth due to the inclusion of additional tasks to provide an assurance methodology.</p>
Capability Partner	The Explosive Ordnance Division is seeking to establish a Capability Partner Standing Offer Panel to provide a range of services to support the acquisition and sustainment of Defence's capital equipment and systems projects managed by the Division.	Sep 2009	Feb 2010	<p>The DMO advised that as of November 2009:</p> <ul style="list-style-type: none"> a Request for Tender has been issued, and Tenders received; and a Tender Evaluation Panel has been formed and evaluation commenced as of 19 October 2009. <p>The DMO further advised that a review of this project on 28 October 2009 identified gaps in assurance processes which are now being addressed.</p>

Reform Initiative	Description	Initial expected completion date	Revised expected completion date	DMO comments on the status of the project
Schedule Control Improvement	<ul style="list-style-type: none"> The aim of this project is to ensure that the Explosive Ordnance Division compliance assurance framework includes schedule compliance. 	Ongoing	Ongoing	<p>The DMO advised that as of November 2009 an initial evaluation of Explosive Ordnance Division project schedules has been completed.</p> <p>The DMO further advised that this project has experienced schedule growth due to the inclusion of additional tasks to provide an assurance methodology.</p>
Logistics Management Program	<p>The Logistics Management Program covers a range of smaller reform initiatives including:</p> <ul style="list-style-type: none"> Development of the policy, plans and procedures around acquisition and in-service logistics. A Logistic Authority Framework to provide Item Managers with an appropriate level of authority to perform assigned duties. The development and incorporation of COMSARM procedures within Electronic Supply Chain Manual (<i>Note – this initiative is currently on hold</i>). The Computer System for Armaments (COMSARM) is Defence's explosive ordnance inventory management system. The development and implementation of a Logistics IT Architecture Strategy (<i>Note – DMO advise that this initiative is currently</i> 	Range of dates from Aug 2009 to Mar 2010	Range of dates from Dec 2009 to Dec 2010	<p>The DMO advised that as of November 2009:</p> <ul style="list-style-type: none"> draft Standard Operating Procedures (SOP) have been developed for inclusion into the BMS; the sustainment element of the Logistics Governance Program has been scoped ahead of drafting governance SOPs; stocktake remediation has been completed; COMSARM IT control framework has been rolled out in Guided Weapons Branch; Logistics Governance Program for 2009-10 has been put in place; and 2009-10 Stocktake Program developed and entered into the Stocktake

Reform Initiative	Description	Initial expected completion date	Revised expected completion date	DMO comments on the status of the project
	<p><i>on hold).</i></p> <ul style="list-style-type: none"> An integrated Logistics Governance Program to remediate identified deficiencies and improve performance. Data Integrity and Purification Program to identify and address data quality issues at the business, system and process level. 			<p>Reporting System.</p> <p>The DMO further advised that the initial estimated schedule was impacted by resource availability. A review in October 2009 led to a revised task and resource priority.</p>
Explosive Ordnance Disposal Backlog Remediation	<p>Explosive Ordnance Division has engaged a contractor to manage the project. The scope of the project includes addressing the backlog of explosive ordnance identified for disposal and held within various COMSARM Disposal accounts and, identifying and recommending solutions to the range of issues which are affecting the Division's ability to effectively and efficiently undertake disposal planning and execution.</p> <p>The project report for the initiative notes that the extant backlog of disposal activity is beyond the capacity of the Division's steady state structures, and there is also a range of poor disposal practises across the Division.</p>	Jun 2010	Ongoing	<p>The DMO advised that as of November 2009 a disposal backlog remediation assessment was completed and a remediation plan has been put in place.</p> <p>The DMO further advised that the disposal of inventory to occur as funding for destruction is made available.</p>
Enhance Materiel Sustainment Agreements (MSAs)	<p>The aim of this initiative is to enhance the existing MSAs, including:</p> <ul style="list-style-type: none"> ensuring that MSA Product Schedules are ready for signature by the required 30 June 	Nov 2009	Ongoing	<p>The DMO advised that as of November 2009 Agreements training has been provided to staff.</p> <p>The DMO further advised that this project has experienced schedule growth due to</p>

Reform Initiative	Description	Initial expected completion date	Revised expected completion date	DMO comments on the status of the project
	<ul style="list-style-type: none"> date each year; and develop a performance reporting structure and performance management framework that is more focused on capability outcomes. 			growth in the scope of the initiative.
Cohesive Explosive Ordnance Division Engineering Management System.	The purpose of this initiative is to implement an effective, efficient and interactive Engineering Management System across the division. The initiative aims to achieve this through addressing legacy data issues, skill shortages, organisational disconnects and process issues.	May 2010	Nov 2010	<p>The DMO advised that as of November 2009:</p> <ul style="list-style-type: none"> an Engineering Maintenance Working Group has been put in place; procedures and tools have been developed; and a Technical Data Framework has been drafted. <p>The DMO further advised that this project has experienced a growth in schedule which reflects Explosive Ordnance Division's business risks associated with the management/integrity of technical data in support of the ADF.</p>

Source: Adapted from Defence and the DMO documentation

ANAO's assessment of Defence and the DMO's progress in implementing the recommendations of the 2005–06 audit

2.53 The ANAO's detailed findings and resulting assessments of Defence and the DMO's progress in respect of implementing the various recommendations of the 2005–06 audit report are contained in the relevant chapters of this report. However, Table 2.5 summarises the ANAO's assessment of progress and lists the chapter in this report where the progress against each of the recommendations is discussed in more detail.

2.54 Recommendation Numbers 2, 4, 6, 9, 14 and 15 were identified as priority recommendations. Of these, Recommendation Numbers 2, 4, 9 and 14 focused on improving inventory management practices and thereby the overall value for money achieved and capability delivered. Recommendation No.6 was intended to address poor contract management practices and Recommendation No.15 focused on financial management.

Table 2.5

ANAO assessment of Defence and the DMO's progress in implementing the recommendations of ANAO Audit Report No.40 2005–06

Recommendations from ANAO Audit Report No.40 2005–06	ANAO Assessment	Chapter in 2009–10 Audit Report
Recommendation No.1 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.	Implementation complete	Chapter 3
Recommendation No.2 The ANAO recommends that the Defence Materiel Organisation and Defence: establish requirements determination processes to identify longer term inventory line item stockholding levels necessary to fulfil operating and reserve explosive ordnance requirements; and incorporate performance measures, based on agreed inventory levels, into future Materiel Sustainment Agreements for explosive ordnance.	Partially implemented	Chapter 3

Recommendations from ANAO Audit Report No.40 2005–06	ANAO Assessment	Chapter in 2009-10 Audit Report
Recommendation No.3 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.	Limited progress	Chapter 3
Recommendation No.4 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.	Overtaken by events	Chapter 4
Recommendation No.5 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.	Implementation complete	Chapter 4
Recommendation No.6 The ANAO recommends that the Defence Materiel Organisation complete a Strategic Agreement for Munitions Supply (SAMS) Agreement remediation programme to: update the SAMS Agreement to reflect an agreed contract baseline between the parties; and implement version control arrangements to ensure that the SAMS Agreement remains up to date and available to staff.	Not implemented	Chapter 5
Recommendation No.7 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.	Not implemented	Chapter 5

Recommendations from ANAO Audit Report No.40 2005–06	ANAO Assessment	Chapter in 2009-10 Audit Report
Recommendation No.8 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.	Partially implemented	Chapter 5
Recommendation No.9 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.	Unable to assess ^A	Chapter 5
Recommendation No.10 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.	Implementation complete	Chapter 5
Recommendation No.11 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.	Limited progress	Chapter 4
Recommendation No.12 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.	Partially implemented	Chapter 6
Recommendation No.13 The ANAO recommends that the Defence Materiel Organisation and Defence ensure that the allocation of funding for future phases of Project JP 2085 is aligned with standard contract payment requirements.	Unable to assess ^B	Chapter 6
Recommendation No.14 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.	Substantially implemented	Chapter 6

Recommendations from ANAO Audit Report No.40 2005–06	ANAO Assessment	Chapter in 2009–10 Audit Report
Recommendation No.15 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.	Implementation complete	Chapter 6

Note:

^A The ANAO was unable to assess whether Recommendation No.9 has been implemented as investment proposals for the changes to the capability of the Benalla facility were still being developed.

^B At the time of audit fieldwork Phases 2 and 3 of Project JP 2085, the project phases that follow Phase 1B, were yet to receive second pass approval from Government.¹²⁶ Accordingly, the ANAO is unable to assess whether Recommendation No.13 has been implemented.

Source: ANAO analysis.

Defence and the DMO improvements to management of the implementation of ANAO recommendations

2.55 Management Audit Branch (MAB), the area responsible for Defence's internal audit function, uses a database known as the Audit Recommendation Management System (ARMS) to record progress in implementing recommendations for both internal and external reviews undertaken in Defence and the DMO, including the timeframe and reasons for closing particular recommendations. In contrast to the ANAO's findings in this audit as summarised in Table 2.5, the status of all 15 recommendations from the 2005–06 ANAO audit report were recorded as closed in the ARMS database at the beginning of fieldwork for this audit. The reasons set out in ARMS for this are included in the relevant chapters of the report where the individual recommendations are discussed in detail.

2.56 Defence and the DMO have now implemented improvements to procedures for monitoring the implementation of, and authorising closure of,

¹²⁶ Defence capability development proposals generally pass through two government decision points — first pass and second pass approval. The first pass approval stage of the two-pass process can be defined as the stage during which Defence analyses and identifies a number of options which meet the agreed capability gap in the Defence Capability Plan and then presents these options to government in the form of separate business cases. After achieving first pass approval by government of a project, Defence has government approval to proceed with more detailed development and rigorous analysis of an approved set of options intended to meet the capability gap. Second pass approval is formal approval by government of a specific capability solution to an identified capability development need. Second pass approval by government authorises Defence to proceed to acquire the agreed solution.

ANAO recommendations. Defence's Management Audit Branch informed the ANAO that:

In light of the ANAO finding in the EO Audit that recommendations had been closed off before action had been completed, the CAE [Chief Audit Executive] has decided that Audit Division must now be consulted before any outstanding ANAO recommendations are closed out on ARMS. There will be a 100% follow up review by Audit Division to ensure that the actions required to close out a recommendation have been completed to the CAE's satisfaction. To facilitate an efficient approach to the follow up process, the reviews will be performed 6 monthly.

The CAE advised all Group Audit Coordinators (GACs) of this change, effective immediately, at [the 17 November 2009] GAC meeting. These meetings are held every three months and bring together the Finance/Audit coordinators (usually SES Band 1) from each of the 14 Defence Groups to discuss audit related issues. In addition, the CAE will issue a Minute next week to Group Heads confirming this change in the process for closing out ANAO audit recommendations.¹²⁷

2.57 The DMO informed the ANAO that the revised implementation procedures for closing ANAO audit recommendations introduced by the agency include the following improvements:

Implementation Management Plan (IMP). To better manage remediation of recommendations, the DMO has established a project management approach to their implementation. Each recommendation now requires an IMP [implementation management plan], which is developed by the relevant Business Process Owner (one-star rank equivalent) and approved by the respective Division Head. Each IMP includes a standard set of milestones which are monitored and reported on to (and by) CAE [Chief Audit Executive] DMO (e.g. to the CEO [Chief Executive Officer] and/or Materiel Audit & Risk Committee).

Reporting. Two new reports on recommendation management have been established:

- Implemented - CEO's Fortnightly Report includes a narrative overview of key audit issues, but will also now contain key statistics relating to recommendations; and

¹²⁷ Email from Audit Division in Defence, 17 November 2009.

- In progress - an Audit Recommendation Status Quarterly Report will be provided to the CEO and Division Heads. This will contain detailed information on the progress of remediation action and key/emerging issues. First report is due as at 31 Dec 09.

Recommendation Closure Assurance. A new three-tier assurance system has already been implemented to better manage closure of audit recommendations. The three levels are:

- Implemented - **Level 1 – Principal Assurance.** The respective Division Head, responsible for the business domain concerned, considers the recommendation's Closure Report for 'Closure Approval'. The closure report must contain evidence of the recommendation's implementation, as previously agreed in the audit report's Management Action Plan (MAP). Once approved by the Division Head, the closure report is forwarded to CAE DMO (by the Div Head) formally requesting closure in the Audit Management Recommendation System (ARMS).
- Implemented - **Level 2 – Second Party Assurance.** CAE DMO will validate the Division Head's approved closure report and subsequently process the closure transaction in ARMS.
- In progress - **Level 3 – Independent Assurance.** On behalf of the CAE, the DMO Internal Auditor – Ernst & Young or Protiviti – will conduct an annual quality review on a sample of closed recommendations for the previous Financial Year (FY). The outcome of this review will be provided to the Materiel Audit and Risk Committee (MARC). First report will be provided post 30 Jun 2010.

CAE DMO formally briefed DMO Division Heads on 9 Nov 09 on the new initiatives and procedures, and a Defence Materiel Instruction is being developed to provide guidance to the wider DMO community of the new processes.¹²⁸

¹²⁸ Email from Chief Audit Executive area in DMO, 18 November 2009.

3. Requirements Determination

This chapter provides an overview of the explosive ordnance requirements determination process, including the roles of all the major stakeholders in the process and assesses Defence and the DMO's progress in implementing recommendations 1, 2, and 3 from the previous ANAO audit report.

Introduction

3.1 Requirements determination is a critical step in the overall effective management of the explosive ordnance procurement process. The Logistics Companion Review to the *Defence White Paper 2009* recognises this commenting that:

Preparedness drives planning for EO [explosive ordnance] management due to the challenges of balancing strategic risk versus investment in inventory. Ineffective planning could result in either an inability to support forces, with potentially dire consequences, or significant unnecessary investment.¹²⁹

3.2 Requirements determination is defined by Defence as 'the process which establishes the quantity of an item of supply to be procured; [comprising] assessment, requirement computation and procurement determination'.¹³⁰ The requirements determination process for the management of explosive ordnance in Defence involves a range of stakeholders. In addition to the DMO, these include the Capability Managers for each of the Services and Joint Operations Command (JOC)¹³¹, VCDF (and CJLOG and his staff to whom VCDF has delegated the relevant day to day responsibility) and Capability Development Group (see Figure 3.1).

3.3 There are two types of agreements between Defence and the DMO relating to the requirements determination process:

- **Material Acquisition Agreement (MAA)** – MAAs cover the DMO's acquisition services to Defence for both minor and major capital

¹²⁹ Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, para. 4.

¹³⁰ Defence Instructions (General) LOG 06-4 'Australian Defence Force requirements determination and management of reserve stocks', 30 August 2005.

¹³¹ The Chiefs of Army, Navy, Air Force and Joint Operations Command.

equipment.¹³² A MAA defines what the DMO will deliver to Defence in respect of any acquisition of capability including the associated costs and timing. It also provides a means by which performance will be monitored over the course of the acquisition project. There are a number of other project management documents, tools and processes that cover how the project is managed. The MAA is about the high-level outputs that the DMO has undertaken to deliver.

- **Material Sustainment Agreement (MSA)** – Sustainment of current explosive ordnance capability is covered under the product schedules within the relevant MSAs with the Service Groups. The product schedule between each Service and the DMO is an agreement on the level of support to be provided and the associated funding in the purchase of explosive ordnance inventory. The Capability Manager for each of the Services determines the requirement for explosive ordnance to support Raise, Train, Sustain (RTS)¹³³ activities in accordance with their Service procedures and advises the DMO as part of the Defence Management and Finance Plan and MSA development process. There is currently no MSA between the DMO and JOC to define the obligations of each party and the services to be delivered by the DMO.

3.4 Explosive ordnance stock procured through the requirements determination process falls into two categories:

- **Operating stock** – is the quantity of explosive ordnance required by each of the Services (Army, Navy and Air Force) to maintain authorised levels of peacetime training activity between successive procurements. This includes stocks of explosive ordnance made available to the Capability Managers to support their RTS activities. Stock for ADF operations and joint activities, determined by JOC, is also included in this category.

¹³² Defence defines a major capital equipment project as any project involving expenditure of \$20 million or more, or of less than \$20 million with strategic significance or with individual items of \$1 million or more. Minor capital equipment projects are generally valued between \$250,000 and \$20 million, and cover new equipment, modifications to existing equipment or enhancements to new equipment. Major capital equipment projects are funded from the Defence Capability Program funding, while the minor capital equipment projects are funded by the Services Groups and other Capability Managers.

¹³³ Raise, Train, Sustain requirements refers to the Services' resource needs, including explosive ordnance, to conduct training to support the ADF's capability.

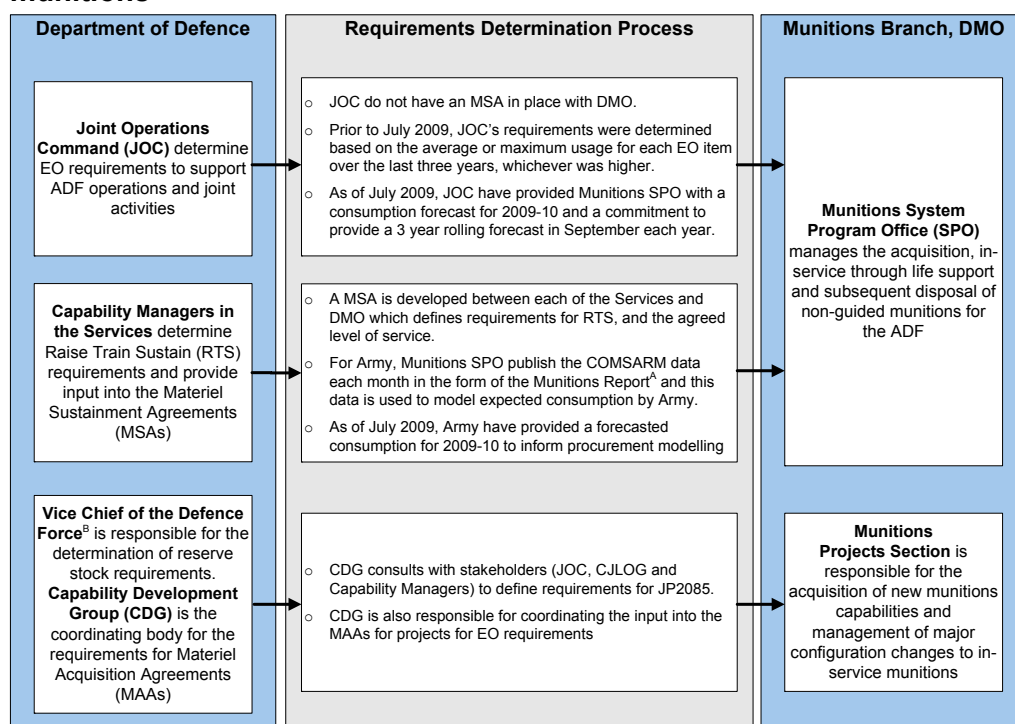
- **Reserve stock** – (also referred to as warstock) is that held in addition to the operating stocks to meet the anticipated requirements of possible contingencies. Reserve stock levels are defined by the CDF Preparedness Directive.¹³⁴

3.5 An overview of the requirements determination process for the procurement of non-guided munitions, including the various stakeholders involved and how the requirements are communicated to the DMO, is illustrated in Figure 3.1.

¹³⁴ The Chief of Defence Force (CDF) Preparedness Directive is a principal strategic-level directive containing strategic planning guidance. It lists military response options and sets preparedness requirements. It informs all subordinate preparedness directives at the operational level, which set specified levels of preparedness and contain the capability standards against which force units measure and report. Annex C to the CDF Preparedness Directive is the basis for elements of the EO reserve stock liability.

Figure 3.1

Requirements determination for the procurement of non-guided munitions



Note:

^A The Munitions Report is a report on the status of explosive ordnance inventory for Munitions Branch and is developed using data from Defence's explosive ordnance inventory management system, Computer System for Armaments (COMSARM).

^B The VCDF, through the CJLOG, is the single point of accountability for explosive ordnance within Defence.

Source: ANAO analysis of Defence documentation

Defence and the DMO progress in implementing relevant recommendations and findings of 2005–06 ANAO audit

3.6 ANAO audit report No.40 2005–06 concluded that 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 first three recommendations from that audit related to this aspect of the explosive ordnance life cycle. This section discusses those recommendations and the subsequent work by the DMO and Defence to implement them.

JP 2085 1B Equipment Acquisition Strategy

Findings from the 2005–06 ANAO audit report

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. At that time some \$50.1 million of Phase 1B funds had already been committed and largely expended in 2003–04. The ANAO noted that a poor alignment exists between the phasing of funding for Phase 1B and standard contractual payment requirements which precipitated significant prepayments being initiated by the DMO.¹³⁵

The DMO informed 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, including 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, and significant prepayments.¹³⁶

The ANAO made the following recommendation:

Recommendation No.1

The ANAO recommends that the JP 2085 Phase 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.

3.7 In May 2009, the DMO advised the following in respect of action taken to implement this recommendation:

Most of the items that were to be acquired by JP 2085 Ph1B consisted of restocking existing inventory. A generic equipment acquisition strategy was used to place orders through the existing Sustainment contracts. Two new-to-ADF items required specific Equipment Acquisition Strategies: the Excalibur and the SMArt 155 Artillery Precision Guided Munitions (APGMs). Specific Acquisition Strategies were attached to the Generic Equipment Acquisition Strategy document, which was then re-issued as Version 1.1. Phase 1B is nearing completion.¹³⁷

¹³⁵ ANAO Audit Report No.40 2005–06, op. cit., p. 34.

¹³⁶ *ibid.*

¹³⁷ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', 22 May 2009, Enclosure 1, p. 1.

3.8 As noted in paragraph 2.55, Management Audit Branch (MAB) in Defence uses a database known as ARMS to record progress in implementing recommendations for both internal and external reviews undertaken in Defence and the DMO, including the timeframe and reasons for closing particular recommendations. Recommendation No.1 from the previous ANAO audit report was signed off in the ARMS database on 25 October 2006. The comments against this recommendation in the ARMS database are included in Table 3.1.

Table 3.1

Status of Recommendation No.1 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	25 October 2006	<p>A discrete Acquisition Strategy has been developed under JP 2085 Ph1B for the 155 millimetre (mm) Precision Guided Munitions (PGM), as recommended.</p> <p>The Acquisition Strategy has been incorporated into the JP 2085 Project Acquisition Strategy and the JP 2085 Project Acquisition Strategy will be reissued. The recommendation is being closed as the action as recommended has been completed.¹³⁸</p>

3.9 The ANAO has assessed Defence and the DMO's implementation of this recommendation as **completed**. The JP 2085 Phase 1B Equipment Acquisition Strategy has been updated by the DMO to include all procurements of new explosive ordnance types under that project phase.

¹³⁸ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 1, 25 October 2006.

Requirements Determination Processes and Material Sustainment Agreements

Findings from the 2005–06 ANAO audit report

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.

ANAO found that weaknesses in the coordination of these requirements have led to difficulties in developing comprehensive, validated explosive ordnance procurement plans.

The ANAO made the following recommendation:

Recommendation No.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.

3.10 In May 2009, in relation to action taken to implement this recommendation, the DMO advised the ANAO as follows:

Part (a):

Since 2005/06 Requirements Determination (RD) has been conducted in accordance with GWEO Logistics Procedures (Part 2 Section 3 Proc 3.1.1), implemented against planned consumption figures provided by the Services, and EO Reserve Stock figures authorised in the CDF's Preparedness Directive (CPD). The tool used to conduct RD has been the Resource and Sustainment Program (RASP) report,¹³⁹ generated monthly from up-to-date COMSARM data, and loaded on to EO Central on the DSN [Defence Secret Network]. In 2008 an Item Management Plan concept was introduced into the SPO [Munitions Systems Project Office]. The SPO has commenced using this tool and is presently reviewing the functionality to ensure that the inventory is managed appropriately.

¹³⁹ The Resource and Sustainment Program (RASP) report was a report drawn from COMSARM data and was used to provide information on historical usage to inform procurement planning. It has since been replaced by the Munitions Report.

Part (b):

Materiel Sustainment Agreements (MSAs) for all commodities and products have been improved incrementally over the last few years. The current (FY08/09) EO MSAs included stockholding (described as a 'measure of the actual inventory vs RTS and reserve stockholdings') amongst a number of reportable KPIs.¹⁴⁰

3.11 Recommendation No.2 from the previous ANAO audit report was signed off in the ARMS database on 29 May 2007. The comments against this recommendation in the ARMS database are included in Table 3.2.

Table 3.2

Status of Recommendation No.2 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Recommendation 2 (a) – Closed	29 May 2007	The Closure Package provided to MAB identifies the inclusion of agreed Target Stock Figures, with a ten year outlook in the Material Sustainment Agreement. This requirement fully satisfies the ANAO recommendation. ¹⁴¹
Recommendation 2 (b) – Closed	24 July 2007	MSAs have been completed and have been signed by the CEO DMO and Service Chiefs. The required performance measures have been included in the documents. Closure minute has been prepared and sent to General Manager Corporate. ¹⁴²

Effectiveness of the requirements determination process

3.12 The ANAO has assessed Defence and the DMO's implementation of Recommendation No. 2(a) as **partially implemented**. While there have been attempts within the DMO to improve internal requirements determination processes, these continue to be immature. Fundamental to the requirements determination process is the aggregation of RTS, operations and reserve stock requirements. While there is ongoing development in all these areas, it is not

¹⁴⁰ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', Enclosure 1, p. 2.

¹⁴¹ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 2a, 29 May 2007.

¹⁴² Department of Defence, Management Audit Branch, ARMS Database, Recommendation 2b, 24 July 2007.

currently possible to identify longer term inventory line item stockholding levels. It is essential that the requirements determination process is based on robust analysis and agreement from all stakeholders to ensure that inventory holdings are at defined levels and procurement planning can be undertaken in line with the varying procurement arrangements and procurement lead-times for individual inventory line items.

3.13 The consolidation of the requirements determination process is discussed further in paragraphs 3.62 to 3.71.

Performance measures in Materiel Sustainment Agreements

3.14 The ANAO has assessed Defence and the DMO's implementation of Recommendation No.2(b) as **overtaken by events**. The implementation of this recommendation was contingent on successful implementation of Recommendation No. 2(a). Since the 2005–06 ANAO audit report, performance measures or Key Performance Indicators (KPIs) have been introduced into the MSAs. However, the ANAO's recommendation was that the performance measures be based on agreed inventory levels, and as indicated in paragraph 3.12, Defence and the DMO have still not identified longer term inventory line item stockholding levels.

3.15 The ANAO notes however that since the 2005–06 audit report, Defence no longer regards the KPIs in the MSAs as an appropriate measure for the requirements determination process. Defence informed the ANAO in November 2009 that:

Defence's understanding of the MSA environment has matured significantly since 2005/06. While performance measures based on agreed inventory levels may have seemed appropriate then, there may be a more effective measure of sustainment success.

Reporting in MSAs against agreed inventory levels, as recommended in the 2005/06 report, implies that each of the Services should be prepared to accept reporting under their separate MSAs against agreed inventory targets, which are effectively the sum of inventory required to support the three Services' RTS activities, operational consumption, supply margin stock to account for supply chain risk, and reserve stocks. It is arguable whether this will be meaningful to each of the services.

The total inventory level is, in effect, a means to an end, where the end is the DMO's ability to satisfy the consumption requirements of each of the various customer groups (the Services, JOC, etc). It is arguable that a more appropriate recommendation might be that DMO and Defence incorporate

performance measures based on agreed satisfaction rates into future MSAs for EO.

However, appropriate measures regarding inventory levels are considered to be a general KPI that should form part of the higher level EO governance arrangements, as they underpin Defence's ability to provide government directed military options. Consequently, performance measures based on inventory levels are being developed under the 'EO Performance Management Framework' agreed by DEOC on 23 October 2009, and will be considered by the DEOC at future meetings.¹⁴³

3.16 An overview of the 'EO Performance Management Framework', part of the Explosive Ordnance Reform Program being undertaken by JLC, is provided in Table 2.3. The first working group for the project was held in November 2009. The ANAO notes that this program is in the early stages and is unable to provide assessment on its impact at this stage. Further information on KPIs in the MSAs for explosive ordnance is included in paragraphs 3.48 to 3.51.

Procurement of explosive ordnance under Major Capital Equipment Projects

Findings from the 2005–06 ANAO audit report

The ANAO reviewed several Army Major Capital Equipment Projects 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.¹⁴⁴

The ANAO made the following recommendation:

Recommendation No.3

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. The current Capability Development processes require in depth analysis of all costs, including explosive ordnance.

¹⁴³ Defence and the DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 13.

¹⁴⁴ ANAO Audit Report No.40 2005–06, op. cit., p. 38.

3.17 In May 2009, the DMO provided the following comments on its progress in implementing Recommendation No.3 from the 2005–06 ANAO audit:

The process of preparing capital project approval documentation for consideration by Government is owned by the Capability Development Group (CDG), as documented in the Defence Capability Development Manual (DCDM).

The DCDM requires platform projects to consider all Fundamental Inputs to Capability (FIC) issues in developing capability proposals for Government consideration, and notes that ‘whole-of-life costs must be presented to and understood by Government’. The requirement to make provision for acquisition of initial EO war reserves is specifically addressed.

DMO participates in the CDG-led Integrated Project Teams (IPTs) that work up Project Capability proposals for Government consideration, providing advice on costs and necessary support systems as required for particular projects.¹⁴⁵

3.18 Recommendation No.3 from the 2005–06 ANAO audit report was signed off in the ARMS database on 10 November 2006. The comments against this recommendation in the ARMS database are included in Table 3.3.

Table 3.3
Status of Recommendation No.3 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	10 November 2006	A minute from DGCP to the Inspector-General dated 7 November 2006 advises that this recommendation be marked as complete. The Defence Capability Development Manual was revised Feb 2006 to cover items in this recommendation. ¹⁴⁶

3.19 The ANAO has assessed the DMO and Defence’s implementation of Recommendation No.3 as **limited progress**. The ANAO notes that since the

¹⁴⁵ Defence Materiel Organisation, ‘ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit’, 22 May 2009, Enclosure 1, p. 3.

¹⁴⁶ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 3, 10 November 2006.

previous audit report, the Defence Capability Development Manual (DCDM) has been updated to include the following guidance:

All new projects that acquire weapon systems or munitions are to make provision for an initial war reserve buy. DGCP [Director-General Capability and Plans] within CDG is to be contacted for advice on the means and timing of the production of an initial buy quantity for endorsement by the War Reserve Explosive Ordnance Committee (WREOC). This should occur at least 12 months before scheduled Second Pass approval is sought.¹⁴⁷

3.20 While the ANAO acknowledges that the DCDM has been updated, the recommendation specifically dealt with the 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 in the second pass approval documentation.

3.21 The ANAO examined the Land 17 Artillery Replacement project (Land 17) and Land 40 Phase 2 Direct Fire Support Weapon (Land 40 Ph 2) to assess whether the updated guidance from the DCDM was being followed.

Land 17 Artillery Replacement – 105 mm and 155 mm

3.22 Land 17 is intended to enhance the Australian Army indirect fire support system through the replacement or upgrade of the 105 mm Hamel Howitzer and 155 mm M198 Howitzer fleets when they reach the end of their service life. The goal for the project is to provide Army with new protected self-propelled guns, new lightweight owed guns, and a digitised, networked Battle Management System. The Advanced Field Artillery Tactical Data System (AFATDS) has been selected as the Command and Control component of the Battle Management System.¹⁴⁸

3.23 The Land 17 Operational Concept Document states that:

The family of 155mm ammunition will be replaced under Army Minors Project MARAP [Medium Artillery Replacement Ammunition Project].¹⁴⁹ This new ammunition is expected to be compatible with the platforms selected under

¹⁴⁷ Department of Defence, *Defence Capability Development Manual*, 2006, para. 4.44 (y), p. 51.

¹⁴⁸ Defence Materiel Organisation Website – Projects, <<http://www.defence.gov.au/dmo/lcd/land17/land17.cfm>> [accessed 15 June 2009].

¹⁴⁹ As discussed in paragraph 1.28, the Medium Artillery Replacement Ammunition Project (MARAP) is a high value Army minor capital equipment project procuring explosive ordnance.

Land 17. Should the MARPAP ammunition solution be incompatible with the Land 17 platforms, the responsibility for resolution lies with Land 17.¹⁵⁰

3.24 As noted in paragraph 1.28, Defence informed the ANAO in November 2009 that MARAP has been subject to funds re-prioritisation and reduction and will deliver at least one nature of medium artillery ammunition once the current scoping activity is completed.

3.25 The ANAO found that the second pass approval documentation for Land 17 did not clearly identify the explosive ordnance required for the project. The approval documentation stated that long term procurement arrangements were yet to be identified. Given that the 105 mm artillery ammunition is manufactured under SAMS Agreement at the Benalla facility a change to the 155 mm might not only involve the acquisition of operating and reserve stock but also capital improvements to the Benalla facility if there is an ongoing desire to maintain a domestic manufacturing capability for artillery ammunition. As noted in Chapter 5 there are ongoing issues surrounding the Domestic manufacturing arrangement that need to be resolved.

3.26 Defence and the DMO informed the ANAO in November 2009 that:

LAND 17 predates the latest updates to the Defence Capability Development Manual (DCDM) processes for EO [explosive ordnance]. Nevertheless, LAND 17 will comply with updated guidance by procuring Introduction Into Service and Reserve Stocks for new EO nature and components being introduced under the project. A central aspect of LAND 17 is the compatibility of existing ammunition with the new towed and self propelled guns. LAND 17 is being taken forward as part of the revised Defence Capability Plan (DCP) to support Force 2030, the *Defence White Paper 2009*. The DCP is due to be considered by government in November 2009.

MARPAP, the Army Minor Project to deliver Medium Artillery Replacement Ammunition, has been subject to funds re-prioritisation and reduction. It will now deliver at least one nature of medium artillery ammunition once the current scoping activity, which is being aligned with Government decisions regarding the LAND 17 capability, is completed.¹⁵¹

¹⁵⁰ Department of Defence, 'Land 17 – Artillery Replacement: Operational Concept Document, 5 May 2009, Version 3.4, paragraph 4.1.4.2.

¹⁵¹ Defence and the DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 14.

3.27 The ANAO sought to clarify the Defence advice and in late November 2009, Defence further informed the ANAO that it was a requirement for the new guns to be able to fire the in-service 155 mm ammunition. On this basis, Defence indicated that it was not necessary to buy new ammunition to cater for Introduction-into-service (IIS), the first three years of training and warstocks. Defence informed the ANAO as follows:

As a result, LAND 17 has always planned to acquire additional quantities of the in-service M107 ammunition, sufficient to conduct the IIS of these new towed and SPH platforms but never to acquire warstocks of this ammunition nature - that was the scope of JP 2085. It would be a false economy and fiscally irresponsible to retrospectively add a requirement to add Warstocks now when the scope of the Project has been agreed during the White Paper process in 2009 and NSC consideration in Jul 09 and funding confirmed in the DCP.

3.28 The ANAO notes that this is inconsistent with the DCDM as set out in paragraph 3.19. One of the reasons for the inclusion of this recommendation in the previous audit report was that Land 907 – Main Battle Tank Replacement Project and Land 19 Phases 5A and 6 – Short Range Air Defence Weapon Systems Project both required explosive ordnance to be procured but had insufficient funding available within the project to fully fund that acquisition. Both these projects used JP 2085 funding which the Defence Capability Plan 2009 states is to:

remediate the ADF's Explosive Ordnance (EO) stocks in order to ensure that joint forces have appropriate operational viability period stocks for a range of concurrent contingencies in accordance with Government expectations of Defence.¹⁵²

3.29 The acquisition of warstock for additional 155 mm artillery platforms acquired under Land 17 would not appear to fit within this scope.

3.30 In November 2009, Defence informed the ANAO as follows:

Army will also be removing the 105mm artillery fleet from service between 2011–13. Army's advice (which has been consistent since 2005) is that the funding currently directed towards 105mm ammunition is to be transferred to 155mm ammunition.

3.31 The ANAO notes that 105 mm artillery ammunition is currently manufactured under the SAMS Agreement, therefore the cost of withdrawing

¹⁵² Department of Defence, *Defence Capability Plan 2009*, p. 116.

it from service not only relates to existing stockholdings but ongoing capability payments under the SAMS Agreement as set out in Chapter 5.

Land 40 Phase 2 Direct Fire Support Weapon

3.32 Land 40 comprises two phases. Phase 1 has been completed and provided a medium range, direct fire guided weapon for attacking bunkers, buildings and armoured vehicles. Phase 2 is intended to provide Army with a range of direct fire support weapon systems that will be integral to an Infantry Battalion.

3.33 The recommended option presented to Government included the acquisition of the 84 mm Mark 3 (M3) Carl-Gustaf medium direct fire support weapons and the Lightweight Automatic Grenade Launchers (LWAGL). As the M3 Carl-Gustaf medium direct fire support weapons are already in-service, Defence did not consider that there was any requirement to seek further funding in the second pass approval documentation for explosive ordnance for this weapon. The LWAGL proposed for acquisition under the project is a new solution not currently in-service with the ADF, and therefore additional funding for the 40 mm high velocity explosive ordnance for this weapon was sought in the second pass approval documentation.

3.34 The ANAO found that while the Net Personnel and Operating Costs (NPOC) in the second pass approval documentation for Land 40 include funding for ammunition, there is no clear analysis of initial project funding to procure explosive ordnance required to support the LWAGL. This includes the breakdown of costs associated with the procurement of explosive ordnance for training, operations, and reserve stock or safety and suitability for service assessments.

Developments in requirements determination since the 2007 Orme Review

3.35 Through this audit the ANAO reviewed the elements that feed into the requirements determination process. The 2007 Orme Review noted that requirements determination was an area that required ongoing management attention. That review identified the following issues:

- **Lack of standardisation of processes.** The Orme Review stated that 'Extant guidance is not clear or well understood. Conflicting views of the roles of different parts of the [Defence] organisation further impede planning processes'.

- **Lack of communication and coordination.** The Orme Review stated that ‘There is considerable frustration stemming from poor communication’.
- **No single point of accountability.** The Orme Review stated that there is ‘no single point of visibility across the many parts of the EO domain, particularly in terms of requirements definition, funding and inventory status.’¹⁵³

3.36 The ANAO notes that there has been progress in addressing some of these issues since the Orme Review was finalised in 2007. For example, the establishment of the VCDF as the single point of accountability for explosive ordnance in Defence, the reconstitution of the DEOC to provide overall governance and direction to progress reforms to address the Orme Review findings, the approved Explosive Ordnance Reform Program, and the Explosive Ordnance Reserve Stock Study. However, the ANAO also identified that, while measures had been put place to enhance requirements determination processes in Defence and the DMO, there remain opportunities for further improvement. This is discussed further in the sections below.

Communication with Army

3.37 In recent times, there have been improvements in Explosive Ordnance Division’s relationship with Army Headquarters, achieved through both high-level Explosive Ordnance Coordination meetings and regular meetings at the Munitions Systems Program Office (SPO)¹⁵⁴ level.

3.38 The high-level Explosive Ordnance Coordination Meetings for Army involve representatives from Army Headquarters and the Head of Explosive Ordnance Division, the Director-General of Munitions Branch and the Director-General of Guided Weapons Branch from the DMO. The aim of these meetings is to assess Army’s priorities going forward, discuss the resolution of issues collaboratively, and get feedback on areas for improvement, as well as to support the requirements determination process.

¹⁵³ Department of Defence, ‘Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)’, para. 3c, p. 2.

¹⁵⁴ Systems Program Offices (SPOs) are responsible for acquisition, introduction into service and through life support of their assigned platform or system.

3.39 There is also additional contact with Army Headquarters at the Munitions SPO level, with monthly meetings to discuss any issues with explosive ordnance procurement planning or stock.

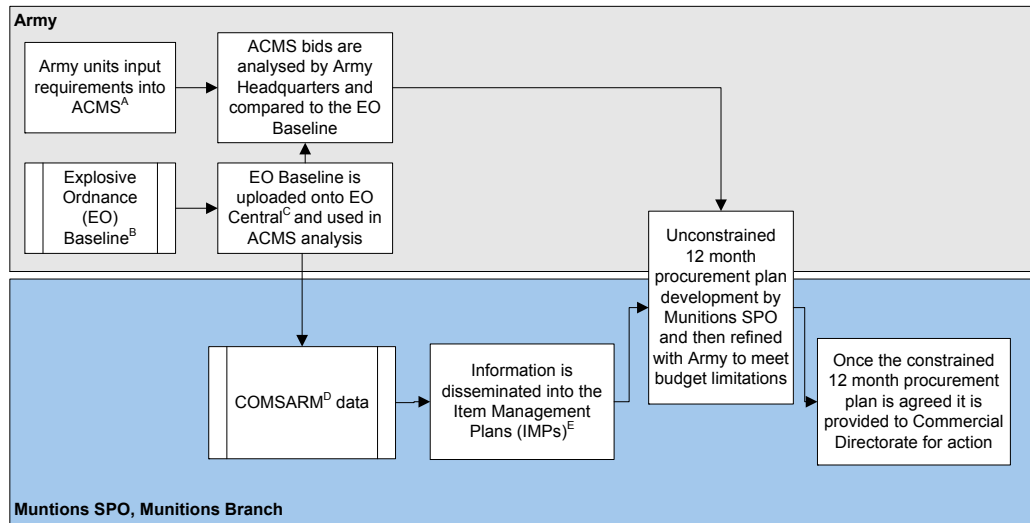
3.40 Army informed the ANAO that:

The formal process of requirements determination is underpinned and enhanced by the regular and more informal series of regular contact between all parties including Army HQ [headquarters] for internal processes and in-year management adjustments.¹⁵⁵

Raise, Train, Sustain requirements for Army

3.41 The process for determining Army's non-guided explosive ordnance requirements for Raise, Train, Sustain (RTS) activities and how these requirements are communicated to Munitions Branch in the DMO is illustrated in Figure 3.2.

¹⁵⁵ Defence and DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 16.

Figure 3.2**Requirements determination for Army's RTS requirements for non-guided explosive ordnance****Note:**

- ^A Army Capability Management System (ACMS) is a web-based system used to integrate training and activity plans for Army units including their full range of resource requirements.
- ^B The 'Army Ammunition Study', a 2002 study conducted by Army, provided an Explosive Ordnance (EO) Baseline that defines the amount of ammunition required to maintain Army units at required levels of preparedness.
- ^C EO Central is a web-based tool used by Munitions Branch and its customers as a central repository of data on explosive ordnance requirements for the Services. The site is currently under development.
- ^D Computer System for Armaments (COMSARM) is Defence's explosive ordnance inventory management system. The Munitions Report is drawn from COMSARM data and is used to provide information on historical usage to inform procurement planning. This information can also be drawn directly from COMSARM in more detail.
- ^E Item Management Plans (IMPs) are Munitions Branch's key inventory management tool providing a snapshot of individual EO items including consumption rates for the item. The IMPs are discussed in more detail in 3.73 to 3.83.

Source: ANAO analysis of Defence documentation.

3.42 Until July 2009 the requirements determination process for Army was based around the higher of the Explosive Ordnance Baseline¹⁵⁶, the average or maximum consumption over the last three years. Recent efforts by the DMO and Army to improve procurement planning have included Army's provision

¹⁵⁶ The 'Army Ammunition Study', a 2002 study conducted by Army, provided an Explosive Ordnance Baseline that defines the amount of ammunition required to maintain Army units at required levels of preparedness.

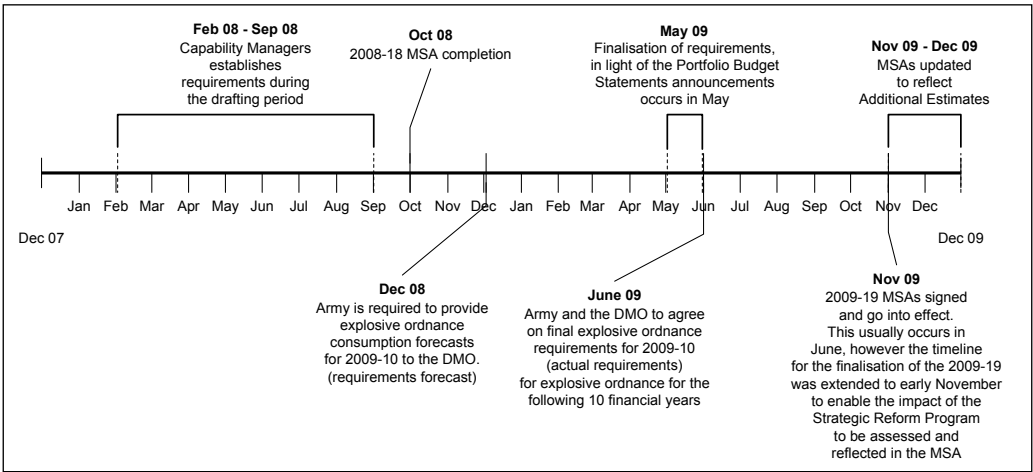
to the DMO in July 2009 of a forecasted consumption of explosive ordnance for 2009–10. The DMO intends to use this information to inform procurement modelling and the creation of the Munitions Report¹⁵⁷(see Figure 3.2).

Timings under the Materiel Sustainment Agreements

3.43 As mentioned in paragraph 3.3, the MSA between each Service and the DMO is an agreement on the level of support to be provided and the associated funding for the purchase of explosive ordnance inventory. The MSAs contain a one year commitment and a forward estimate for the remaining years on the Defence Management and Finance Plan (DMFP). For example, the 2009–19 Army MSA product schedule contains commitments for the period July 2009 to June 2010 and forward estimates for the remaining years of the DMFP. The timeline for development of the 2009–19 MSAs and related discussions, including forecasting requirements, is represented in Figure 3.3.

Figure 3.3

Timeline for development and discussions for 2009–19 MSAs



Source: Adapted from Defence documentation.

3.44 Despite the ten year period covered by the current Army MSA, MSA discussions between the Services and the DMO focus primarily on the immediate financial year ahead:

¹⁵⁷ The Munitions Report is drawn from COMSARM data and is used to provide information on historical usage to inform procurement planning.

MSAs are 10 year rolling multi-year agreements encompassing a one year commitment and an agreed planning basis for the following nine years of the DFMP [Defence Financial Management Plan] or until the product is withdrawn. They are developed annually to provide a price and performance outlook.¹⁵⁸

3.45 The impact of this is discussed in the quote below from a May 2008 brief from Munitions Branch to the Head of Explosive Ordnance Division:

The focus of MSA discussions has been predominantly on the immediate year ahead. This reduces the certainty of funds expenditure given the lead-times for EO procurement. In year MSA discussions should be focused on 2 to 3 years out to allow certainty in delivery and immediate year ahead funding should be committed and in contract for delivery in the first six months of the financial year.

3.46 Defence and the DMO informed the ANAO that enhancements to the MSA process for 2010–20 cycle will include more robust 10 year planning and a more disciplined approach to MSA negotiations before budget considerations.

3.47 The misalignment between the timings of forecasts under the SAMS Agreement and the MSA had been identified as an issue at the time of the previous audit. That audit included a recommendation that was intended to address this issue. The ANAO's assessment of the implementation of this recommendation is discussed in paragraphs 5.14 to 5.18.

Key Performance Indicators in the MSAs

3.48 The KPIs contained in the current Army Explosive Ordnance MSA are split into two groups:

- **Tier 1 KPIs** – these are 'lag' indicators of past performance. They represent satisfaction, or otherwise, of Army's requirements as defined in the MSA.
- **Tier 2 KPIs** – these are 'lead' indicators of performance over time which aim to monitor performance trends.

3.49 In April 2009, the DMO informed the ANAO that the Logistics Directorate in Explosive Ordnance Division was working with a contractor to

¹⁵⁸ DI(G) LOG 4-1-013 'Defence Policy for the Management of Explosive Ordnance', draft developed by Capability Development Group.

develop a performance reporting framework around the KPIs in the Explosive Ordnance MSAs. This initiative, known as 'Enhance Materiel Sustainment Agreements' is being undertaken as part of the Explosive Ordnance Transformation Program in Explosive Ordnance Division. An overview of the initiative is provided in Table 2.4 in Chapter 2 of this report. In July 2009, the DMO advised that it will not use the KPIs developed during this process in the short term and instead will be developing a small and simplified set of KPIs which will be implemented in the 2009–19 MSAs. The DMO subsequently informed the ANAO that, as of September 2009, the project was at risk as the 2009–19 MSA explosive ordnance product schedules had not yet been agreed.

3.50 Army provided the following comments in relation to the development of KPIs in the explosive ordnance domain:

Army, along with the other services, has been closely involved with EO Div [Explosive Ordnance Division] in the development of the KPIs that underpin the 2009–19 EO [Explosive Ordnance] MSA Product Schedule. As with all MSAs the KPIs are still immature and remain under development and consideration by Army and DMO. The initiatives taken to develop KPIs will be of benefit for the development of the 2010–20 MSA. Army is looking to standardise the KPIs for commodity based product schedules such as EO.

In conjunction with the reworking of the KPIs, Army is in the process of instituting biannual fleet screenings of the EO Product Schedule, which will allow the Capability Manager to provide the detailed level of guidance required by EO Div to manage the land-based EO requirements of the ADF.¹⁵⁹

3.51 There is some limited reporting against the KPIs in the MSAs through the DMO's Sustainment Overview Reports.¹⁶⁰

Operational explosive ordnance requirements

3.52 Operational explosive ordnance requirements are those that are required to support ADF operations and joint activities. These are in addition to the RTS requirements of the Services. Defence advised that operational explosive ordnance requirements are provided through government supplementation on a 'no win, no loss' basis. While Army Headquarters sets

¹⁵⁹ Defence and DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, pp. 18-19.

¹⁶⁰ A Sustainment Overview Report is a high level monthly report for inventory providing a snapshot of sustainment for Army, Air Force or Navy.

the RTS requirements for Army, JOC sets the requirement for all operations, including those conducted by Army personnel.

3.53 Until July 2009, Munitions Branch did not have a procurement plan in place with JOC, and did not receive any requirements data from JOC. As noted in Figure 3.1, JOC's forecasted requirements for explosive ordnance were determined on its past consumption rates. The DMO informed the ANAO that, as of July 2009, JOC has provided Munitions Branch with a limited consumption forecast for 2009–10 and a commitment to provide a three year rolling forecast in September of each year. The DMO subsequently advised that a three year forecast was provided by JOC to Munitions Branch in September 2009. The DMO informed the ANAO that this information will be used to inform procurement planning to determine operational requirements. There is currently no MSA between the DMO and JOC to define the obligations of each party and the services to be delivered by the DMO.

Operations supplementation funding

3.54 The DMO informed the ANAO in November 2009 that the current arrangement under which the DMO receives supplementation funding for operations impacts on RTS funds. In particular, the DMO does not have the funding certainty required to support procurement of explosive ordnance with long lead times that are required to support operations. The DMO further advised:

While the process of JOC [Joint Operations Command] forecasting has improved significantly in 2009, the extended procurement lead-times that are typical in the global market drive the need for long-term budgeting of the associated operational funds. Defence is appropriately recompensed on a no-win/no-loss basis for the cost of operations, but these appropriations have generally only been released to EO Division in the budget year itself. (Note that in 2009, for the first time, EO Division has received a significant Operations Supplementation budget that spans both the budget year and the first year of the Forward Estimates period. Given that most EO procurement lead-times are over two years, this has done little to resolve the issue.)

The consequence of these arrangements is that EO item managers have not had the funding certainty required to enable long lead-time ordering of stock destined for consumption by JOC on operations. The pragmatic answer has been to allocate Service RTS funds to support the approval process (based on the ten-year DMFP RTS budgets), and then to shift the funding burden later when the Operations Supplementation budget is finally allocated.

This pragmatic solution to long-term procurement of EO for JOC distorts the range of investment that item managers should be making with Service RTS funds: because the RTS funds are freed up at a late stage when they are released from covering future Operational purchases, they can only then be diverted toward short lead-time items.¹⁶¹

3.55 This issue is discussed further in Chapter 6.

Establishing and maintaining reserve stocks

3.56 The desired level of the explosive ordnance stockholding is identified in the 2006 Chief of Defence Force Preparedness Directive (CPD06). The Orme Review noted that various interviewees had advised that ‘the planning basis for EO stockholdings derived from the current war gaming and scenarios was in some cases not credible. Consequently the review suggested as follows:

Reviewing the EO reserve stock liability presented in Annex C to the CDF Preparedness Directive to provide a more consistent (and in some cases a more realistic) basis to inform provisioning.¹⁶²

3.57 As mentioned in paragraph 2.27, JLC has recently completed a study reviewing the 2006 CDF Preparedness Directive, known as the Explosive Ordnance Reserve Stock Study. The final report of the Explosive Ordnance Reserve Stock Study was endorsed by the DEOC on 23 October 2009 and was approved by the Chief of Services Committee (COSC)¹⁶³ on 25 November 2009. This study will be used to:

- identify explosive ordnance reserve stock requirements;
- provide a number of options for explosive ordnance reserve stock requirements catering for different levels of risk;
- provide input for JP 2085 Phases 2 and 3 procurement considerations; and
- provide input to future projects with an explosive ordnance component.

¹⁶¹ *ibid.*, p. 10.

¹⁶² Department of Defence, ‘Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)’, December 2007, para 24(d), p. 13.

¹⁶³ The Chiefs of Service Committee (COSC) provides military advice to the CDF to assist him to discharge his responsibilities in command of the Defence Force.

Replenishing reserve stocks

3.58 JP 2085 seeks to replenish reserve stockholdings of Explosive Ordnance natures that are currently in-service with the ADF. JP 2085 initially consisted of four planned phases: Phases 1A and 1B were authorised to replenish high priority natures, with Phases 2 and 3 being authorised to purchase all other reserve natures.

3.59 The Orme Review noted in relation to Phases 2 and 3 of JP 2085 that:

Notwithstanding Defence Capability Committee guidance on the scope, schedule and funding provision for JP 2085 provided in the last 12 to 18 months, there is still uncertainty around the boundaries for Phase 2 and 3 of the project and its relationship with major platform projects and ongoing sustainment activities.¹⁶⁴

3.60 In late 2008, a change in capability programming by Defence led to Phases 2 and 3 being combined, as noted in the *2009-2019 Defence Capability Plan*. The 2009 Explosive Ordnance Reserve Stock Study gave further insight into strategic explosive ordnance requirements and shortfalls, with the study determining that JP 2085 Phase 2/3 as a combined project could remediate all of Defence's explosive ordnance reserve stock shortfalls for those contingencies examined.

3.61 Defence informed the ANAO in November 2009 that: 'the decision to combine Phases 2 and 3 of the project also led to a decision in early 2009 to de-link the previously agreed combined First/Second Pass approach to government'.¹⁶⁵ Rather, Capability Development Group was directed to present the project for consideration by government in the traditional First Pass followed by Second Pass manner. JP 2085 is now expected to undergo First Pass consideration by government in 2010, with Second Pass consideration scheduled for the period mid 2012–2015. Defence also informed the ANAO in November 2009 that the Explosive Ordnance Reserve Stock Study and the rescoping of JP 2085 have addressed the issues surrounding JP 2085 identified in the Orme Review as outlined in paragraph 3.59.

¹⁶⁴ Department of Defence, 'Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)', December 2007, para. 3h, p. 3.

¹⁶⁵ Defence and DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 21.

Consolidating the Requirements Determination Process

3.62 As noted in paragraph 3.12, it is essential that the requirements determination process is based on robust analysis and agreement from all stakeholders to ensure that inventory holdings are at defined levels and procurement planning can be undertaken in line with varying procurement arrangements and procurement lead-times.

3.63 The requirement to achieve this outcome has been acknowledged within Defence with the Orme Review, the *2008 Audit of the Defence Budget*¹⁶⁶ and the Logistics Companion Review to the *Defence White Paper 2009* each raising similar issues around the current requirements determination process.

3.64 In December 2007, the Orme Review noted that:

An effective and robust EO [explosive ordnance] requirements determination process is fundamental to the successful management of Defence's EO stockholdings. Yet there are a number of significant shortfalls associated with Defence's current EO process. Most importantly, it is not governed from a whole-of-Defence perspective, leading to inadequate forecasting of Defence-wide EO requirements.¹⁶⁷

3.65 The Orme Review further stated that 'no single line of EO [explosive ordnance] acquisition request yet flows into DMO, compounding the difficulties associated with EO inventory management'.¹⁶⁸

3.66 Following the Orme Review, the CDF's Directive 4/2008 assigned the VCDF, through the Commander of Joint Logistics Command (CJLOG), as the single point of accountability for explosive ordnance within Defence. The Chief of Defence Force Directive to the Vice Chief of the Defence Force advised that CJLOG should 'assess the merits of establishing a single Materiel Sustainment Agreement that covers the needs of the three Services and Joint Operations Command'.¹⁶⁹ The potential benefits of a single MSA include a single point of

¹⁶⁶ Department of Defence, *2008 Audit of the Defence Budget*, April 2009. Also known as the 'Pappas Review'. <<http://www.defence.gov.au/publications/DefenceBudgetAudit.pdf>> [accessed 18 November 2009].

¹⁶⁷ Department of Defence, 'Review of Defence Policy and Procedures for the Management of Explosive Ordnance (EO)', December 2007, para. 21, p. 11.

¹⁶⁸ *ibid.*, para 34, p. 15.

¹⁶⁹ Department of Defence, Joint Logistics Command, 'Explosive Ordnance Reform Program (Draft)', March 2009, p. 14.

contact for MSAs (VCDF), and a consolidated approach to requirements. Defence informed the ANAO in November 2009 that:

A single MSA was considered at a series of workshops conducted by HEOD [Head Explosives Ordnance Division] in early 2008; while these workshops concluded that this would assist in facilitating a consolidated approach to requirements, it was agreed that consolidation of requirements can also be achieved during the procurement planning process. However, the variety of funding sources for requirements identified in the MSAs made the development and approval of a single MSA complex and problematic. Consequently, consideration of a single MSA for EO was discarded in mid 2008 and this Orme Review recommendation was closed at the Jul 08 DEOC meeting.¹⁷⁰

3.67 As noted in paragraph 2.22 in Chapter 2, the *2008 Audit of the Defence Budget* identified the lack of clear and accurate explosive ordnance holding targets and future consumption requirements for both operational and Raise, Train, Sustain activities within Defence, and recommended that:

...clear requirement thresholds for explosive ordnance are set by capability managers; demand requirements are more accurately forecast, communicated and harmonised between operational and 'raise train sustain' activities; and customers provide the clear performance characteristics required, but do not engage in direct product specification. Informed by these requirements, the DMO should further develop the skills necessary to minimise the impact of movements in the spot price of munitions and manage inventory more closely to demand.¹⁷¹

3.68 The audit also found that Defence was carrying a net overstock¹⁷² of explosive ordnance munitions estimated to be worth between \$219 million and \$247 million.

3.69 The report of the *2008 Audit of the Defence Budget* recommended that Defence, after implementing the recommendation identified in paragraph 3.67, conduct a review of munitions explosive ordnance stock to identify excess stock, cease ordering against those items until the excess is used and dispose of any remaining excess stock. The report stated that the total estimated savings from the audit's proposed explosive ordnance munitions inventory reforms are

¹⁷⁰ Department of Defence, Request for Information, 2 November 2009, p. 2.

¹⁷¹ Department of Defence, *2008 Audit of the Defence Budget*, April 2009, p. 138.

¹⁷² Comprised of \$378 million to \$393 million in overstocks and \$146 million to \$159 million in understocks.

an ongoing cash saving of \$13 million to \$32 million, plus a one-off net cash saving of \$218 million to \$398 million.

3.70 Defence and the DMO informed the ANAO in November 2009 that:

The report of the 2008 audit does not contain either a detailed explanation or background data that would allow the DMO to understand the precise rationale or method of calculation for these numbers.¹⁷³

3.71 The Logistics Companion Review to the *Defence White Paper 2009* also recommended that Defence and the DMO optimise 'inventory based on preparedness and operational requirements, and criticality and security of supply'.¹⁷⁴ To facilitate the implementation of these recommendations of both the *2008 Audit of the Defence Budget* and the Logistics Companion Review, it is important that Defence undertake further work to refine the requirements determination process for explosive ordnance, particularly in regard to obtaining senior level sign-off by each of the stakeholders to the requirements forecasts and the consolidation of these to be provided to the DMO to inform procurement planning.

Recommendation No.1

3.72 The ANAO recommends that Defence and the DMO develop processes for consolidating explosive ordnance inventory requirements of all stakeholders, at an appropriate level, to facilitate efforts to optimise explosive ordnance inventory holdings from both a capability and value for money perspective.

Defence and DMO response: *Agreed.*

Inventory management tools used by the DMO

3.73 The Defence Instruction (General) LOG 4-1-013 Defence Policy for the Management of Explosive Ordnance¹⁷⁵ states the following in relation to inventory management of explosive ordnance in Defence:

¹⁷³ Defence and DMO, 'Consolidated Proposed Amendments and Comments', 6 November 2009, p. 21.

¹⁷⁴ Department of Defence, explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, para. 28, pp. 5.

¹⁷⁵ The Defence Instruction (General) LOG 4-1-013 Defence Policy for the Management of Explosive Ordnance was endorsed by the Defence Explosive Ordnance Committee in May 2009.

CEO DMO is accountable for inventory management and is responsible to ensure that Item Management Plans are prepared for each nature of EO. The EO inventory is to be managed so that the requirements of CJOPS [Chief of Joint Operations] and the Capability Managers are satisfied effectively and efficiently. This will require proactive management of inventory stock levels, obsolescence and serviceability.¹⁷⁶

3.74 As discussed in Chapter 1 (paragraph 1.32), the focus of the audit was on Army as the largest user of explosive ordnance and the procurement of non-guided munitions as the primary type of explosive ordnance used by Army. Accordingly, ANAO's primary focus in the DMO was on Munitions Branch in Explosive Ordnance Division.¹⁷⁷

3.75 The day-to-day inventory management of explosive ordnance in Munitions Branch is largely the responsibility of the item managers. In the Munitions SPO in Munitions Branch, item managers are split into two groups:

- Land, dealing with Army-related explosive ordnance; and
- Air and Sea, dealing with Navy and Air Force explosive ordnance.

3.76 In terms of the Land section of Munitions SPO, the item managers are broken up into four groups dealing with various types of non-guided munitions: Medium Calibre, Small Arms, Demolition Stores and Grenades and Pyrotechnics.

3.77 In late 2008, Item Management Plans (IMPs) were introduced as the key inventory management tool for explosive ordnance in Munitions Branch. IMPs are defined as the 'master, through-life planning document for a munitions Training Stock Number¹⁷⁸ (TSN)'.¹⁷⁹ The IMPs are a spreadsheet-based computer application.

3.78 Similar to the MSA, the IMP covers the current 'in-year' and nine 'out-years', and defines the following information for explosive ordnance items:

¹⁷⁶ DI(G) LOG 4-1-013, 'Defence Policy for the Management of Explosive Ordnance', para. 28.

¹⁷⁷ Guided Weapons Branch in Explosive Ordnance Division is responsible for procurement and inventory management of guided weapons including artillery Precision Guided Munitions.

¹⁷⁸ The Training Stock Number (TSN) is used as a reference for munitions item that satisfy the same physical and functional specification. Accordingly, items with different National (or NATO) Item Identification Numbers (NIINs) can comprise a single TSN.

¹⁷⁹ Defence Materiel Organisation, 'Munitions Acquisition and Sustainment System (Functional) Design Document', Version 0.61, November 2008, para. 7.2.1-7.2.3, p. 16.

- the minimum quantity requirement which is defined by the CDF Preparedness Directive and/or the Capability Manager;
- the actual (in-year) and projected ready-for-issue (serviceable) stock level;
- the actual (in-year) and projected other-than-serviceable stock level;
- the actual (in-year) and projected consumption;
- the activities required to sustain the item (procurement, disposal, surveillance, test, configuration change); and
- the funds required to undertake the defined activities (commitment and expenditure).

3.79 The IMPs draw this data directly from the DMO's COMSARM inventory management system. As indicated in Figure 3.2, information from the IMPs is used to inform the procurement plan that is provided to the Commercial Directorate in Munitions Branch for the actual procurement of the explosive ordnance.

3.80 The aim of IMPs is to 'facilitate the achievement of the quantity, reliability, performance and cost outcomes specified in the respective MSA schedules'.¹⁸⁰

3.81 The ANAO assessed five IMPs for the following items:

- **Cartridge 40 mm Practice DM118** – a practice cartridge used for training.
- **Cartridge 81 mm Mortar fused Point Detonating** – a high explosive mortar ammunition for the 81mm mortar system.
- **Cartridge 5.56 mm Ball F1 (Ops Pack)** – rifle ammunition for the F88 Steyr.
- **Cartridge 5.56 mm Blank link** – ammunition for the F88 Steyr used for training.
- **Primer 38 gram Tetral Replacement 1 (TR1)** – used as an intermediate explosive in demolition activities.

¹⁸⁰ *ibid.*, para. 8.4.4, p. 28.

3.82 The ANAO's analysis indicated that the newly introduced IMPs offer some improvements in the management of explosive ordnance in Munitions Branch compared to the previously utilised Requirements Determination (RD) sheets. This is because the IMPs provide both a graphical and tabulated view of the inventory profile for each TSN, including the implications of expected consumption and procurement on the particular inventory profile. There are, however some limitations in the IMPs, as outlined in the paragraphs below:

- **The IMPs do not draw the correct data from COMSARM.** In drawing the relevant data on stock codes for each TSN from COMSARM, only stock identified as serviceable is drawn into the IMP. Stock identified as 'serviceable contingent'¹⁸¹ is not drawn into the IMPs. While this stock is generally available for training and operational requirements, in the current IMPs it is listed as either 'pending' or 'unserviceable', rather than available. As a result the 'serviceable contingent' stock, of which a high percentage will be identified as serviceable at some stage, is not taken into account in the procurement calculations and this is likely to result in an incorrect procurement quantity being recommended for purchase.
- **IMPs require significant manual intervention to generate and so there is increased risk of human error.** The IMPs are labour and time intensive for staff and involve a great deal of data entry. Also, data from the individual IMPs do not 'roll-up' to provide a complete snapshot of the explosive ordnance inventory. The process of consolidating the information from the IMPs into a procurement plan to provide to the Commercial Directorate is a manual and time-intensive task.

3.83 The ANAO also identified that, to date, item managers have not received training in the use of the IMPs. During fieldwork, the DMO informed the ANAO that the IMPs will undergo additional iterations to address some of the above issues. In July 2009, the DMO informed the ANAO that it is developing a statement of work and seeking a quotation to enhance the IMPs that draw this data directly from COMSARM. In the meantime, item managers will continue to use the current version of the IMP.

¹⁸¹ 'Serviceable contingent' stock include items that have a contingency certification and can be used in a limited fashion only.

4. Sustainment of Explosive Ordnance

This chapter discusses aspects of sustainment of explosive ordnance including the serviceability of explosive ordnance both in the context of the extent to which Defence and the DMO have implemented recommendations 4, 5 and 11 from the 2005–06 ANAO audit report and in terms of other developments following the audit.

Introduction

4.1 The responsibility for sustainment of explosive ordnance in Defence is shared across the DMO and JLC. JLC is responsible for warehousing, stock maintenance, national logistics and in-theatre support of explosive ordnance inventory. Munitions Branch in the Explosive Ordnance Division of the DMO is responsible for the management of inventory through the Item Management Plans (IMPs), serviceability issues including upgrades, sentencing¹⁸², 'lifing' policy¹⁸³ and legacy certification¹⁸⁴, and disposal of stock.¹⁸⁵

4.2 This chapter discusses aspects of sustainment of explosive ordnance including the serviceability of explosive ordnance. The extent to which Defence and the DMO have implemented Recommendation Numbers 4, 5 and 11 from the 2005–06 ANAO audit report is examined first. Subsequent developments following the audit, particularly in the area of serviceability of explosive ordnance, are then discussed.

¹⁸² Sentencing is a written decision as to the condition of explosive ordnance and/or non-explosive dangerous goods (NEDG) as a result of inspection. After inspection, all NEDG, guided and non-guided explosive ordnance is to be sentenced to reflect its current condition status.

¹⁸³ Explosive ordnance life is made up of 'Storage Life' and 'Operational Life' phases, which in total comprise its 'Service Life'. They are defined as follows:

- Service Life – the time for explosive ordnance, in specified storage conditions and when subsequently used in its operations or training role, may be expected to remain safe and suitable for service.
- Storage Life – the time for which explosive ordnance, in specified storage conditions, may be expected to remain safe and suitable for service.
- Operational Life - the time for which explosive ordnance, when used is its specified operational or training role, may be expected to remain safe and suitable for service.

¹⁸⁴ Legacy certification involves the retrospective certification of legacy explosive ordnance. Legacy explosive ordnance is that for which there is not a clearly identifiable audit trail to show due rigour in its safety and suitability for service assessment.

¹⁸⁵ Munitions Branch perform these responsibilities for non-guided explosive ordnance. Guided Weapons Branch performs these responsibilities for guided weapons, including Artillery Precision Guided Munitions (APGMs).

Follow-up on the previous recommendations and findings

4.3 Recommendation Numbers 4, 5 and 11 from the 2005–06 ANAO audit report relate to the sustainment and operational availability of explosive ordnance. The relevant findings and recommendations of this report, and the subsequent work by the DMO and Defence to address these findings and implement the recommendations, are covered in this section.

Serviceability of explosive ordnance

Findings from the previous ANAO audit report

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' was 55 per cent of the stock holdings, worth \$928 million. This figure increased to \$1.04 billion in October 2005.

The DMO identified that explosive ordnance inventory held against the condition codes in COMSARM in the other than 'serviceable' category could be further broken down in three broad categories:

- 'repairable' (41 per cent) requiring some form of inspection and/or a routine testing or servicing process to be conducted to confirm ongoing serviceability;
- 'pending' (25 per cent) comprising mostly new inventory waiting inspection before being confirmed as 'serviceable'; and
- 'non-repairable' (34 per cent) comprising items that have reached the end of their useable life, have become obsolete, or are beyond economical repair.

In early 2005, the GWEO Branch¹⁸⁶ established a project to review the level of other than 'serviceable' explosive ordnance. The objective of the project was 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 ANAO made the following recommendation:

Recommendation No.4

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.

¹⁸⁶ This branch is now called the Munitions Branch.

4.4 In May 2009, the DMO informed the ANAO in relation to this recommendation that:

Procedures for the periodic review of stock condition were developed and documented in GWEO Logistics Procedures Part 2 Section 3 (Manage Configuration Items) Chapter 1 (EO Available and Sustainable) and Chapter 2 (Ensure Serviceability).¹⁸⁷

4.5 Recommendation No.4 from the previous ANAO audit report was signed off in the ARMS database on 29 May 2007. The comments against this recommendation in the ARMS database are included in Table 4.1.

Table 4.1

Status of Recommendation No.4 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	29 May 2007	A closure pack was provided to MAB in April 2007. The closure pack identifies procedures for the reporting, monthly, of stock serviceability ratios and the subjecting, via formal monthly performance review, of these figures to higher-level scrutiny. Performance indicators for both Guided and Non-Guided stocks have been developed to enable reporting. ¹⁸⁸

4.6 The ANAO has assessed this recommendation as **overtaken by events**.

4.7 The DMO informed the ANAO that the current procedure for other than 'serviceable' stock in Munitions Branch is as follows:

1. The Australian Defence Force Logistics Manager (ADFLM)¹⁸⁹ identifies stock that is surplus or unserviceable, and is either not able to made

¹⁸⁷ Defence Materiel Organisation, 'ANAO Performance Audit of Explosive Ordnance Procurement: Status of the Implementation of the Recommendations Arising from the 2005–06 Audit', 22 May 2009, Enclosure 1.

¹⁸⁸ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 4, 29 May 2007.

¹⁸⁹ The Australian Defence Force Logistics Manager is also known as the Item Manager who are responsible for the day-to-day inventory management of explosive ordnance in Munitions Branch.

serviceable or is uneconomic to be made serviceable.¹⁹⁰ This stock is normally recorded in COMSARM as non repairable.

2. The ADFLM moves the stock to the 'disposal account' on COMSARM so disposal planning can commence.
3. Disposal planning can include physical disposal, or other actions as appropriate (for example the sale of ammunition being withdrawn from service).

4.8 The DMO's advice that it had implemented the recommendation relied on the fact that procedures for the periodic review of stock condition are documented in the GWEO Logistics Procedure Manual. However, the original ANAO recommendation asked that the DMO develop procedures to monitor the effectiveness of processes to improve the serviceability of all explosive ordnance.

4.9 As noted in the 2005–06 ANAO audit report, in early 2005 the GWEO Branch established a project to review the level of other than 'serviceable' explosive ordnance. The DMO informed the ANAO in August 2009 that the project 'stalled' and did not achieve its aims.

4.10 The recommendation from the last audit was framed around processes that the DMO had in place to address serviceability issues at the end of the last audit. These processes are no longer ongoing so the recommendation can be regarded as having been overtaken by events.

4.11 However, the recommendation was focused on reducing the proportion of explosive ordnance categorised as other than 'serviceable'. There is a requirement for continued focus by the DMO on this issue (see paragraphs 4.25 to 4.29). The DMO has recognised this and the Munitions Branch Business Plan for 2009–10 indicated that Munitions Branch would develop, by 30 September 2009, a 'formal plan to reduce the level of other than serviceable (OTS) inventory'.¹⁹¹ This plan was completed in October 2009 (see paragraphs 4.29 to 4.31).

¹⁹⁰ Stock may not be able to be made serviceable or is uneconomic to be made serviceable because it has been returned from a user in an unserviceable condition, for example damaged or corroded, has 'life expired', or in-service testing indicates it no longer performs adequately.

¹⁹¹ Munitions Branch Business Plan 2009–10, Annex C, C-4. 3 August 2009.

Workforce Renewal Strategy

Findings from the previous ANAO audit report

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.

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 informed 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.

In October 2005, a GWEO Branch Renewal Strategy was developed in acknowledgement of the ageing workforce issues.

The ANAO made the following recommendation:

Recommendation No.5

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.

4.12 Recommendation No.5 from the 2005–06 ANAO audit report was signed off in the ARMS database on 26 March 2007. The comments against this recommendation in the ARMS database are included in Table 4.2.

Table 4.2

Status of Recommendation No.5 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	26 March 2007	The ANAO recommendation was to establish targets and implement processes to monitor progress. Both of these actions have been completed - targets have been established and a review process has been implemented. ¹⁹²

¹⁹² Department of Defence, Management Audit Branch, ARMS Database, Recommendation 5, 26 March 2007.

4.13 In May 2009, the DMO provided the following statement in relation to this recommendation:

The Pegasus program¹⁹³ that was implemented in October 2006 was the cultural change vehicle for GWEO workforce renewal. It established targets for the workforce renewal strategy. Since the formation of EO Division this action has been subsumed into the scope of the Professionalisation Project.¹⁹⁴

4.14 As noted in the 2005–06 ANAO audit report, the GWEO Branch Renewal Strategy, or ‘Project Pegasus’ was established in October 2005. Project Pegasus aimed to achieve the following objectives:

- Repositioning and improving business functions and staff to meet customer expectations.
- Productivity improvement projects.
- Increasing staff numbers and capability/skills sets to meet existing and projected requirements.
- Improving integrated support systems and work processes.¹⁹⁵

4.15 An internal presentation by the Project Pegasus team in November 2006 noted that Project Pegasus was set up to create a sustainable and effective workforce, however after nine months into the program and three Directors managing the program, Pegasus still had yet to deliver significant improvements.

4.16 A report by external consultants in 2007 noted the potential impacts of Project Phoenix¹⁹⁶ on attempts to address skills shortages through Project Pegasus:

While the existence of Project Phoenix may indicate a weakness in historic processes, the most significant issue is the impact that the recovery process is having/will have on the appropriately qualified staff. All of the work to recover the technical integrity of ADF EO is being performed by contractors

¹⁹³ The GWEO workforce renewal strategy was also known as ‘Project Pegasus’.

¹⁹⁴ Defence Materiel Organisation, ‘ANAO Performance Audit of Explosive Ordnance Procurement: Status of the Implementation of the Recommendations Arising from the 2005–06 Audit’, 22 May 2009, Enclosure 1.

¹⁹⁵ Defence Materiel Organisation, ‘GWEO Cultural Change Programme: The Way Forward – “One Team – Customer Service”, Interim Report to HEWS’, Version 1a, 27 November 2006.

¹⁹⁶ As noted in the previous ANAO audit report, Project Phoenix was a medium term initiative to re-establish and maintain full technical integrity in the management and use of the ADF’s explosive ordnance. Project Phoenix is discussed in more detail later in this chapter.

due to the lack of capacity within GWEO. This situation has the potential for a further reduction in GWEO/GWA technical staff as contractors target staff with aggressive recruitment practices.¹⁹⁷

There exists a skills shortage within GWEO, for both qualified personnel and, where qualified, adequately experienced. A number of strategies are in place, though each will take some years to show significant results. A significant factor is the lack of uniformed and ex-uniformed personnel which has the effect of there being, in some cases, a limited understanding within the in-Service management organisation of operational issues.¹⁹⁸

4.17 The ANAO assessed the DMO and Defence's implementation of Recommendation No.5 as **implemented** to the extent that it related to the October 2005 GWEO Branch Renewal Strategy (Project Pegasus). Targets were established in Project Pegasus, and there was monitoring against these targets for the duration of the program in the form of 'traffic-light' reports.

4.18 The recommendation from the last audit was framed around reporting arrangements for processes that the DMO had in place at the end of that audit to address the ongoing availability of personnel with appropriate technical skills. The intent in including this recommendation in the audit report was to recognise that improving availability of personnel with these skills was essential to the operation of this area of the DMO and resolution of issues surrounding the management of explosive ordnance inventory. There are ongoing issues surrounding the availability of personnel with the requisite skills (see paragraph 4.39). As set out in paragraph 4.13, Project Pegasus has since been subsumed into the Professionalisation Project and this project is discussed further at paragraphs 4.40 to 4.42.

¹⁹⁷ Department of Defence, 'Report for Capability Development Group: An Overview of the Provision of the Explosive Ordnance Capability to the ADF', Report No. NPS/2160, Revision 1.1, 2007, pp. 24-25.

¹⁹⁸ *ibid.*, p. 41.

Acceptance of explosive ordnance into service

Findings from the previous ANAO audit report

The ANAO presented a case study in the previous audit report on a Foreign Military Sale (FMS) through the US Government. The FMS case study involved the acquisition of 155 mm artillery ammunition and associated charge bags.¹⁹⁹ The issues associated with this procurement are outlined below.

- 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'.
- In 2004, an Army unit reported that 25 bags, out of the 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.
- 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.

The ANAO made the following recommendation:

Recommendation No.11

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.

4.19 In May 2009, the DMO informed the ANAO of the following in respect of this recommendation:

The GWEO Logistics Procedures Manual was amended (Part 2 Section 1 Procedure 1.2.3) to incorporate a description of how to conduct a risk assessment on a Configuration Item during an EO tendering process.²⁰⁰

4.20 Recommendation No.11 from the previous ANAO audit report was signed off in the ARMS database on 26 March 2007. The comments against this recommendation in the ARMS database are included in Table 4.3.

¹⁹⁹ 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.

²⁰⁰ Defence Materiel Organisation, 'ANAO Performance Audit of Explosive Ordnance Procurement: Status of the Implementation of the Recommendations Arising from the 2005–06 Audit', 22 May 2009, Enclosure 1.

Table 4.3

Status of Recommendation No.11 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	26 March 2007	<p>Based on the review of Part 2, Section 1, Chapter 2, Procedure 1.2.3 of the GWEO Logistic Procedures Manual, MAB agrees with GWEO that the recommendation should be closed upon the release of the Logistics Procedural Manual at its next re-issue during 2007.</p> <p>However, as indicated by GWEO, ongoing review work will be required to ensure that the contents of the Logistics Procedure Manual are routinely applied.</p> <p>MAB is of the view that compliance with the Manual is an important factor in improving processes.</p> <p>In conclusion, MAB agrees that the ANAO recommendation has been complied with and endorses the closure of the recommendation.²⁰¹</p>

4.21 The ANAO has assessed this recommendation as having had **limited progress**. Following the tabling of the previous audit report, the DMO informed the ANAO that it would update its procedures. A closure pack on the recommendation was sent to Management Audit Branch (MAB) in Defence with the updated section on the Logistics Procedure Manual in early 2007.

4.22 GWEO advised MAB that the Logistics Procedures Manual had been amended to incorporate a description of how to conduct a risk assessment on the configuration items identified during an explosive ordnance tendering process and that these procedures would ensure that the receipt inspection is consistent with the risks associated with the procurement.

4.23 These amendments were approved and were to be formally incorporated at the next re-issue of the manual during 2007. However, during fieldwork for this audit the ANAO found that the Logistics Procedure Manual available on the Defence Restricted Network (DRN) has not been updated

²⁰¹ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 11, 26 March 2007.

since 2006. In addition, staff in the Munitions Branch informed the audit team that the Logistics Procedure Manual was out of date and not used by staff.

Subsequent developments in the sustainment of explosive ordnance

4.24 As noted above, many of the issues in this area were known at the time of the last audit. At that time, there were strategies in place but these strategies have largely been subsumed into different approaches adopted subsequent to the establishment of the Explosive Ordnance Division. The current approaches are outlined in the following sections.

Inventory categorised as other than ‘serviceable’

4.25 At 30 June 2009, Defence’s total stock holdings of explosive ordnance inventory were valued at \$2.9 billion with some 46 per cent of the value of the explosive ordnance inventory categorised as other than ‘serviceable’ by the DMO.²⁰² While not directly comparable with the figures contained in the 2005–06 audit report, due to differences in methodology, they do indicate that this is a significant ongoing issue requiring resolution. Table 4.4 shows the composition of the explosive ordnance inventory as at 30 June 2009.

²⁰² According to the DMO, explosive stock encompasses items which are in Hazard Classification 1, that is, are explosive in nature.

Table 4.4

Explosive ordnance stock availability at 30 June 2009

DMO serviceability category	Value at 30 June 2009 (\$ million)	Proportion of total explosive ordnance inventory holdings at 30 June 2009
Beyond repair	124.2	4%
Potentially serviceable ^A	1 204.0	42%
Sub total – other than ‘serviceable’	1 328.2	46%
Serviceable	1 572.8	54%
Total Explosive Ordnance inventory	2 901.0	100%

Note:

^A Potentially serviceable includes items identified by the DMO as:

- ‘Repairable’ – item is identified as repairable.
- ‘Serviceable contingent’ – items that have a contingency certification and can be used in a limited fashion only.
- ‘Life expired’ – item is life expired at the time the report is run.
- ‘Pending action’ – item falls into one of two categories: ‘pending contractor action’ where item is pending inspection or ‘pending Explosive Ordnance Division action’ where Explosive Ordnance Division is to approve sentence or provide technical data on the item.
- ‘Other’ – includes items which do not fall into any of the above categories.

Source: The DMO

4.26 The above figures do not include inventory items managed by Explosive Ordnance Division that the DMO classifies as ‘non-explosive’ stock.²⁰³ That is, items of inventory which are not explosive in nature including items such as test equipment, spares, consumables and packaging. At 30 June 2009 these items were valued at \$712.1 million, \$11.4 million of which were classified by the DMO as other than ‘serviceable’.

4.27 At 30 June 2009, the value of Army explosive ordnance inventory categorised as other than ‘serviceable’ was 57 per cent of the Army explosive ordnance inventory stock holdings valued at \$437.7 million. Table 4.5 shows the composition of the Army explosive ordnance inventory as at 30 June 2009.

²⁰³ ‘Non-explosive’ stock encompasses general stores and all items in any Hazard Classification other than Hazard Classification 1 which are managed in COMSARM.

Table 4.5

Army explosive ordnance stock availability at 30 June 2009

DMO serviceability category	Value at 30 June 2009 (\$ million)	Proportion of total explosive ordnance inventory holdings at 30 June 2009
Beyond repair	44.3	6%
Potentially serviceable ^A	393.4	51%
Sub total – other than ‘serviceable’	437.7	57%
Serviceable	334.5	43%
Total Army explosive ordnance inventory	772.2	100%

Note:

^A Potentially serviceable includes items identified by the DMO as:

- ‘Repairable’ – item is identified as repairable.
- ‘Serviceable contingent’ – items that have a contingency certification and can be used in a limited fashion only.
- ‘Life expired’ – item is life expired at the time the report is run.
- ‘Pending action’ – item falls into one of two categories: ‘pending contractor action’ where item is pending inspection or ‘pending Explosive Ordnance Division action’ where Explosive Ordnance Division is to approve sentence or provide technical data on the item.
- ‘Other’ – includes items which do not fall into any of the above categories.

Source: The DMO

4.28 In August 2009 the DMO informed the ANAO as follows:

An Other Than Serviceable project was established within the then Guided Weapons and Explosive Ordnance Branch, Engineering Management function. The project was to engage contractor support to review the Explosive Ordnance held in Other Than Serviceable categories and determine which could be returned to a serviceable status and to proactively manage the process of doing so.

....the contracting strategy and Statement of Work were all but finalised when the Systems Program Office mainly affected by the project raised some issues regarding contractor engagement and integration into the engineering and inventory management functions. While these issues were in work, EO Div [Explosive Ordnance Division] was formed and the intention to engage an Explosive Ordnance Capability Partner to support the Division across a range of engineering and logistics functions was announced. Hence the project did not get to contract award. The Capability Partner concept is still progressing.²⁰⁴

²⁰⁴ Director Materiel Logistics, Director Reform, Explosive Ordnance Division, 27 August 2009.

4.29 As noted in paragraph 4.11, the Munitions Branch Business Plan for 2009–10 indicated that Munitions Branch would develop, by 30 September 2009, a ‘formal plan to reduce the level of other than serviceable (OTS) inventory’.²⁰⁵ A framework for the Munitions Branch OTS Management Plan was finalised in late October 2009. The Munitions Branch OTS Management Plan aims to:

- a. confirm (or otherwise) the legitimacy of the GWEO Dec 06 target for OTS stock to be maintained at levels less than 25% of the value of the whole EO inventory;
- b. (if required) set a revised Munitions Branch OTS stock value target;
- c. initiate the review and remediation of OTS inventory levels with a view to achieving the desired target;
- d. establish a mechanism for regular OTS review and management at Munitions Branch Item Manager level; and
- e. establish a mechanism for regular review of OTS management by the Munitions Branch Executive Leadership Team (ELT).²⁰⁶

4.30 The plan is expected to be delivered by Munitions Branch in three phases as outlined below:

- Phase 1 is a scoping and planning phase that involves developing a detailed understanding and baseline report of the current other than serviceable stock, developing targets for other than serviceable stock, developing a standard form of reporting against the baseline of other than serviceable stock and developing an action plan around resourcing, scheduling and reporting.
- Phase 2 of the plan would involve executing the action plan developed under Phase 1.
- Phase 3 would aim to embed the management of other than ‘serviceable’ stock into the routine business of Munitions Branch.

4.31 Phase 1 of the plan was to be concluded by 11 December 2009 when a formal report was expected to be submitted to the Munitions Branch Executive Leadership Team, with Phase 2 and 3 is to commence after the Munitions

²⁰⁵ Munitions Branch Business Plan 2009-10, Annex C, C-4. 3 August 2009.

²⁰⁶ Defence Materiel Organisation, Munitions Branch ‘Other Than Serviceable’ Inventory Management Plan, 26 October 2009, pp. 1-2.

Branch Executive Leadership Team consider the Phase 1 report. The DMO informed the ANAO in January 2010 that the formal Phase 1 report was yet to be considered by the Munitions Branch Executive Leadership Team.

Reducing the disposals backlog

4.32 The DMO informed the ANAO that the Logistics Directorate in Explosive Ordnance Division is running, with the assistance of a contractor, a disposals backlog project to address issues around the disposal of other than 'serviceable' explosive ordnance. The Disposals Backlog Project is being conducted as part of the Explosive Ordnance Transformation Program and an overview of the project including its current status is included in Table 2.4 in Chapter 2 of this report.

4.33 The DMO informed the ANAO in November 2009 that the Disposals Backlog Project was developed in response to the following issues:

- a. The Defence requirement to resolve inventory accounts through the accelerated disposals program for all items categorised as either a Disposal Candidate or as having a Disposal Directive within SDSS²⁰⁷;
- b. Informal advice from Director General Defence Asset and Inventory Management (DGDAIM), Defence Materiel Organisation, that EO Div was likely to receive separate direction with respect to a COMSARM accelerated disposals program; and
- c. The existence of approximately \$82.5m of inventory in a range of COMSARM Disposal accounts, in effect representing a backlog of inventory disposal planning and action that had developed over a number of years and which was assessed, at the time, as beyond the capacity of Guided Weapons Branch and Munitions Branch staffing and structures to remediate, especially given the early status of recruiting to those new organisational structures.²⁰⁸

4.34 The disposals backlog project involved an analysis of the inventory and historical disposal planning processes. This analysis identified the following issues:

- instances where the record and audit trail for items allocated to disposal account codes under COMSARM is incomplete;
- instances where disposal instructions do not exist;

²⁰⁷ The Standard Defence Supply System (SDSS) is the key logistics management system for the ADF.

²⁰⁸ Department of Defence, 'Request for Information', 2 November 2009, p. 4.

- instances where there is a potential to return some items to serviceable inventory;
- a range of items for which disposal planning and execution could be relatively quickly finalised; and
- large quantities of packaging across explosive ordnance storage sites for which business rules for disposal need to be determined and applied.

4.35 Overall, the disposals backlog project aims to address the above issues and also improve the disposal planning and management process, including the way in which industry is involved and contracted. Specifically the project had aimed to achieve one of the following objectives for each of the items under the disposal accounts code in COMSARM, by 1 June 2009:

- a. A recommendation that inventory be returned to serviceable, based on the assessment that it is cost and time effective to do so;
- b. A disposal certificate;
- c. A disposal plan, awaiting Delegate Approval; or
- d. An information pack detailing inventory, action taken, reasons for non-delivery of one of any of the previous outcomes, and the actions necessary to achieve disposals approval and execution.²⁰⁹

4.36 In November 2009, the DMO and Defence provided the ANAO with the following update on the approximately \$87 million worth of stock being considered under the project:

- \$4.8 million worth of stock still requires further action, investigation or is affected by whole of capability disposal decisions.
- \$9.3 million worth of stock has developed or planned Disposal Authorities, has been disposed and requires updating on COMSARM, or has a generic Disposal Directive planned.
- \$72.2 million worth of stock has been returned to service (\$3.9 million), withdrawn from the scope of project (\$0.4 million), has approved Disposal Authority (\$47.7 million), or has disposal completed (\$20.7 million).

²⁰⁹ Jacobs Australia Pty Ltd, 'EO Division Disposals Remediation Project: Phase 3 Report', Version 1.0, 21 May 2009, para. 1.2, p. 1.

4.37 In June 2009, the Logistics Directorate in Explosive Ordnance Division proposed to continue the current project to include wider inventory analysis and disposal action for items that were not within the original project scope, but are either not serviceable, obsolete or otherwise no longer required.

4.38 In November 2009, the DMO informed the ANAO that:

The proposal to continue the current disposals backlog project to include inventory analysis and potential disposal for items that were not within the original project scope, but which are potentially beyond economic repair, has been endorsed by the Director General Guided Weapons Branch and agreed in principle by the Director General Munitions Branch. The Directorate of Logistics, EO Division, is currently working with individual Systems Program Office Directors to confirm the scope of work prior to finalising the Higher Delegate Submissions necessary to engage a contractor to pursue the agreed Statement of Work and project outcomes.²¹⁰

Professionalisation Project

4.39 As discussed in the section commencing at paragraph 4.12, at the time the 2005–06 audit was completed Project Pegasus²¹¹ was the workforce renewal initiative then in train to address the DMO's explosive ordnance personnel issues. Project Pegasus was subsumed into the Professionalisation Project in early 2008. Notwithstanding the DMO's actions to initiate Project Pegasus and then commence the Professionalisation Project, the explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, identified that shortages in explosive ordnance skills within Defence and the DMO remains an issue:

EO skills have declined dramatically over the last decade, with workforce issues managed piecemeal and a lack of discernible career streams and opportunities. Hence, there is an urgent need to develop the EO workforce on a whole-of-Defence basis, to provide the critical mass that enables efficient investment and viable career structures. An opportunity exists to integrate with industry in the areas of workforce development, yielding further efficiency and facilitating staff movement both ways across the

²¹⁰ Department of Defence, 'Request for Information', 2 November 2009, p. 4.

²¹¹ As noted in paragraph 4.14, Project Pegasus aimed to achieve the following objectives:

- Repositioning and improving business functions and staff to meet customer expectations.
- Productivity improvement projects.
- Increasing staff numbers and capability/skills sets to meet existing and projected requirements.
- Improving integrated support systems and work processes.

Defence/industry boundary. The current EO workforce costs approximately \$61m per annum. Investment of approximately \$18m is required for development and implementation of comprehensive EO skilling and career path programs.²¹²

4.40 The Professionalisation Project is being managed by the Human Resources (HR) Directorate in the Explosive Ordnance Division, with input from the Engineering Directorate in the Explosive Ordnance Division. As indicated in Table 2.4 in Chapter 2 of this report, the Professionalisation Project is being undertaken as part of the Explosive Ordnance Division's Explosive Ordnance Transformation Program. The DMO informed the ANAO that the Professionalisation Project had been established in Explosive Ordnance Division as a result of issues highlighted during the divisional restructure in early 2008. These matters included a lack of corporate governance, skill shortages, and difficulties with attraction and retention of staff, particularly in the engineering and technical domains. A number of elements of the Professionalisation Project (that were previously being addressed under Project Pegasus) have since been transferred to specific areas of the new Explosive Ordnance Division where they are being addressed as part of normal business. Examples include workforce attraction and retention, recruitment, accommodation, and processes and procedures. The specific question of training frameworks is being carried forward under a discrete Professionalisation Project.

4.41 The expected outcomes from implementation of this project include:

- improved attraction, retention and employee engagement;
- increased organisational capability;
- improved adherence to corporate governance requirements;
- reduced life cycle costs through streamlining training activities, prioritising needs and ensuring best value for money options are utilised; and
- cultural change and improved customer/supplier relationships.

²¹² Department of Defence, Joint Logistics Command, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, para. 26.

4.42 The DMO informed the ANAO that, as part of the Professionalisation Project, baseline training will be delivered to all personnel in the Commercial and Logistics Job Families to ensure they are supported in developing the basic competencies required to perform their duties. By September 2009, the DMO intended to conduct a workforce competency assessment for all Explosive Ordnance Division employees against new job role profiles to ascertain the competency gaps and required training, and develop training plans to ensure all required training identified in the workforce competency assessment is undertaken by March 2010. The DMO informed the ANAO in November 2009 that:

The Professionalisation Project is focussed on the development of a competency based framework for EO Div [Explosive Ordnance Division] employees, and on the management of associated training. The initial completion date has been revised due to its complexity of defining competency profiles across 560 positions at multiple APS classifications and ADF ranks. It is currently anticipated that the required generic 108 Job Role Profiles will be received by DMO from an external provider in March 2010, with the subsequent implementation of the competency based framework to commence from that time and be completed by 30 June 2011.²¹³

4.43 As indicated in Table 2.4 in Chapter 2 of this report, the DMO informed the ANAO in November 2009 that the Professionalisation Project has experienced scope growth, and its expected completion date has moved forward from May 2010 to June 2011.

Project Phoenix

4.44 As mentioned in Chapter 2 (paragraph 2.36), GWEO initiated Project Phoenix in June 2005 to 're-establish and maintain full technical integrity in the management and use' of the ADF explosive ordnance inventory.²¹⁴ Project Phoenix was closed by the DMO in December 2008. The Review and Closure

²¹³ Department of Defence, Request for Information, 2 November 2009, p. 6.

²¹⁴ Three Defence reports between late 1999 and mid 2000 'highlighted a significant number of Configuration Items (CIs) [see footnote 114 for an explanation of this term] that fail to comply with the Australian Defence Force's (ADF) requirements for Introduction Into Service (IIS) of Explosive Ordnance (EO). Defence had historically accepted 'the properties and safety of an EO item because of a lack of known faults or technical issues during its service life. However, the Defence Legal Office and the Australian Government Solicitor deemed this customary practice 'legally untenable' and 'does not provide an adequate basis for establishing the technical integrity of EO'. Source: Department of Defence, 'Project Phoenix Scoping Study', October 2005, p. 4.

report for the project made the following assessment on the outcomes of the project:

The project successfully achieved its primary objectives to baseline the supporting data of ADF Explosive Ordnance (EO) configuration items (CIs). The CI data recovered by contractors has been loaded into the Nexus Product Lifecycle Management system²¹⁵ and is accessible to users. However the overall outcome of this project would have been more successful if the project was able to secure sufficient Engineering resources to approve and accept the CIs loaded into Nexus.²¹⁶

4.45 In August 2009, the DMO informed the ANAO that although the draft packages are loaded onto the Nexus system, in many cases the technical approval process is yet to occur, and that:

Where this is the case, there is no consequence [of having configuration items loaded onto the Nexus that have not been approved or accepted by Engineering] because the unapproved information is not available to users. When the information has been formally approved and once resources are committed, then information is formally published/promulgated/released as necessary.

4.46 Munitions Branch provided the following reason for the closure of the project:

There are no further requirements to recover EO legacy items under project Phoenix. CENGR [Chief Engineer] Munitions Branch decided that it would not be cost effective to proceed with the technical integrity recovery of approximately 850 EO Items categorised as obsolete, obsolescent and excluded by Munitions Engineering Group.²¹⁷

4.47 The DMO informed the ANAO that it is likely that the 850 explosive ordnance items categorised as obsolete, obsolescent and excluded by Munitions Engineering Group would be either used or disposed of through an approved disposal activity. The period of time over which this occurs will vary for each item due to the differing reasons that the items were determined to be obsolete, obsolescent or excluded from the project. As a result, some of the

²¹⁵ Nexus Product Lifecycle Management system is a configuration management information system.

²¹⁶ Defence Materiel Organisation, 'Phoenix Project Review and Closure Report V2', 26 November 2008, p. 5.

²¹⁷ *ibid.*, para. 2.4.2, p. 5.

natures may already have been disposed of, whereas others may still be in service for limited durations.

4.48 Defence informed the ANAO in November 2009 that the following risk management measures are in place to ensure that risks associated with the use, transport, storage and disposal of legacy explosive ordnance are understood and appropriately mitigated from an Occupational Health and Safety Perspective:

The Risk Management measures in place with respect to the use, storage, transport and disposal of legacy EO [explosive ordnance] are identical to those for non-legacy EO. There is no differentiation from a Technical Integrity perspective (the Technical Integrity of an item of ADF Materiel is its fitness for service, safety and environmental compliance, as defined in DI(G)LOG 08-15 Regulation of Technical Integrity of ADF Materiel). Legacy EO Items cannot be issued, transported or used unless they are in life, and cannot be stored or transported unless they are listed in the Defence Explosive Ordnance Classification Listing (DEOCL). If they are life expired or not in the DEOCL, then it is the responsibility of the using/storing/transporting agency to request a technical assessment by EO Div [Explosive Ordnance Division] Engineering Staff prior to the conduct of the desired activity.

Even though legacy EO items have not undergone a formal certification process as part of their Introduction Into Service ... EO Div [Explosive Ordnance Division] will still hold significant amounts of technical information for each item (i.e. the fact that something is classified as legacy EO does not imply that technical information is unavailable). A technical assessment conducted by EO Div Engineering Staff in response to a request from an agency using/storing/transporting an item of legacy EO will - in the first instance - assess the available technical information and the item's demonstrated service performance history. All such assessments are risk based to some degree, but this is mitigated to the maximum possible extent by the use of all available technical and performance information.²¹⁸

²¹⁸ Department of Defence, 'Request for Information', 2 November 2009, pp. 6-7.

5. Contract Management

This chapter follows up on the implementation of recommendations 6 to 10 from the previous ANAO audit report and provides an overview of the major developments in the contracts for the domestic manufacture of munitions, high explosive and propellant since the 2005–06 ANAO audit. The chapter also provides an overview of the Mulwala Redevelopment project (JP 2086 Ph 1) and developments in Munitions Branch contract management since the 2005–06 audit.

Introduction

5.1 As part of the review process that underpinned the development of the *Defence White Paper 2009*, Defence supported the continuation of a domestic explosive ordnance manufacturing capability, specifically:

To avoid the costs of stockpiling EO [explosive ordnance] inventory and to ensure security of supply of critical EO natures, Australia needs to maintain the capability to produce EO natures which reflect the ADF's strategic needs.²¹⁹

Reliance on overseas sources to meet Australia's EO preparedness requirements involves significant risk, which is mitigated through investment in large stockholdings. Accordingly preparedness requirements may be better achieved by diverting the funds required to maintain large EO holdings into industry production capability.²²⁰

5.2 Defence also noted that: 'an integrated supply chain, including a strategic manufacturing partnership, can smooth demand and reduce the need for high inventory stocks, resulting in greater efficiencies'.²²¹

5.3 The Strategic Agreement for Munitions Supply (SAMS Agreement) and the Mulwala Agreement and are two interrelating contracts that were originally framed to guarantee the future of ADI (now Thales Australia)²²² as

²¹⁹ Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, para. 13, p. 3.

²²⁰ *ibid.*, para. 19, p. 4.

²²¹ *ibid.*, para. 8, p. 2.

²²² At the time of the previous ANAO audit, the SAMS and Mulwala agreements were between the Commonwealth and ADI Limited. At that time, ADI Limited was a joint venture between Transfield Holdings (an Australian company) and Thomson-CSF (a French company, partially owned by the French Government, which was renamed Thales in December 2000). In October 2006, the Australian Foreign Investment Review Board approved Thales' acquisition of the remaining 50 per cent stake in ADI Limited which was subsequently renamed Thales Australia.

the ADF's 'first choice source of a specified range²²³ of explosive ordnance'.²²⁴ The Munitions Branch of the Explosive Ordnance Division within the DMO is responsible for the ongoing management of these contracts.

SAMS Agreement

5.4 The SAMS Agreement requires Thales Australia to maintain a capability to manufacture certain types and quantities of explosive ordnance required by the ADF. This manufacturing capability is located at a munitions manufacturing facility near Benalla in Victoria and is also known as the 'Benalla Facility'. The Commonwealth has the option of purchasing the Benalla Facility at the end of the initial term of the lease (30 June 2015) for one dollar plus an adjustment reflecting the depreciated cost of any investment by ADI/Thales in the facility.²²⁵

5.5 The SAMS Agreement covers the provision of 13 of the approximately 830 explosive ordnance items in Defence's inventory.²²⁶ Defence spends an average of \$30 million on SAMS items each year.²²⁷ In addition to payments for the delivery of specific munitions orders, Defence is required to make a capability payment²²⁸ to Thales Australia each year (indexed annually, with a value in 2008–09 of \$63.2 million) to retain an agreed level of manufacturing capability. The SAMS Agreement requires that an annual Payments Basis Review be conducted to determine the annual capability payment and the unit price of munitions.

²²³ Primarily 5.56 mm, .50 cal, 20 mm and 25 mm ammunition natures, 105 mm artillery ammunition, 5"/54 naval gun ammunitions and Mk 82/Mk 84 bombs and the F1 grenade. Source: Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, p. 3.

²²⁴ Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, para. 13, p. 3.

²²⁵ Clause 65.5 of the Strategic Agreement for Munitions Supply: '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.'

²²⁶ Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the 'Defence White Paper 2009', p. 3.

²²⁷ *ibid.*

²²⁸ 80 per cent of this capability payment is fixed and the remaining 20 per cent is incentive based.

The Mulwala Agreement

5.6 The Mulwala Agreement relates to a Defence owned, Thales Australia operated, propellant and high explosive production facility located at Mulwala in southern New South Wales.²²⁹ The Mulwala Facility's product is supplied to the Benalla Facility for incorporation into ammunition purchased by Defence; supplied to Defence as a finished product; or sold into the commercial propellant and specialty chemicals market.

5.7 The Mulwala Agreement requires the DMO to pay Thales Australia a capability payment each year (indexed annually, with a value in 2008–09 of \$29.7 million)²³⁰; payments for repairs and maintenance associated with the capability being a government owned facility;²³¹ and payments for the delivery of propellant and high explosives.

5.8 Defence has acknowledged that 'both Benalla and Mulwala are under utilised, with capability often based on increasingly irrelevant items, and an inability to meet preparedness requirements'.²³²

Defence and the DMO progress in implementing relevant recommendations and findings of 2005–06 ANAO audit

5.9 Five recommendations from the 2005–06 ANAO audit report related to the operation and management of the SAMS Agreement, Recommendation Numbers 6 to 10. The recommendations, and the subsequent work by the DMO and Defence to implement these recommendations, are covered in the following sections.

²²⁹ Also known as the 'Mulwala Facility'.

²³⁰ The DMO advised the ANAO that capability payments made by the DMO to Thales in respect of the Mulwala Facility totalled \$27.2 million in 2007–08, \$29.7 million in 2008–09 and the estimated commitment for capability payments for 2009–10 is \$34.5 million.

²³¹ The DMO advised the ANAO that repairs, maintenance and capital improvements payments made by the DMO to Thales totalled \$6.5 million in 2007–08 and \$5.9 million in 2008–09. Additionally, the DMO advised that \$4.8 million was paid by the DMO to Thales in 2008–09 for Major Hazards Facility (MHF) 'work required to undertake activities necessary to obtain a MHF operating licence' (The DMO advised that the Mulwala Facility was classified as a Major Hazards Facility by COMCARE in January 2008).

²³² Department of Defence, explosive ordnance component of the 'Logistics Companion Review' to the *Defence White Paper 2009*, para. 16, p. 3.

Remediating the SAMS Agreement

Findings from the previous ANAO audit report

The previous ANAO audit found the DMO had 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 accepted Agreement Change Proposals, the first of which was approved in mid 2000.

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.

In October 2005, the DMO informed the ANAO that a review had commenced into the SAMS Agreement (the SAMS Review) and that the terms of reference for the SAMS Review included establishing a SAMS Agreement Baseline. The Baseline would incorporate all accepted Agreement Change Proposals and other amendments, that had been agreed but not formally processed, into an updated version of the SAMS Agreement. The DMO also informed the ANAO that it had undertaken a detailed examination of the cost model, payment structure and the performance and incentive regime under the Agreement, with a view to identifying specific opportunities to improve productivity and efficiency of munitions supply under the Agreement.

A legal opinion obtained by the DMO in October 2005 advised that, based on the information available, reconstructing the SAMS Agreement 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 informed the ANAO that a 2005 baseline had been prepared by the DMO's legal advisers based on records held by the DMO and ADI. The baseline was being reviewed by the DMO as part of a package of materials which would form the basis for the SAMS Review and renegotiation.

The absence of an up to date contract called into question the basis on which the DMO had been able to effectively administer the contract. The financial and legal risk to Defence and the DMO from the absence of a valid contract for over five years was considerable.

The ANAO made the following recommendation:

Recommendation No.6

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.

5.10 In May 2009, the DMO advised the following in respect of action taken to implement this recommendation:

A GWEO-initiated SAMS Agreement remediation program has delivered an updated baseline for the SAMS Schedule that defines the natures of EO to be manufactured at Benalla. No updated contract has been issued, although both

parties maintain records of the original baseline and all agreed ACPs [Agreement Change Proposals].²³³

5.11 On 23 February 2007, Defence determined that the basis for Recommendation No.6(a) had been ‘overtaken by events’ and was therefore considered by Defence to be ‘complete’.²³⁴ On 24 July 2007, Defence determined that Recommendation No.6(b) was ‘complete’.²³⁵ The reasons supporting Defence’s closure of these recommendations in the ARMS database are provided in Table 5.1.

Table 5.1

Status of Recommendation No.6 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Recommendation 6(a) – Closed	23 February 2007	<p>Since this recommendation was made, a detailed study was undertaken into the operation, and in particular the financial arrangements, of the Strategic Agreement of Munitions Supply (SAMS).</p> <p>This study identified significant deficiencies that could only be satisfactorily rectified through a substantial renegotiation of SAMS.</p> <p>This renegotiation negates the need to rebaseline the agreement.</p> <p>Ministerial approval has since been given to proceed with negotiations with ADI Limited on this basis.</p> <p>Since the basis for the Recommendation 6(a) has now been overtaken by events, it is requested that approval be given to have this recommendation removed from ARMS.²³⁶</p>

²³³ Defence Materiel Organisation, ‘ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit’, Enclosure 1.

²³⁴ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 6a, 23 February 2007.

²³⁵ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 6b, 24 July 2007.

²³⁶ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 6a, 23 February 2007.

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Recommendation 6(b) – Closed	24 July 2007	<p>Version control of the SAMS, which was required by the ANAO Recommendation, has been achieved, and the document has been incorporated into QEMS [Quality and Environmental Management System].²³⁷</p> <p>Version control arrangements for the document are in place. The activity to incorporate the 17 Contract Changes into the baseline proceeds within available resources.</p> <p>Closure minute has been prepared and sent to General Manager Corporate.²³⁸</p>

5.12 The ANAO has assessed both parts of this recommendation as **not implemented**. The SAMS Agreement remediation program, which later became known the SAMS Renegotiation Project²³⁹, did not deliver an updated contract agreed to by both parties as discussed in paragraphs 5.38 to 5.44.

5.13 Both parties continue to operate on the same version of the contract in operation at the time of the previous audit plus the 19 Agreement Change Proposals agreed to since 2000. Additionally in June 2009, the DMO informed the ANAO that while a baseline version of the SAMS Agreement and a version control table was created in the DMO's quality management system known as QEMS, the system has not been used to manage version control for the SAMS Agreement. The DMO further informed the ANAO that the DMO staff found QEMS difficult to use, it was not kept up to date and is to be replaced by a new Explosive Ordnance Division Business Management System (BMS) which is currently under development.

²³⁷ QEMS is DMO's business process information management system.

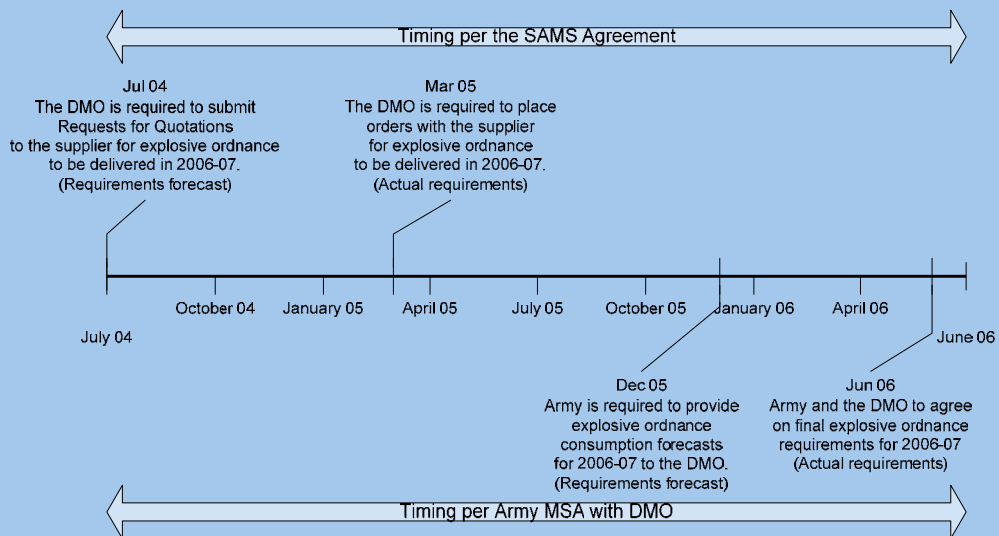
²³⁸ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 6b, 24 July 2007.

²³⁹ The DMO advised the ANAO that in excess of \$0.91 million was spent on consulting fees for legal and commercial advice in relation to the SAMS renegotiation project.

Aligning deliveries under the SAMS Agreement with Army's planned explosive ordnance consumption

Findings from the previous ANAO audit report

The previous ANAO audit found that timing of requests for quotations and orders specified under the SAMS Agreement did not align with the explosive ordnance requirements timelines in the MSA between Army and the DMO. The deadline for agreement between Army and the DMO on the annual explosive ordnance requirements occurred more than a year after the deliveries for that year are required to be identified to the supplier under the SAMS Agreement.²⁴⁰ The relevant timings discussed in the previous audit are illustrated below:



The ANAO made the following recommendation:

Recommendation No.7

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.

Defence and DMO response: Agreed.

5.14 In May 2009, the DMO provided the following comments on its progress in implementing Recommendation No.7 from the previous ANAO audit:

In Feb of each year, Defence produces a rolling five year forecast of requirements under the SAMS Agreement for discussion with Thales. The

²⁴⁰ In December 2005, the DMO indicated that GWEO Branch and ADI were planning changes to the Payment Basis Review timings to align with revised Materiel Sustainment Agreement timings. Source: ANAO Audit Report No.40 200–06, footnote 68, p. 59.

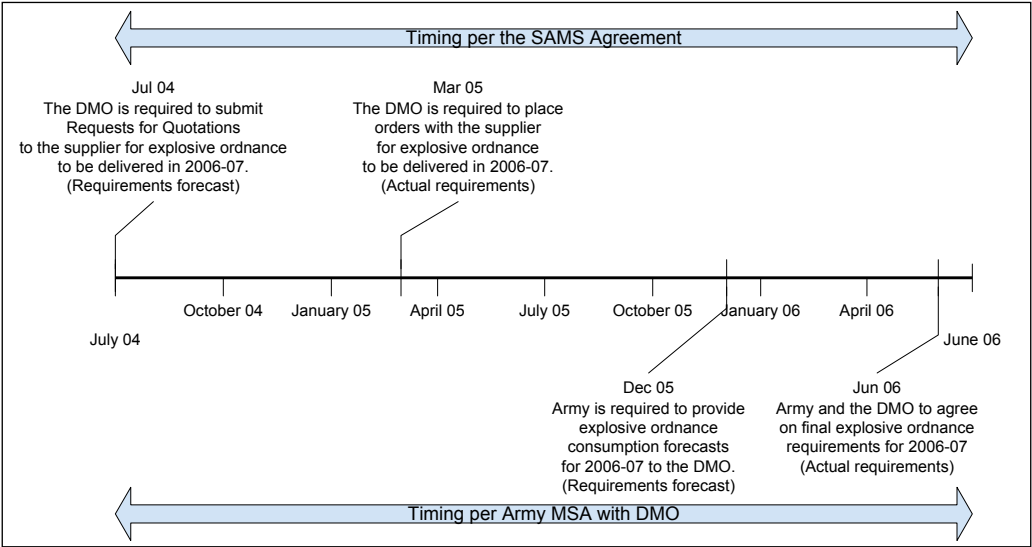
forecast is drawn from the detailed MSA discussions with Army. This business cycle is used so that Army’s evolving munitions requirements and resource constraints are factored in to Thales’ production planning.²⁴¹

5.15 Recommendation No.7 from the previous ANAO audit report was marked as complete in MAB’s ARMS database on 24 August 2006. However, no accompanying comments or reasons for the closure of this recommendation are included in ARMS.

5.16 The ANAO has assessed this recommendation as **not implemented**. The explosive ordnance requirements timings in the SAMS Agreement and the current Army MSA are illustrated in Figure 5.1 and remain the same as those reported in the previous audit.

Figure 5.1

Comparison of explosive ordnance requirements timings: SAMS Agreement vs. Army MSA



Source: Adapted from DMO documentation.

5.17 The rolling five year forecast referred to in the DMO’s May 2009 advice to the ANAO set out in paragraph 5.14 is not an innovation that has been introduced to address the issue underpinning Recommendation No.7 of the 2005–06 audit. The rolling five year forecast is a requirement under the SAMS

²⁴¹ Defence Materiel Organisation, ‘ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit’, Enclosure 1.

Agreement that was also a requirement at the time of, and noted in, the 2005–06 audit.²⁴²

5.18 The DMO informed the ANAO in November 2009 that:

While the rolling five year forecast referred to in this May 2009 advice is not an innovation that has been introduced to address the issue underpinning Recommendation No 7 of the 2005–06 audit, the incremental improvement in the MSA process over time has meant that the quality of these forecasts has improved significantly in recent years. Additionally, the DMO and Thales now convene regular production planning conferences, where the fidelity of the information delivered in the rolling forecasts is progressively refined. This process enables Thales to plan the most efficient use of production capability on the basis of up-to-date data.²⁴³

Performance management of the SAMS Agreement

Findings from the previous ANAO audit report

Following an annual Payment Basis Review²⁴⁴, the SAMS Agreement is required to be amended by an Agreement Change Proposal to include updated cost and savings data.

Payment Basis Reviews have not been conducted in a timely manner and in accordance with the SAMS Agreement and the SAMS Agreement was not being amended to include updated cost and savings data from Payment Basis Reviews. The ANAO considered that the ineffective maintenance of Payment Basis Review cost data had adversely impacted upon Defence's negotiating position and the effective stewardship of Government resources.

The ANAO made the following recommendation:

Recommendation No.8

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.

²⁴² ANAO Audit Report No.40 2005—06, op. cit., note to Figure 4.2, p. 58.

²⁴³ Defence and DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 23.

²⁴⁴ The purpose of a Payment Basis Review is to calculate the capability payment and contract prices for munitions that will apply to future deliveries under the SAMS Agreement. The SAMS Agreement requires Payment Basis Review data to be submitted to the DMO by the supplier by 30 November each year (i.e. one month prior to the annual Payment Basis Review). This data should be cost investigated by DMO. The basis year for a Payment Basis Review is the prior financial year just completed and the delivery year for a Payment Basis Review is the financial year occurring two years after the review year.

5.19 In May 2009, the DMO provided the following comments on its progress in implementing Recommendation No.8 from the previous ANAO audit:

SAMS was amended by Agreement Change Proposal No.26 (ACP 26) on 21 Dec 07 to permit the Payment Basis Review (PBR) updates to pricing schedules to be incorporated via administrative action once higher delegate endorsement is given. This mechanism was then applied to incorporate corrections to prior years' PBRs to bring the SAMS Schedules up to date.²⁴⁵

5.20 Recommendation No.8 from the previous ANAO audit report was marked as closed in the ARMS database on 29 January 2008. The comments against this recommendation in the ARMS database are included in Table 5.2.

Table 5.2

Status of Recommendation No.8 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	29 January 2008	An Agreement Change Proposal was submitted by Thales Australia on 18 May 07. Proposal remains under review by the Commonwealth, with closure dependent upon acceptability and availability of resources. A 'higher delegate submission' regarding the proposed updates was forwarded on 26 November 2007. Higher Delegate Submission approval was received on 19 December 2007. ²⁴⁶

5.21 The ANAO has assessed this recommendation as **partially implemented**. Agreement Change Proposal 26 removes the contractual requirement to create and agree to an Agreement Change Proposal (ACP) to incorporate the results of approved annual Payment Basis Reviews into the Agreement and treats an approved Payment Basis Review report as an ACP. However, the ANAO notes that an ACP is a proposal to make a change to the SAMS Agreement, not a change to the agreement itself. As noted in paragraph

²⁴⁵ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', Enclosure 1.

²⁴⁶ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 8, 29 January 2008.

5.11, the SAMS Agreement has not been updated to reflect the outcomes of the various ACPs agreed to by the DMO and the supplier.

5.22 The ANAO notes that the 2005 Payment Basis Review report, which sets the SAMS contract prices for deliveries in 2007–08, was not submitted by the supplier to the DMO until April 2007, 15 months behind the timing prescribed in the SAMS Agreement²⁴⁷, and was not agreed to by the DMO until December 2007.²⁴⁸

5.23 The cost investigation report for the 2005 Payment Basis Review indicates that factors contributing to the delay included the late finalisation of required production quantities by Defence.

5.24 The 2006 Payment Basis Review report, which sets the SAMS contract prices for deliveries in 2008–09, was not submitted by the supplier to the DMO until May 2007, six months behind the timing prescribed in the SAMS Agreement, and was not agreed to by the DMO until December 2007.²⁴⁹

5.25 The impact of the delay in finalising the 2006 Payment Basis Review in accordance with the SAMS contract is stated in Thales' 2005 Payment Basis Review submission:

The impact of delays in preparing the PBR 2006 is that Thales Australia has no recourse other than to use prices agreed from this PBR2005 applicable to FY07/08 orders to respond to recently released RFQ's [Request for Quotations] for delivery in FY08/09. This inefficiency necessitates additional administrative effort by both parties to update orders and budgets when the correct PBR is agreed and delays the preparation for PBR 2006.²⁵⁰

5.26 The DMO informed the ANAO that the 2007 Payment Basis Review report, which sets the SAMS contract prices for deliveries in 2009–10, had not

²⁴⁷ SAMS Clause 31 (as amended by ACP 15) states that the Payment Basis Review 'shall take place on or about 30th November of every year'.

²⁴⁸ The DMO advised the ANAO that an initial submission was provided by Thales to the DMO in December 2006 however the DMO identified errors in the submission and determined that further clarification was required by Thales. Thales resubmitted the PBR 2005 to the DMO in April 2007. Additional clarification, requested by the DMO, was received from Thales in June 2007. Source: Commercial Director, Explosive Ordnance Division, 21 August 2009.

²⁴⁹ The DMO advised the ANAO that an initial submission was provided by Thales to the DMO in May 2007 however the DMO identified errors in the submission. Thales resubmitted the PBR 2006 in December 2007. Source: Commercial Director, Explosive Ordnance Division, 21 August 2009.

²⁵⁰ Department of Defence, Strategic Agreement for Munitions Supply 2005 Payment Basis Review, page 3, para 2.2.

yet been agreed to by the DMO as at 24 August 2009. The DMO subsequently informed the ANAO in January 2010 that:

The initial PBR [Payment Basis Review] 2007 submission was received from Thales in January 2009, but initial review identified significant errors and flawed assumptions. The revised final PBR 2007 submission was received from Thales in September 2009. Investigative work by Munitions Branch and Financial Investigative Services was completed in December 2009. The PBR 2007 will be finalised with necessary delegate approvals in February 2010.²⁵¹

5.27 In August 2009, the DMO advised the ANAO that the 2008 and 2009 Payment Basis Reviews were yet to commence. In January 2010, the DMO informed the ANAO that 'PBR 2008 was received from Thales in August 2009, and is now being cost investigated. PBR 2009 was received from Thales on 27 November 2009.'²⁵²

5.28 During the 2005–06 ANAO audit, the DMO informed the ANAO that the SAMS Review was to investigate mechanisms to more clearly articulate arrangements to resolve situations where there is a delay in completing a Payment Basis Review. The information provided by the DMO to the ANAO during this audit in relation to subsequent Payment Basis Reviews suggests that this issue has not been resolved.

5.29 The January 2009 internal review of Munitions Branch Procurement Practices²⁵³ also found:

...when prices quoted from Thales increased due to the incorporation of a new PBR agreement; there was no referral back to the cost investigator to ascertain whether the increase had been correctly calculated.²⁵⁴

5.30 The DMO informed the ANAO in January 2010 that the above finding from the internal review has since been addressed and all Thales quotes are now referred for cost investigation.

²⁵¹ Department of Defence and Defence Materiel Organisation, *Response to Draft Report*, 29 January 2009.

²⁵² Department of Defence and Defence Materiel Organisation, *Response to Draft Report*, 29 January 2009.

²⁵³ Department of Defence, Defence Materiel Organisation, 'Conclusion Report – Review of Munitions Branch Procurement Practices', SCCEO/OUT/2009/6, January 2009.

²⁵⁴ *ibid.*, paragraph 11.c), p. 8.

Changes to munitions produced under SAMS for Army

Findings from the previous ANAO audit report

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 (for example, 81 mm mortar and 25 mm ammunition) or expanded existing capability requirements (for example, increased capacity to produce 5.56 mm ammunition).

The ANAO found a range of weaknesses in the DMO's management of change to the capability of the Benalla Facility including 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.

The ANAO made the following recommendation:

Recommendation No.9

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.

5.31 In May 2009, the DMO provided the following comments on its progress in implementing Recommendation No.9 from the previous ANAO audit:

A number of changes to the Benalla facility have been considered since the examples cited in the 05/06 audit report (for example: shift to a new 81mm mortar design, introduction of 155mm artillery in lieu of 105mm (a direct consequence of Project Land 17), and introduction of 7.62mm manufacture).

No decisions on these matters have been taken at this stage. The investment proposals are being worked up in close consultation with the Army customer. Where relevant, detailed investigations have included facility inspections to enable assessment of costs and benefits by US DoD [Department of Defence] experts. All proposals have been (or will be) thoroughly reviewed by the DMO's Financial Investigative Service.

Value for money considerations are being assessed in balance with other strategic considerations relating to self-reliance, development of industry capability, etc.²⁵⁵

5.32 Recommendation No.9 from the previous ANAO audit report was signed off as 'complete' in the ARMS database on 24 June 2008. The comments against this recommendation in the ARMS database are included in Table 5.3.

²⁵⁵ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005—06 audit', Enclosure 1.

Table 5.3

Status of Recommendation No.9 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	24 June 2008	<p>1. Explosive Ordnance Division has been working collegiately with both Defence and the operator of the Benalla Facility (Thales Australia Pty Ltd) to address this recommendation for some time.</p> <p>2. A methodology for evaluating value-for-money continues to be developed for the procurement of all explosive ordnance.</p> <p>3. A 'Strategic Governance Board' has been established comprising executives from both Explosive Ordnance Division and Thales. The manufacture of a wider range of EO products will be pursued external to the Strategic Agreement for Munitions Supply (SAMS), under which changes to capability at Benalla are currently managed. Accordingly, there will be no further increases to capability at Benalla under the SAMS, only reductions relating to those items deemed obsolescent by the Services.</p> <p>4. This action is therefore considered to have been overtaken by events.²⁵⁶</p>

5.33 On 24 August 2009, the DMO informed the ANAO:

Of the initiatives listed in this [statement from DMO in paragraph 5.31], only the 7.62mm proposal has matured to the point where FIS [Financial Investigative Service] investigation has been initiated. This matter is still being negotiated, and it remains commercially sensitive.²⁵⁷

5.34 Given that the proposal to introduce the manufacture of 7.62 mm is still under consideration, the ANAO has been **unable to assess** the implementation of this recommendation.

²⁵⁶ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 9, 24 June 2008.

²⁵⁷ Director General Munitions Branch, DMO, 'ANAO Performance Audit of Explosive Ordnance Procurement: Update on Outstanding Information', 24 August 2009, Enclosure 1, p. 6.

Accounting for the SAMS Agreement

Findings from the previous ANAO audit report

The SAMS Agreement was treated as an operating lease in Defence's financial statements.

The ANAO made the following recommendation:

Recommendation No.10

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.

5.35 In May 2009, the DMO provided the following in respect of action taken to implement this recommendation:

Defence reviewed the accounting treatment of the SAMS Agreement. In the Annual Report for 2005/06, the capital component of the Benalla payments was reported as a Finance Lease.

Appropriate processes have been implemented between Defence and DMO to properly treat and report on finance lease capitalisation and the depreciation expense.²⁵⁸

5.36 Recommendation No.10 from the previous ANAO audit report was signed off in the ARMS database on 8 November 2006. The comments against this recommendation in the ARMS database are included in Table 5.4.

Table 5.4

Status of Recommendation No.10 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	8 November 2006	Defence's review of the treatment of the SAMS (e.g. Benalla) agreement has been completed and we have recognised it as a finance lease arrangement. ²⁵⁹

²⁵⁸ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', Enclosure 1.

²⁵⁹ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 10.

5.37 The ANAO has assessed this recommendation as **completed**. Defence's financial statements have reported the SAMS Agreement as a finance lease since 2005–06.

Subsequent Developments in relation to the SAMS Agreement

Outcomes of the SAMS Renegotiation Project

5.38 The SAMS Renegotiation Project, an internal DMO project to review and renegotiate the SAMS Agreement, was established on 16 January 2006. As part of the SAMS Review and Renegotiation Program, the DMO received external legal and commercial advice, from a number of sources, on the SAMS Agreement.

5.39 In December 2006, the DMO sought approval from the then Minister for Defence to renegotiate the SAMS Agreement. The objective of the renegotiation project was to 'deliver a renegotiated SAMS contract which better aligns risk and returns in keeping with contemporary expectations'.²⁶⁰ The renegotiated contract was expected to:

- accurately reflect existing Agreement Change Proposals;
- contain updated and manageable administrative arrangements;
- contain accurate historical data with a clearly articulated change management processes;
- identify performance improvement and cost reduction targets;
- establish Key Performance Indicators (KPI's) to monitor performance; and
- provide increased transparency of pricing.²⁶¹

5.40 In the 2006 submission to the then Minister, the DMO advised:

Given the state of the current SAMS, the resources that would be required to derive an agreed baseline, and the degree to which DMO is recommending that SAMS be amended, it is proposed that the Commonwealth seek

²⁶⁰ Department of Defence, Defence Materiel Organisation, Review of the Strategic Agreement for Munitions Supply (SAMS), Project Plan (Draft) n.d.

²⁶¹ *ibid.*

agreement from ADI that the renegotiation of SAMS proceed on the basis of developing a new document that meets agreed key principles and outcomes.²⁶²

5.41 In the same submission, the DMO also advised the then Minister that the likely result of not renegotiating the SAMS Agreement would be:

- the DMO would continue to pay an excessive rate of return under the Agreement on the capital balance until at least 2015;
- the arrangements would continue to be inconsistent with the performance-based contracting approach now endorsed by the DMO;
- price setting for munitions contracts would continue to be complex and not necessarily representative of true cost of production;
- inappropriate risk sharing would be perpetuated;
- the opportunity to drive cost reductions and share in potential savings from efficiencies would not be realised;
- adding new capability to the facility would become problematic from a value for money perspective; and
- current budgetary allocations would not be sufficient to cover the projected payments.²⁶³

5.42 The then Minister gave approval for the renegotiation of the SAMS Agreement in February 2007. Renegotiations with Thales²⁶⁴ commenced in April 2007.

5.43 The SAMS renegotiation project failed to deliver the project's stated objective of a 'renegotiated SAMS contract which better aligns risk and returns in keeping with contemporary expectations'²⁶⁵ referred to in paragraph 5.39.

5.44 Subsequently, on 30 June 2008, the DMO made the decision to allow the existing SAMS Agreement to expire on 30 June 2015.

²⁶² Department of Defence, Defence Materiel Organisation, HEWS/OUT/2006/166, Ministerial Submission seeking approval to renegotiate the SAMS Agreement, 06 December 2006, 'Renegotiation of Strategic Agreement for Munitions Supply', Attachment B, p. 6, para. 17.

²⁶³ Ibid., p. 9 para. 35.

²⁶⁴ In October 2006, the Australian Foreign Investment Review Board approved Thales' acquisition of the remaining 50 per cent stake in ADI Limited which was subsequently renamed Thales Australia.

²⁶⁵ Department of Defence, Defence Materiel Organisation, Review of the Strategic Agreement for Munitions Supply (SAMS), Project Plan (Draft) n.d.

The decision to allow the SAMS Agreement to expire

5.45 Under the terms of the agreement, the Commonwealth was obliged to notify Thales by 30 June 2008 of its intention to:

- (a) terminate the agreement; or
- (b) extend the initial term (30 June 2015) of the agreement for a further 10 years; or
- (c) allow the agreement to expire at the end of the initial term (30 June 2015).

5.46 On 30 June 2008, the DMO²⁶⁶ notified Thales that the Commonwealth would allow the SAMS Agreement to expire at the end of the initial term and consequently the SAMS Agreement will expire on 30 June 2015.

5.47 The June 2008 brief to the CEO DMO, recommending that the SAMS Agreement be allowed to expire on 30 June 2015, indicated that the three Services were not satisfied with the existing SAMS arrangements and included the following supporting information:

- Defence pays a premium for retention of the indigenous manufacturing capability, which now provides only 13 items of the approximately 830 EO line items in the ADF inventory. On average, \$20m is spent on procurement of SAMS products each year (at cost) while Defence continues to make Capability Payments of approximately \$100m per year to retain an agreed level of manufacturing capability. Defence is obligated to pay the (escalating) \$100m Capability Payment each year until the expiry of the SAMS agreement in 2015, regardless of the value of purchases.²⁶⁷
- Clearly SAMS has not evolved to meet Australia's needs for an indigenous manufacturing capability, either now or into the future. SAMS is not a performance-based agreement and the production capability being maintained is inadequate, in terms of both product range and production volumes to be a credible supply source in a high intensity conflict. The intrinsic complexity of the agreement's terms

²⁶⁶ Letter from CEO DMO to Managing Director Thales, 30 June 2008.

²⁶⁷ The ANAO sought clarification from the DMO on the figure of \$100 million for the capability payment included in the brief as it is significantly larger than the current capability payment payable under the SAMS Agreement. DMO advised the ANAO that this figure includes payments to Thales of \$63.2 million for SAMS Capability and \$29.7 million for Mulwala Capability, as well as further payments to Thales totaling \$10.3 million for capital works on the Mulwala site related to maintenance of capabilities.

and conditions also inhibits the natural progression of the strategic relationship between the parties, even in areas where both agree that change should occur.

- [Allowing the SAMS Agreement to expire on 30 June 2015] will provide valuable commercial incentive for the negotiation of performance based terms more favourable to the Commonwealth. Thales has given in-principle support to the commercial principles that would underpin their performance.²⁶⁸

5.48 In the explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, Defence stated 'SAMS is a relatively short term non-performance based agreement which inhibits strategic investment, limits full competition, and does not currently meet Australia's needs. Accordingly, the SAMS Agreement is in urgent need of reform'.²⁶⁹

5.49 The SAMS Agreement will be extant for another six years before its expiry, meaning the risks and disadvantages of the existing agreement identified in paragraphs 5.41 and 5.48 will also continue for this period.

5.50 According to external advice received by the DMO in March 2008, the Commonwealth is likely to be liable to pay Thales a number of expiry payments upon the expiry of the SAMS Agreement at 30 June 2015. This advice estimated the total net present value of the capability payments to be paid under the agreements between March 2008 and their expiry on 30 June 2015 was \$432.3 million.²⁷⁰ The ANAO notes that allowing the SAMS Agreement to expire was the lowest cost option presented in the external advice. A number of potential expiry payments were also identified that could not be quantified due to a lack of Commonwealth information or other uncertainties around the SAMS Agreement. The DMO provided the following advice to the ANAO in November 2009 in regard to the \$432.3 million figure:

The DMO can confirm that the NPV [net present value] figures for SAMS and the Mulwala Agreement cited in the respective [external] reports under 'Option 1 – Status Quo' are calculated on the basis of the capability payments continuing to be paid under the agreements until their expiry on 30 June 2015.

²⁶⁸ Department of Defence, DMO, Brief to CEO DMO, 'Strategic Agreement for Munitions Supply (SAMS) – Formal Notification to Thales Australia Ltd', HEOD/OUT/12008/042, 30 June 2008.

²⁶⁹ Department of Defence, explosive ordnance Component of the 'Logistics Companion Review' to the *Defence White Paper 2009*.

²⁷⁰ This estimate assumes no material contract amendments and no additions or deletions to capability from the time of the advice and the expiry of the initial term of SAMS in 2015.

It should be noted that the capability payments are not 'expiry payments' as defined in the agreements, but are included in the NPV calculation.

It should also be noted that Defence and the DMO are working with Thales to clarify IP [intellectual property] ownership positions between the parties now so that end-of-agreement costs can be assessed.²⁷¹

5.51 According to financial analysis by external consultants, the total estimated cost to the Commonwealth of allowing the Mulwala Agreement to expire on 30 June 2015 is \$215.2 million assuming no material contract amendments are made and no additions or deletions are made to capability. This is discussed further at paragraph 5.67.

Maintaining a domestic munitions manufacturing capability post SAMS Agreement expiry

5.52 The SAMS Agreement was originally a contract between the Commonwealth of Australia (the Commonwealth), represented by the Department of Defence, and ADI Limited.²⁷² ADI Limited and the Commonwealth entered into a Deed of Novation in 2000, novating the SAMS Agreement to ADI Munitions Pty Limited.

5.53 Legal advice obtained by the DMO in October 2005 noted that at that time ADI Limited was still the entity named in the contract and recommended that, at minimum, ADI Munitions Pty Limited should be incorporated into the contract. The legal advice also recommended that:

Depending on the corporate structure adopted by ADI, the Commonwealth may wish to seek financial and/or performance securities from ADI Limited (or other entities within the ADI group) in relation to ADI Munitions' performance of SAMS, including any contract made under SAMS.²⁷³

5.54 At the time of the 2005–06 audit report, ADI was owned by Thomson–CSF Investment Pty. Ltd. which represented a joint venture between the Australian Transfield Holdings Pty. Ltd. Group and the French listed company Thomson–CSF Group (now Thales). In October 2006, Thales Australia acquired

²⁷¹ DMO Response to Requests for Information to Finalise s19, p. 1, 23 November 2009.

²⁷² Purchased from the Australian Government in 1999 by Transfield Thomson–CSF Investment Pty. Ltd. which represented a joint venture between the Transfield Holdings Pty. Ltd. Group and the French listed company Thomson–CSF Group (now Thales).

²⁷³ Department of Defence, Defence Materiel Organisation, Clayton Utz Review of SAMS Agreement – Terms and Conditions & Schedule 7, 17 October 2005.

100 per cent ownership of ADI Holdings (the holding company for ADI Limited). The ADF's domestic supplier of munitions is therefore now controlled by a foreign entity.

5.55 At the end of the main body of audit fieldwork in August 2009, the DMO was still investigating and considering a number of options to maintain a domestic manufacturing capability post 30 June 2015. The DMO informed the ANAO in August 2009 that options would be presented to Government for consideration and further guidance some time in the next six weeks. The DMO subsequently informed the ANAO in November 2009 that the six week timeframe advised in August 2009 was 'indicative only and was subject to commercial discussions with industry, internal DMO cost analysis and stakeholder consultation'. Furthermore, the DMO informed the ANAO that:

A submission to Government has been prepared and is under high level review. DMO intends to provide interim options to Government by the end of 2009, including a proposal for soliciting views on the long term future of domestic EO manufacturing.²⁷⁴

5.56 In December 2009, the DMO further advised the ANAO that:

given the broader factors to be considered, the matter was referred for Defence consideration in the first instance. A policy paper was considered by the Defence Committee in November 2009, and the matter will be further considered by the Defence Capability and Investment Committee in March 2010, prior to a submission to Government.

5.57 As noted in paragraph 2.28, the Logistics Companion Review to the *Defence White Paper 2009* made two recommendations around the domestic manufacturing capability, namely:

- Australia continue to maintain an indigenous EO manufacturing industry; and
- Defence invest in the indigenous industry capability as a strategic cost-risk decision to reduce the need for acquiring and stockpiling warstocks.²⁷⁵

5.58 Defence subsequently informed the ANAO in November 2009 that:

²⁷⁴ Department of Defence, 'Request for Information', 2 November 2009, p. 6.

²⁷⁵ Department of Defence, explosive ordnance component of the Logistics Companion Review to the *Defence White Paper 2009*, para. 28, p. 5.

The Defence White Paper 2009 ... described the Government's intention to establish Priority Industry Capabilities (PICs). The capability to manufacture selected ballistic munitions and explosives was confirmed as a PIC in the subsequent statement that was released at the Defence + Industry conference in Adelaide in July 2009.

Options review and risk studies for JP 2085 Ph2/3 (to be conducted between 1st and 2nd Pass) are intended to inform decisions on domestic manufacture of EO as a strategic cost-risk decision in lieu of stockpiling reserve stocks of EO.²⁷⁶

Strategic governance board

5.59 The Explosive Ordnance Strategic Governance Board (SGB)²⁷⁷ was established in March 2008 to 'focus on four core areas of the relationship' between the DMO and Thales Australia Ltd; 'EO Capability, EO Products, Stakeholders in outcomes, and risks to the business'.²⁷⁸

5.60 During the fieldwork for this audit, the DMO informed the ANAO that the SGB was established to provide direction to contract managers in relation to the SAMS Agreement. The DMO also informed the ANAO that the SGB was established in response to senior management acknowledgement in early 2008 that: there had been little progress made in renegotiating the SAMS Agreement; strategic decisions regarding the SAMS Agreement were being made at too low a level within the organisation; there were no contract management processes in place; and the organisation did not have the right skills at the right level to manage the contract appropriately.

Mulwala Agreement

5.61 As noted in paragraph 5.6 the Mulwala Facility is a Defence owned propellant and high explosive production facility in southern New South Wales operated by Thales Australia under an agreement (Mulwala Agreement) signed between the Department of Defence and ADI Limited (now Thales Australia). Under the terms of the Mulwala Agreement, ADI is required to

²⁷⁶ Department of Defence, response to ANAO Request for Information, 2 November 2009, p. 7.

²⁷⁷ Comprises members from Defence, DMO and Thales Australia Ltd.

²⁷⁸ Department of Defence, Defence Materiel Organisation, Minute, 'Explosive Ordnance Strategic Governance Board,' HEOD/OUT/2008/049, August 2008.

supply propellant and high explosive to the Benalla munitions factory while the SAMS Agreement is in force operates.

5.62 No changes have been made to the Mulwala Agreement since 1999. In October 2008, the DMO obtained legal advice that, even though ADI Limited is the entity named in the current version of the agreement, Thales Australia Limited is the entity bound by the contract. This conclusion was reached on the basis that there was 'no reason to believe that the sale of ADI Limited was not effective'.

5.63 In March 2007, the Parliamentary Standing Committee on Public Works²⁷⁹ issued a report, *Redevelopment of Propellant Manufacturing and other Specified Capabilities at Mulwala*²⁸⁰, which made a number of recommendations in relation to the Mulwala Agreement:

Recommendation 1

The Committee recommends that at the time of renegotiating the lease of Mulwala in 2008 between Thales Australia and the Commonwealth, Defence consider bringing rental payments into line with current market rental payments for purpose built buildings.

Recommendation 2

The Committee recommends that Defence consider renegotiating the capability payment paid by the Commonwealth to Thales Australia in recognition that production at the Mulwala facility exceeds the demands of the ADF, and has the capacity to service commercial markets.

Recommendation 3

The Committee recommends that at the earliest opportunity Defence adjust the profit sharing ratio so as to deliver an outcome that is more equitable to the Commonwealth, recognising the improvements in operational efficiencies that the redevelopment provides to the lessee.

²⁷⁹ The Committee is required by the Public Works Committee Act 1969 to consider public works over \$15 million and to report to Parliament on: the purpose of the work and its suitability for that purpose; the need for, or the advisability of, carrying out the work; whether the money to be expended on the work is being spent in the most cost effective manner; the amount of revenue the work will generate for the Commonwealth, if that is its purpose; and the present and prospective public value of the work.

Source: *Public Works Committee Act 1969* as amended, Part III, Section 17 and Part III Section 18 (8). <[http://www.comlaw.gov.au/comlaw/Legislation/ActCompilation1.nsf/0/36AC11C8D3B5B06DCA2573AD007FC4DF/\\$file/PublicWorksCommittee1969.pdf](http://www.comlaw.gov.au/comlaw/Legislation/ActCompilation1.nsf/0/36AC11C8D3B5B06DCA2573AD007FC4DF/$file/PublicWorksCommittee1969.pdf)> [accessed 4 May 2009].

²⁸⁰ Commonwealth of Australia, Parliamentary Standing Committee on Public Works 2007, *Redevelopment of Propellant Manufacturing and other Specified Capabilities at Mulwala*. <<http://www.aph.gov.au/house/committee/pwc/mulwala/report/fullreport.pdf>> [accessed 4 May 2009].

Recommendation 5

The Committee recommends that Defence submit a strategy report to the Committee on how the department proposes to address the issues referred to in Recommendations 1, 2, and 3.²⁸¹

5.64 In relation to the Committee's recommendations, the DMO informed the ANAO in November 2009 that:

These recommendations appear to have arisen from a misinterpretation of information provided by Defence to the Public Works Committee. Paragraph 3.4 of the Committee's report noted that: 'Defence also informed the Committee that in 2008 the Commonwealth will make a decision as to whether it will extend the Thales lease beyond 2015 to 2025.'

This statement is accurate (and Defence did, indeed, take this decision in 2008). The Committee's recommendations, however, appear to have been based on the misunderstanding that there may have been an opportunity in 2008 to renegotiate the Mulwala lease, when in fact no such opportunity existed.²⁸²

5.65 The DMO provided the following update to the ANAO on 31 August 2009 of the progress against the recommendations 1, 2, 3 and 5 of the Public Works Committee report outlined in paragraph 5.63:

Recommendation 1: No change – the timing and form of any replacement agreement is yet to be determined.

Recommendation 2: No change – an ACP [agreement change proposal] may be proposed to Thales to reflect an appropriate revised capability payment when JP 2086²⁸³ delivers new capability.

Recommendation 3: No change – any renegotiation will need to be triggered by delivery of JP 2086 capability.

Recommendation 5: No change. Defence has not settled on an agreed strategy for renegotiation of the agreement.²⁸⁴

²⁸¹ Commonwealth of Australia, Parliamentary Standing Committee on Public Works 2007, *Redevelopment of Propellant Manufacturing and other Specified Capabilities at Mulwala*, pp. viii–ix. <<http://www.aph.gov.au/house/committee/pwc/mulwala/report/fullreport.pdf>> [accessed 4 May 2009].

²⁸² Defence and DMO, Response to Issues Papers, Annex A: Additional Information and Proposed Amendments, 6 November 2009, p. 24.

²⁸³ JP 2086 is the Mulwala Redevelopment Project Phase 1. See the section commencing at paragraph 5.68.

²⁸⁴ Defence Materiel Organisation, 'ANAO Performance Audit of Explosive Ordnance Procurement: Update on Outstanding Information', 31 August 2009, p. 9.

5.66 On 15 December 2008, the DMO advised Thales Australia of the Commonwealth's decision to allow the Mulwala Agreement to expire at the completion of the agreement's initial term on 30 June 2015. In a December 2008 brief to the CEO DMO recommending allowing the Mulwala Agreement to expire on 30 June 2015, the same date as the SAMS Agreement, the DMO was of the view that this 'provides considerable leverage to the Commonwealth on commercial options to take this capability forward'.²⁸⁵

5.67 A July 2007 financial analysis by external consultants of options available to the Commonwealth under the SAMS and Mulwala Agreements estimated the cost to the Commonwealth of allowing the Mulwala Agreement to expire on 30 June 2015 at \$215.2 million assuming no material contract amendments are made and no additions or deletions are made to capability.

Mulwala Redevelopment Project

5.68 The provisions of the Mulwala Agreement required ADI [now Thales Australia] and the DMO to undertake a Strategic Review into the modernisation of the Mulwala Facility. The 1999 Review was 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 supplier's ability to meet Defence requirements and generate additional commercial sales. The Review identified improvements required to modernise the facility and rectify significant occupational health and safety and environmental issues. The redevelopment work is intended to replace the existing propellant manufacturing capability that dates back to the 1940s and includes the construction of new nitrocellulose²⁸⁶, solvent and propellant production plants, a confined burn facility and a performance and safety testing centre.

5.69 At the time of the 2005–06 audit, the DMO informed the ANAO that it was seeking and evaluating tenders for the redevelopment of the Mulwala Facility. Subsequently, in March 2007, on the basis of a submission from Defence, the Parliamentary Standing Committee on Public Works

²⁸⁵ Department of Defence, DMO, 'Mulwala Agreement – Notification of Commonwealth's Intentions', HEOD/OUT/2008/089, p. 2.

²⁸⁶ Nitrocellulose is a highly flammable material used in the manufacture of propellant.

recommended that 'the redevelopment of the propellant manufacturing facility at Mulwala proceed at an estimated cost of \$338.7 million, excluding GST'.²⁸⁷

5.70 The approved project expenditure is \$368 million²⁸⁸ with an additional \$63 million required for identified environmental remediation works²⁸⁹ that had been identified as having originated from earlier operations conducted at the facility. A contract was signed with a contractor in June 2007 for the design and construction of the modernised facility.²⁹⁰

5.71 Given the significant elapsed time since the 1999 Strategic Review, the 2008 decision to allow the SAMS and Mulwala Agreements to lapse and the uncertainty surrounding the form of future domestic manufacture of explosive ordnance, the ANAO sought advice from Defence regarding the basis for Defence's continued commitment to make this significant investment in the Mulwala facility. In this context, the ANAO asked Defence in July 2009 for evidence that the rate of production at the Mulwala facility had been linked to the requirements of the Benalla facility. In response, the DMO provided a 2001 Defence Capability Investment Committee decision which set a rate of production for Mulwala.

5.72 In January 2010, the DMO informed the ANAO that the inaugural meeting for the Project Management Stakeholder Group (PMSG) for the Mulwala Redevelopment Project was held in September 2009. This was more than two years after the contract was signed in June 2007 for the design and construction of the modernised facility. The minutes of the inaugural PMSG, and of the subsequent meeting in December 2009, indicate that these meetings had commenced considering the production capability at Mulwala. The ANAO notes that this has occurred eight years after the 2001 decision by the

²⁸⁷ Commonwealth of Australia, Parliamentary Standing Committee on Public Works 2007, *Redevelopment of Propellant Manufacturing and other Specified Capabilities at Mulwala*, p. ix. <<http://www.aph.gov.au/house/committee/pwc/mulwala/report/fullreport.pdf>> [accessed 4 May 2009].

²⁸⁸ Department of Defence, Defence Materiel Organisation Portfolio Budget Statements 2009–10, p. 140. <http://www.defence.gov.au/budget/09-10/pbs/2009-2010_Defence_PBS_04_dmo.pdf> [accessed 26 June 2009]. In August 2009, the DMO advised that the variation of this figure compared to the \$338.7 million recommended by the Parliamentary Standing Committee on Public Works is in line with regular defence global updates taking into account exchange rate variations and CPI.

²⁸⁹ The Parliament of the Commonwealth of Australia, Joint Standing Committee on Public Works 2007, *Redevelopment of Propellant Manufacturing and other Specified Capabilities at Mulwala*, p. 13. <<http://www.aph.gov.au/house/committee/pwc/mulwala/report/chapter3.pdf>> [accessed 4 May 2009].

²⁹⁰ Bovis Lend Lease.

Defence Capability Investment Committee which set the rate of production for Mulwala.

5.73 A product discussion paper was prepared for the PMSG in October 2009. The discussion paper notes that:

In early 2009, the Director General Guided Weapons Branch (DGGWB) DMO, commissioned an independent review of the project to provide assurance of its activities, progress and risk control strategies. Alongside this process review, known as the “Budd Review”, a strategic review of product was conducted and it was concluded that the ammunition to be certified by JP2086 Ph1 were defined in the very early 2000s and ADF ammunition requirements have evolved since that time leaving many of the natures, as specified within the D&C [design and construct] contract, as either superseded or obsolete.

The inaugural Project Management Steering Group (PMSG) meeting, since project commencement, was held in September 2009. The relevance of the product mix to be certified from the MMF [Modernised Mulwala Facility] was discussed; the action from this meeting was to prepare this discussion paper.²⁹¹

5.74 The DMO’s 2009–10 Portfolio Budget Statements reported:

During 2009–10, the detail design [for the Mulwala Redevelopment Project] will be finalised and construction works substantially completed. The performance and safety test centre is expected to be completed by August 2009 for early handover to Thales. Practical completion of construction is scheduled for July 2010 with commissioning to commence soon after.

The most significant project risk is that there may be an extended transition phase from the existing plant which would adversely impact on cost and schedule. This is being mitigated by close collaboration with, and provision of technical support and advice by, the existing operator through a support services contract.

There is also a risk that the strategy the contractor has employed to undertake initial construction activities prior to completion of detailed design to mitigate against schedule slippage may impact on schedule and/or capability. This risk will be realised if changes made at the detailed design stage result in rework of procurement or construction activities already commenced. This is being

²⁹¹ Defence Materiel Organisation, ‘JP2086 Phase 1 – Mulwala Re-development Project (MRP): Product Discussion Paper for PMSG’ v 1.00, 5 October 2009, p. 1.

mitigated by the project through detailed review of design packages and close monitoring of construction activities.²⁹²

5.75 In late 2008 it was identified that the contractor was experiencing difficulties in meeting progress against contracted milestones, which resulted in a significant impact on the planned project spend. The DMO initiated an internal review of the Mulwala Redevelopment Project in January 2009. The report from this review was released in April 2009.²⁹³ The review found that ‘lack of progress in the construction phase...was a symptom of a number of larger issues identified as’:

- a. A lack of effective strategic engagement by the capability sponsor and end-users of the MMF [Modernised Mulwala Facility] product to ensure its relevance.
- b. A lack of PO [Project Office] staff continuity compounded by a paucity of PO resources for key areas of the project, leading to a loss of corporate knowledge.
- c. Absence of detailed planning for the complex technical issues associated with the qualification, certification and platform integration of MMF product, giving rise to significant risk to CoA [Commonwealth of Australia].
- d. A poor understanding and acceptance of responsibilities compounded by a lack of clarity of responsibility, less than effective communication, and poor project management procedures.²⁹⁴

5.76 The review team’s overall assessment was that ‘while the project was “not broken” the project does require immediate significant attention, planning and co-ordination to ensure successful completion’.²⁹⁵

5.77 The report made 12 key recommendations supported by 112 subordinate recommendations. These recommendations related to issues around high level project management and governance; engineering and design; procurement and sub contracting; construction; project management;

²⁹² Department of Defence, Defence Materiel Organisation Portfolio Budget Statements 2009—10, pp.151—152. <http://www.defence.gov.au/budget/09-10/pbs/2009-2010_Defence_PBS_04_dmo.pdf> [accessed 26 June 2009].

²⁹³ Department of Defence, ‘Assurance Review of JP 2086— Mulwala Re—development Project’, April 2009.

²⁹⁴ Department of Defence, Defence Materiel Organisation, ‘Assurance Review of JP 2086— Mulwala Re—development Project’, April 2009, p. 5.

²⁹⁵ *ibid.*

project schedule; the planned plants and associated facilities; propellant qualification and end-product ammunition certification; legal review; and the project office.

5.78 The Director General of Guided Weapons Branch in Explosive Ordnance Division accepted all of the recommendations and in April 2009, put in place an implementation plan to action these recommendations. This Implementation Directive noted that:

The Review lead strongly recommended immediate action to implement the review recommendations, however both key and subordinate recommendations exhibit varying levels of: complexity, relative urgency, and implementation difficulties. In order to support an immediate implementation of key recommendations (and therefore supporting secondary recommendations) each key recommendation has been prioritised ... taking into account urgency, complexity and the difficulty of implementation.²⁹⁶

5.79 The DMO informed the ANAO that as of October 2009 implementation of nine of the key recommendations had been completed, with implementation of two of the remaining recommendations continuing. One minor recommendation regarding Capability Development Group sponsorship of the Mulwala Redevelopment Project is still under consideration.

5.80 The decision has been taken to allow the SAMS and Mulwala agreements to expire in mid-2015, at the end of their initial terms. In the period between now and when the agreements expire the DMO will continue to make significant ongoing expenditure under these agreements and on the redevelopment of the Mulwala facility. There is currently uncertainty within Defence surrounding the form of future domestic manufacturing arrangements for explosive ordnance. In these circumstances, the ANAO considers there would be benefit in the DMO undertaking a strategic review of the domestic manufacturing arrangements to assess the benefits and viability of investment in domestic manufacturing capabilities. At the conclusion of the audit, the DMO was undertaking ongoing investigation and consideration of options to maintain a domestic manufacturing capability post 30 June 2015. The DMO informed the ANAO that options would be presented to Defence Capability Investment Committee in March 2010 prior to a submission to Government.

²⁹⁶ DMO, 'MRP Assurance Review – Implementation Directive', para. 4.

Recommendation No.2

5.81 The ANAO recommends that Defence undertake a strategic review of domestic manufacturing arrangements to:

- evaluate the extent that value for money can be achieved from existing arrangements; and
- determine the ongoing viability of investment in domestic manufacturing capabilities.

Defence and DMO Response: *Agreed.*

Developments in Munitions Branch contract management since 2005–06

5.82 The ANAO's findings during fieldwork for the 2005–06 audit²⁹⁷ re-enforced the findings of a 2005 DMO review of contracting practices that had identified a range of issues surrounding contract management with the former GWEO Branch (now Munitions Branch) including:

- 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;
- unfamiliarity with current financial delegations and procurement approval requirements; and
- an inconsistent standard of contract file management.

5.83 At the time of the 2005–06 audit, the DMO informed the ANAO of a number of measures being implemented to address the issues identified in the 2005 DMO review:

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

²⁹⁷ ANAO Audit Report No.40 2005–06, op. cit.

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.²⁹⁸

5.84 A January 2009 report of an internal review of procurement and contracting practices within Munitions Branch²⁹⁹ found significant shortcomings in current contract management practices within Munitions Branch.³⁰⁰ This report had four key findings, made nine recommendations and 'identified a number of potential breaches of the Commonwealth and Defence financial management and accountability framework'.³⁰¹

5.85 The report's four key findings were:

Finding 1

An apparent lack of knowledge of the full spectrum of processes and procedures to be followed when undertaking procurement, including an understanding of the financial management and accountability framework that governs DMO procurement processes.

Finding 2

Prices quoted by suppliers were generally accepted without any query or validation as to their make up, profit, freight, parent costs, etc. or analysis undertaken to rationalise price increases compared to previous expenditure often used in Proposal Delegations, Funds Approval and FMAR 10 [Financial Management and Accountability Regulation 10] submissions.

Finding 3

There is a lack of market understanding, analysis and commercial acumen leading to a high proportion of sole source procurement.

²⁹⁸ ANAO Audit Report No.40 2005–06, op. cit., p. 69.

²⁹⁹ Requested by the Head Explosive Ordnance Division October 2008.

³⁰⁰ Defence Materiel Organisation, 'Conclusion Report, Review of Munitions Branch Procurement Practices', SCCEO/OUT/2009/6, January 2009, accepted by HEOD February 2009.

³⁰¹ Defence Materiel Organisation, 'Conclusion Report, Review of Munitions Branch Procurement Practices', SCCEO/OUT/2009/6, February 2009, p. 1.

Finding 4

(a) There is a lack of coordination internally between the two enabling directorates of Business Management Unit (Commercial Directorate) and Engineering Management Unit (Engineering Services Directorate) and to a lesser extent the Munitions SPO. There are indications that the current Re-Architecture changes will improve this, however it is still evolving at the time of the review.

(b) There is a lack of tasking and utilisation of external subject matter experts especially financial, contracting and legal services.³⁰²

5.86 The review report's recommendations, and the potential breaches of the Commonwealth and Defence financial management and accountability framework identified by the review, are discussed further in Chapter 6 of this report.

³⁰² Defence Materiel Organisation, 'Review of Munitions Branch Procurement Processes', January 2009, pp. 4-10.

6. Financial Management

This chapter examines financial management of explosive ordnance procurement including Defence and the DMO's progress in implementing relevant recommendations from the 2005–06 ANAO audit and developments in this area since that audit.

Introduction

6.1 The 2005–06 ANAO audit concluded that weaknesses in procurement planning for explosive ordnance contributed to a poor alignment between explosive ordnance budgets and actual expenditure and also noted that a significant proportion of Defence's prepayments related to procurement of explosive ordnance.

6.2 This chapter examines financial management of explosive ordnance procurement including the DMO's progress in implementing relevant recommendations from the 2005–06 ANAO audit and developments in this area since that audit.

Defence and the DMO's progress in implementing relevant recommendations and findings of 2005–06 ANAO audit

6.3 The Financial Management Section of the previous audit focused on the budget management arrangements. Recommendation Numbers 13 and 14 were based around circumstances where sustainment and capital acquisition funding for explosive ordnance were allocated in the second half of the financial year. At the time, DMO was expending this funding through significant prepayments towards the end of the financial year. Recommendation No.12 was intended to ensure that value for money was achieved through these prepayments by ensuring that any benefits were properly risk assessed prior to committing to the prepayment. Recommendation No.15 related to more general financial administration arrangements. These recommendations, and the subsequent work by DMO and Defence to implement them, are covered in the following paragraphs.

Prepayments

Findings from the previous ANAO audit report

The ANAO reviewed a number of explosive ordnance procurements conducted in 2002–03 involving prepayments. One of these procurements involved the procurement of bolide missiles in 2002–03. The DMO initiated a 90 per cent prepayment just prior to the end of 2002–03. The ANAO noted that the associated documentation for the procurement clearly indicated 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.

The ANAO was unable to identify documentation of risk analysis and mitigation strategies developed in support of this procurement, as required by both the then Department of Finance and Administration and Defence Guidelines.

The ANAO made the following recommendation:

Recommendation No.12

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. The recently developed GWEO business case template will be modified to include this requirement.

6.4 Prepayments still occur in relation to the procurement of explosive ordnance. The DMO informed the ANAO that the total value as at 30 June 2009 of prepayments³⁰³ made by the DMO was \$1615 million of which \$109.9 million relates to prepayments for explosive ordnance.

6.5 In May 2009, the DMO advised the following in respect of action taken to implement Recommendation No.12:

Munitions Branch SOP [Standard Operating Procedure] (CDFIN-07) for management of pre-payments was developed in Feb 2007, and includes guidance on risk management and mitigation strategies.³⁰⁴

6.6 This recommendation was signed off in the ARMS database on 30 October 2006. The comments against this recommendation in the ARMS database are included in Table 6.1.

³⁰³ Defined by the DMO as an amount of money paid for a requirement that has not been fulfilled at the time of payment or any payment that pre-empts satisfactory receipt of goods or services. Source: Department of Defence, Defence Materiel Organisation, Chief Executive Instructions, '2.4 Payment of Accounts', December 2008.

³⁰⁴ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', 22 May 2009, Enclosure 1.

Table 6.1

Status of Recommendation No.12 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	30 October 2006	<p>The Business Case template has been redrafted to include a risk analysis. Management Audit Branch has agreed to proposed changes and the Standing Operating Instruction, including the revised Business Case template, has been promulgated for use.</p> <p>A Closure Package has been completed and sent to MAB, who confirmed that GWEO has met the requirements of the recommendation. The recommendation is closed.³⁰⁵</p>

6.7 The ANAO has assessed this recommendation as **partially implemented**. The DMO released the revised Standard Operating Procedure for the management of prepayments (prepayments procedure) in February 2007.³⁰⁶

6.8 Through this audit, the ANAO sought to verify that the issues surrounding prepayments had been addressed by obtaining a sample of prepayments from the DMO. This sampling activity showed that differing approaches to prepayments were being adopted based on the supplier, and only one example, relating to the acquisition of 120 mm Tank explosive ordnance, was provided by the DMO of a business case having been developed as envisaged by the recommendation. However all the information required by the prepayments procedure was not included in the documentation provided to the ANAO and neither were calculations as set out in the Finance Circular No.2004/14 *Discounts for prepayment and early payment*.

³⁰⁵ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 12, 30 October 2006.

³⁰⁶ Defence Materiel Organisation, GWEO Standard Operating Procedure CDFIN-07, 'Management of Pre-Payments', 12 February 2007.

6.9 The following sections discuss the basis for the ANAO's assessment.

DMO Prepayment policy

6.10 The DMO's policy is that prepayments 'should be avoided when practical to do so' and that 'the DMO must not be disadvantaged through interest lost in opportunity cost to the Agency'.³⁰⁷

6.11 The DMO considers that prepayments are appropriate where:

- a required as part of the procurement process or trading agreement (e.g. contracts for military equipment);
- b. it can be demonstrated that doing so obtains the best value for money outcome for Defence; or
- c. there is identifiable benefit to Defence or the Australian Government.³⁰⁸

Internal audits and reviews of explosive ordnance prepayments

6.12 In September 2006, four months after the ANAO Audit Report No.40 2005–06 was tabled, Defence's Management Audit Branch completed an internal audit that examined the appropriateness of explosive ordnance prepayments.³⁰⁹ The major findings from this internal audit indicated that the management of prepayments within the explosive ordnance area of the DMO required further improvement.

6.13 The audit looked at the risk associated with prepayments entered into by the then GWEO Branch.³¹⁰ The audit selected a sample of 42 from the 120 prepayments current as at 31 January 2006 and found:

- Five instances where excessive prepayments (in dollar value or percentage prepaid) had been made without substantial benefit (discount or other compensation for the prepayment) to Defence.
- These five cases were not secured in accordance with DMO policy (e.g. financial securities, performance guarantees, substitution deeds.).

³⁰⁷ Department of Defence, Defence Materiel Organisation, Chief Executive Instructions, '2.4 Payment of Accounts', December 2008.

³⁰⁸ Defence Materiel Organisation, GWEO Standard Operating Procedure CDFIN-07, 'Management of Pre-Payments', 12 February 2007, para. 7, pp. 1-2.

³⁰⁹ Department of Defence, Management Audit Branch, 'Appropriateness of Explosive Ordnance Prepayments', September 2006.

³¹⁰ *ibid.*

- MAB assessed the outstanding risk for these five cases, representing about 30% of the dollar value of the sample, to present a high risk. MAB also found that 7 cases reviewed represented a medium level of risk with the remaining cases having a low level of risk.
- There were six prepayments where the prepayment had been secured by means of a letter of credit or bank guarantee or where a discount had been given to mitigate the cost or risks to the Commonwealth.
- Almost a third of the cases reviewed (12 of 42) were found not to be prepayments at the time of the audit.
- MAB was unable to determine if the vendor had shipped the product on the date agreed when the prepayment was made.³¹¹

6.14 The audit report noted that compliance with the GWEO Standard Operating Procedure (SOP) FIN-05, issued in July 2005, which reinforced the need for a business case to be prepared for each prepayment, would reduce the Commonwealth's exposure to prepayment risk.³¹² Due to the complexity of some aspects of this procedure, MAB did recommend that GWEO Branch staff be provided with assistance³¹³ to complete each business case and also recommended annual reviews of compliance with these procedures.³¹⁴ The ANAO requested that the DMO provide advice on the type of assistance staff have subsequently been provided to complete each business case and whether annual reviews have been undertaken to ensure compliance with the relevant procedures. In response the DMO provided the following advice in relation to the successor to the GWEO Branch, Munitions Branch:

As a result of the MAB audit of the appropriateness of explosive ordnance prepayments, briefings for the then GWEO staff were conducted in Feb/Mar 07 relating to the application of CD FIN-07 'Management of Prepayments' (this was a re-crafted prepayments SOP that was released after the MAB audit) ... No other formal assistance appears to have been provided to staff involved in generating prepayments.

There is no record of formal annual reviews having been undertaken to ensure compliance with prepayments procedures. However, completion of the

³¹¹ *ibid.*, p. 3.

³¹² *ibid.*, p. 4.

³¹³ Including providing a ready reckoner, templates and checklists, and training.

³¹⁴ Department of Defence, Management Audit Branch, 'Appropriateness of Explosive Ordnance Prepayments', September 2006, p. 4.

Certificate of Compliance³¹⁵ process validates that any identified prepayments have been authorised and managed in accordance with relevant policies and procedures.³¹⁶

6.15 The MAB audit report also noted that:

GWEO, after undertaking its own review of prepayments, had identified the need for process changes to improve the identification and reporting of prepayments. MAB supports the planned process changes.³¹⁷

Standard Operating Procedure for the management of prepayments

6.16 As noted in paragraph 6.6, GWEO Standard Operating Procedure (SOP) FIN-05, issued in July 2005 was revised in late 2006 to include a risk analysis in the business case for a prepayment, in line with Recommendation No.12 of the 2005–06 ANAO audit.³¹⁸ The revised procedure was introduced on 12 February 2007.

6.17 The prepayments SOP³¹⁹ provides ‘guidance and direction on prepayments’,³²⁰ specifically:

- a. When a prepayment is appropriate;

³¹⁵ The Finance Circular 2009/06 *Certificate of Compliance – FMA Act Agencies* states that: ‘All entities in the General Government Sector must report annually on the financial management and financial sustainability of the entity to the portfolio minister. Chief Executives must manage the affairs of their agency in a way that promotes the efficient, effective and ethical use of the Commonwealth resources for which they are responsible. Consistent with this responsibility is the role of seeking to ensure their agency complies with the relevant governing legislation and associated policies affecting the financial activities and sustainability of their agency. Chief Executives are required to provide a completed Certificate of Compliance ... to their portfolio minister and copied to the Minister for Finance and Deregulation (Finance Minister), by 15 October each year. The Department of Finance and Deregulation will prepare an aggregate analysis of annual Certificate results, to be tabled in Parliament. The first report will cover the 2008–09 reporting period.’ <http://www.finance.gov.au/publications/finance-circulars/2009/docs/FC_2008_06.pdf> [accessed 30 November 2009].

³¹⁶ Department of Defence, Request for Information, 2 November 2009, p. 8.

³¹⁷ Department of Defence, Management Audit Branch, ‘Appropriateness of Explosive Ordnance Prepayments’, September 2006, p. 4.

³¹⁸ Management Audit Branch ARMS database content for ANAO recommendation 12 indicates that in October 2006 Management Audit Branch reviewed the revised Standard Operating Procedure ‘Management of Prepayments’, including the associated revised business case template and concluded that the revised procedure met the requirements of the ANAO recommendation.

³¹⁹ Which is applicable to: GWEO staff involved in procurement activity where a prepayment is being considered as part of that procurement, or in the ongoing management of a contract in which a prepayment is made; the approving financial delegate; and the independent reviewer of the prepayment proposal. Source: Defence Materiel Organisation, GWEO Standard Operating Procedure CDFIN-07, ‘Management of Pre-Payments’, 12 February 2007.

³²⁰ Defence Materiel Organisation, GWEO Standard Operating Procedure CDFIN-07, ‘Management of Pre-Payments’, 12 February 2007, para. 1, p. 1.

- b. The records which must be created to justify a prepayment;
- c. The process for obtaining approval for prepayments; and
- d. The recording and ongoing management of prepayments.³²¹

Required supporting documentation for Army explosive ordnance prepayments

6.18 The ANAO selected a sample of 37 explosive ordnance prepayment balances as at 31 March 2009 related to Army from a listing of 74 provided by Munitions Branch. In selecting this sample, the ANAO removed all transactions where the purchase order date preceded February 2007, the date the revised prepayments procedure³²² was introduced. This sample of 37 represented some 97 per cent of the total number of prepayments on the list supplied by the DMO, with a purchase order date of post 12 February 2007, which still had an outstanding prepayment balance at 31 March 2009.³²³

6.19 In November 2009, the DMO informed the ANAO of the following in regard to the prepayments data discussed in paragraph 6.18:

- The prepayment data provided to ANAO was an extract of the prepayment report that is compiled each month by the Directorate of Asset and Inventory Management (DAIM). The DAIM process compares payments made out of ROMAN [Resource Output Management and Accounting Network]³²⁴ with receipts entered into COMSARM. Any payment that cannot be matched directly with a corresponding COMSARM receipt (or any transaction where there is a discrepancy between the payment and the value receipted into COMSARM) is registered automatically as a 'prepayment'. There are many examples where 'standard' procurements (i.e. those where the order of events is delivery, then invoice, then payment) are recorded as pre-payments due to the timing of the COMSARM receipt process.
- The sample of 37 explosive ordnance prepayments analysed by ANAO also included payments made with respect to specific procurements being undertaken through the US Foreign Military Sales (FMS) program, and from Thales Australia Ltd under the SAMS

³²¹ *ibid.*

³²² Noting that the requirement for a business case existed in the preceding version of the prepayment procedure which was introduced in 2005.

³²³ Note that potentially missing from the listing (and therefore the sample) are prepayments made after February 2007 but full delivery of goods received by 31 March 2009.

³²⁴ Defence's financial management information system.

Agreement. Munitions Branch does not regard payments made in advance of explosive ordnance receipt under either FMS or SAMS as a 'pre-payment'.

6.20 The DMO further informed the ANAO why the DMO does not regard payments made in advance of explosive ordnance receipt under either FMS arrangements or the SAMS Agreement as 'prepayments':

FMS. Under the Special Billing Arrangements that exist between the Australian and US Governments, a deposit payment of 50% of the administration fee is made for each case, on case acceptance. The US Government then draws regular (quarterly) rolled-up payments from an Australian Government FMS Account. In order to ensure a surplus of funds in the Australian FMS account that feeds this process, payment recommendations are issued against each case, based on the quarterly DMO FMS disbursement report. Given the unique (and very low risk) nature of the FMS system, these ongoing payments into the FMS Account are not considered to be 'prepayments', and a risk assessment is therefore not completed.

SAMS. Conditions in the long-term SAMS agreement allow Thales to propose milestone payments within the individual contracts that are raised to support specific procurements. When they are proposed, the DMO reviews and accepts the methodology for calculation, and the proposed milestones and associated payment schedule. These milestone payments are seen as advantageous in that they mitigate against Thales having to incur the additional cost of raising working capital.³²⁵ As these contracts are placed under the overriding SAMS Agreement individual risk assessments are not completed.³²⁶

6.21 The ANAO considers that it remains important that prepayments are only undertaken in circumstances where there is a clear benefit to the Commonwealth and risks are appropriately managed. The ANAO acknowledges that the DMO has limited capacity to alter payment arrangements under the FMS system and the SAMS Agreement³²⁷ which involve some level of prepayment. The ANAO also accepts that the substitute processes the DMO has indicated it has in place in relation to these purchases

³²⁵ Under the SAMS Agreement, in addition to the capability payment made to the contractor annually (some \$63 million in 2008–09), Defence pays for explosive ordnance items supplied by the contractor in accordance with the agreed schedule. These items are purchased at cost. Accordingly, should the contractor incur additional costs in relation to working capital those costs would be passed on to Defence in the price of the explosive ordnance items supplied under the SAMS Agreement.

³²⁶ Department of Defence, Attachment A: Request for Information, 2 November 2009, p. 10.

³²⁷ See paragraph 6.20 for details of these processes.

(outlined in paragraph 6.20), if properly applied, should provide the protection envisaged by Recommendation No.12 of the previous audit.

6.22 The DMO informed the ANAO that of the \$97.6 million for Army operations explosive ordnance expenditure for 2008–09, \$51.2 million represented prepayments made during 2008–09. The DMO further informed that the \$51.2 million includes FMS initial prepayments on case establishment and SAMS contracted milestone payments. The ANAO sought further clarification on the breakdown of the \$51.2 million in prepayments and was informed by the DMO that it was comprised of:

- \$0.7 million in SAMS contracted milestone prepayments;
- \$21.4 million in FMS prepayments; and
- \$29.2 million in prepayments for commercial purchases.

6.23 In this circumstance, some \$29.2 million of the prepayments made in 2008–09 were for purchases that were outside both the FMS system and the SAMS Agreement.

6.24 The DMO informed the ANAO that, of the \$29.18 million in prepayments for commercial purchases in 2008–09, only one transaction was a genuine prepayment. This was a \$28.55 million prepayment for 25 mm ammunition.³²⁸ The DMO provided the ANAO with supporting documentation and a copy of the risk assessment for this prepayment. The supporting documentation supplied by the DMO did not include all the required information as identified by the prepayment SOP. In particular it did not include a business case as required by the DMO's prepayment procedure nor did it include calculations required under the Finance Circular No. 2004/14 *Discounts for prepayment and early payment*. The Finance Circular states that:

To calculate the whole of government cost of the interest forgone in accepting the prepayment, agencies should use the Reserve Bank of Australia cash rate target. In addition, agencies need to take into account other costs and risks that may arise due to the prepayment.

6.25 Accordingly, there would be benefit in the DMO reviewing whether current practices give sufficient weight to the business benefits to the

³²⁸ DMO informed the ANAO that the remainder of the \$29.2 million, some \$0.6 million, represented a data mismatch due the receipting issues associated with COMSARM and ROMAN as outlined in paragraph 6.19.

Commonwealth of the DMO making such prepayments for explosive ordnance.

6.26 In February 2010, the DMO acknowledged and agreed that the current prepayment practices for explosive ordnance should be reviewed.

Standard contract payment requirements for future phases of Project JP 2085

Findings from the previous ANAO audit report

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.

Some of these prepayments were made for explosive ordnance to be delivered three years after the prepayment. In all but one case 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.

The ANAO made the following recommendation:

Recommendation No.13

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.

6.27 In May 2009, the DMO provided the following comments on progress made in implementing this recommendation:

This has been implemented for the remaining expenditures under JP 2085 Phase 1B, and will apply to following phases once approved.³²⁹

6.28 Recommendation No.13 from the previous ANAO audit report was signed off in the ARMS database on 25 October 2006. The comments against this recommendation in the ARMS database are included in Table 6.2.

³²⁹ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', 22 May 2009, Enclosure 1.

Table 6.2

Status of Recommendation No.13 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	25 October 2006	<p>GWEO Branch has in place a standard operating procedure that details the comprehensive requirements for a business case to substantiate any prepayments for explosive ordnance.</p> <p>JP 2085 Phase 2 and 3 has a year of decision of 2006–07. The DMO will work with Capability Systems and Service Sponsors to ensure that the proposed spend spread is aligned with standard contract payment requirements.</p> <p>Defence will comply with this recommendation during the implementation of Phases 2 and 3 of JP 2085 which are currently at the pre 1st pass stage. JP 2085 will bid for funds during the life of the project under AMCIP to align with standard contract payment requirements for the Annual Procurement Plan of the project.³³⁰</p>

6.29 The ANAO is **unable to assess** whether this recommendation has been implemented as Phases 2 and 3 of JP 2085, the project phases that follow Phase 1B, have yet to receive first or second pass approval from Government.

Alignment between budgeted and actual expenditure

Findings from the previous ANAO audit report

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.

The ANAO made the following recommendation:

Recommendation No.14

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.

³³⁰ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 13, 25 October 2006.

6.30 In May 2009, the DMO provided the following comments on progress made in implementing this recommendation:

The DMO has reviewed and tightened processes used to manage EO sustainment budgets. The disappointing performances reported in the 05/06 audit have been remediated by the introduction of a financial management tool (TMS) that aligns budget, actuals and commitment directly from ROMAN. A re-alignment of the SPO into functional groupings in late 2006 also concentrated on achieving timely contractual commitments. These initiatives, together with increased management attention through the MSA reporting process, have resulted in improvements in alignment between budgeted and actual spend. The budget achievement results for Army EO in the years since the audit have been: FY05/06 Budget \$132.8m, Achievement \$124.1 (93%); FY06/07 Budget \$101.9m, Achievement \$84.3 (83%); FY07/08 Budget \$134.7m, Achievement \$139.5 (104%).³³¹

6.31 Recommendation No.14 from the 2005–06 ANAO audit report was signed off in the ARMS database on 29 May 2007. The comments against this recommendation in the ARMS database are included in Table 6.3.

³³¹ Defence Materiel Organisation, 'ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit', 22 May 2009, Enclosure 1.

Table 6.3

Status of Recommendation No.14 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	29 May 2007	<p>In-year and future year budget and contract management processes have been analysed. Intra-Branch reorganisation and process review to achieve the required outcome has proceeded in advance of a formal organisational restructure and process re-engineering. However, due to resource constraints resulting from the requirement to service urgent Operational Demands, only limited reorganisation has been possible and, accordingly, limited progress in satisfying the recommendation has been achieved.</p> <p>The Closure Package has been reviewed (internally). The Package identifies the incorporation of procedural and structural changes to simplify the establishment of target stock levels in Material Sustainment Agreements, commence procurement planning well in advance of the budget year commencement (involving the solicitation of supplier advice to support tendering processes), and consolidate budget and contract management functions within responsible groups.³³²</p>

6.32 The ANAO has assessed this recommendation as **substantially implemented**. The following sections discuss issues in 2005–06 and 2007–08 that have been addressed to the extent that the DMO achieved substantially improved performance in relation to budget versus actual expenditure in 2007–08 for all categories of explosive ordnance expenditure for Army. However, the ANAO notes that there is ongoing reform in the area of financial management and reporting of explosive ordnance budgets in Explosive Ordnance Division. This is discussed further in paragraphs 6.41 to 6.43.

³³² Department of Defence, Management Audit Branch, ARMS Database, Recommendation 14, 29 May 2007.

Budget versus actual expenditure in 2005–06 and 2007–08

6.33 In each of the 2005–06 and 2007–08 financial years the total expenditure on explosive ordnance for Army advised by the DMO is within 10 per cent of budget. However, the ANAO notes that expenditure and variance figures provided in the DMO's comments above, particularly in relation to 2005–06 and 2006–07, are skewed by the results related to the logistics shortfall³³³ and operational funding components of the Army explosive ordnance budget. The effect of these skewed results is illustrated in Table 6.4 and Table 6.6.

Table 6.4

Explosive ordnance (Army) 2005–06 budget versus actual expenditure^A

Component	Budget	Actual	Variance (- underspend / + overspend)	
Logistics shortfall	\$0m ^B	\$48.7m	\$48.7m	100%
Operations	\$16.2m	\$5.5m	-\$10.7m	-66%
Raise, Train, Sustain	\$116.6m	\$69.9m	-\$46.7m	-40%
Total	\$132.8m	\$124.1m	-\$8.7m	-7%

Note:

A: Data is prepared on a cash not accrual basis.

B: The DMO informed the ANAO that Logistics Shortfall budget for 2005–06 was not attributed to a particular Service though expenditure was.

Source: The DMO

6.34 If the effect of the logistics shortfall component of the explosive ordnance budget for Army is removed from the 2005–06 figures and only the operations and Raise, Train, Sustain components are considered, the total explosive ordnance expenditure for Army for that year is \$75.4 million resulting in an underspend of \$57.4 million, or 43 per cent of the budget, as illustrated in Table 6.5.

³³³ Logistics shortfall funding was provided to remediate identified deficiencies in explosive ordnance stock levels commencing in 2004–05. The final allocation of approved explosive ordnance logistic shortfall funding was made in 2008–09.

Table 6.5**Explosive ordnance (Army) 2005–06 budget versus actual expenditure – operations and Raise, Train, Sustain components**

Component	Budget	Actual	Variance (- underspend / + overspend)	
Operations	\$16.2m	\$5.5m	-\$10.7m	-66%
Raise, Train, Sustain	\$116.6m	\$69.9m	-\$46.7m	-40%
Total	\$132.8m	\$75.4m	-\$57.4m	-43%

Note: Data is prepared on a cash not accrual basis.

Source: The DMO

Table 6.6**Explosive ordnance (Army) 2006–07 budget versus actual expenditure**

Component	Budget	Actual	Variance (- underspend / + overspend)	
Logistics shortfall	\$48.7m	\$40.3m	-\$8.4m	-17%
Operations	\$1.3m	\$10.9m	\$9.6m	739%
Raise, Train, Sustain	\$51.9m	\$33.2m	-\$18.7m	-36%
Total	\$101.9m	\$84.4m	-\$17.5m	-17%

Note: Data is prepared on a cash not accrual basis.

Source: The DMO

6.35 Table 6.4, Table 6.5 and Table 6.6 show that there are significant variations between the budget and expenditure for the major components of the Army explosive ordnance budget for 2005–06 and 2006–07.

Budget versus actual expenditure in 2007–08

6.36 The variances between budget and actual expenditure in 2007–08 were significantly smaller ranging from a two per cent overspend in the Raise, Train, Sustain component of the Army explosive ordnance budget to a seven per cent overspend in the operational component. Similarly, as shown in Table 6.7 the variances between budget and actual expenditure for the various components of the Army explosive ordnance budget for 2008–09 have been reduced.

Table 6.7**Explosive ordnance (Army) 2008–09 budget versus actual expenditure**

Component	Budget	Actual	Variance (- underspend / + overspend)	
Enhanced Land Force	\$5.2m	\$5.2m	\$0m	
Logistics Shortfall	\$51.0m	\$51.4m	\$0.4m	1%
Operations	\$104.6m	\$97.6m	-\$7.0m	-7%
Raise, Train, Sustain	\$84.6m	\$84.1m	-\$0.5m	1%
Total	\$245.4m	\$238.3m	-\$7.1m	-3%

Note: Data is prepared on a cash not accrual basis.

Source: The DMO

6.37 The ANAO sought to reconcile the issues raised by Defence and the DMO in paragraph 3.54 in relation to operations supplementation funding with the expenditure for Army operations for 2008–09 as represented Table 6.7. As discussed in paragraph 6.22, the DMO informed the ANAO that of the \$97.6 million for Army operations explosive ordnance expenditure for 2008–09, \$51.2 million represented prepayments made during 2008–09.

Review the effectiveness of internal control arrangements

Findings from the previous ANAO audit report

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.

The primary factor identified by the GWEO Branch as contributing to this variance was a discrepancy between Defence's General Ledger system, (ROMAN) and its explosive ordnance inventory management system, (COMSARM). In 2003–04, the DMO informed the ANAO that it would develop supplementary controls over the systems to ensure that explosive ordnance prepayment discrepancies between ROMAN and COMSARM were corrected.

The ANAO made the following recommendation:

Recommendation No.15

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.

6.38 Recommendation No.15 from the previous ANAO audit report was signed off in the ARMS database on 27 September 2006. The comments against this recommendation in the ARMS database are included in Table 6.8.

Table 6.8

Status of Recommendation No.15 from ANAO Audit Report No.40 2005–06 in the ARMS database

Status of recommendation in ARMS	Date actioned	Comments on status from ARMS
Closed	27 September 2006	Reconciliations are appropriately completed. ANAO reviewed documentation in their financial statements 2006 audit and indicated that they are produced to acceptable standards. MAB has reviewed the closure pack and agrees this recommendation can be closed. ³³⁴

6.39 In May 2009, the DMO advised the following in respect of action taken to implement Recommendation No.15:

A process has been established whereby Defence Asset and Inventory Management Branch reviews and reconciles all EO Inventory related Balance Sheet Accounts. This external reconciliation of GWEO/Munitions Branch transactions is undertaken on a monthly basis and signed off by a supervising officer.³³⁵

6.40 The ANAO has assessed this recommendation as **implementation complete**. The ANAO found that reconciliations between COMSARM and ROMAN are being completed and signed off on a timely basis. However, the ANAO notes that financial management and reporting for explosive ordnance are the subject of a number of the Explosive Ordnance Division’s reviews and reform initiatives. This is discussed further in the section below.

³³⁴ Department of Defence, Management Audit Branch, ARMS Database, Recommendation 15, 27 September 2006.

³³⁵ Defence Materiel Organisation, ‘ANAO performance audit of explosive ordnance procurement: Status of the implementation of the recommendations arising from the 2005–06 audit’, 22 May 2009, Enclosure 1.

Subsequent developments in financial management

Accurate Monthly Financial Reporting Initiative

6.41 As discussed in Chapter 2, Explosive Ordnance Division is undertaking a number of reform initiatives as part of the Explosive Ordnance Transformation Program. As outlined in Table 2.4, one of the reform initiatives is the Accurate Monthly Financial Reporting initiative that aims to:

- improve commentary on financial reporting;
- improve reporting against prepayments;
- include explanations of deviations in monthly financial reporting;
- develop and manage budgets on an accruals basis; and
- introduce other improvements including FMAR 10 compliance and improvements to the reconciliation process.³³⁶

6.42 Explosive Ordnance Division manages their budget for explosive ordnance on a cash basis. The accruals reform, being undertaken as part of the Accurate Monthly Financial Reporting initiative, aims to align and operate all of Explosive Ordnance Division's budget management and reporting on an accrual basis.

6.43 The DMO informed the ANAO in November 2009 that there has been a schedule slip in the Accurate Monthly Financial Reporting initiative due to the complexity of reconciliation activities and lack of staff knowledge due to staff turnover.

Review of Munitions Branch Procurement Practices (2009)

6.44 A recent internal review of procurement practices³³⁷ identified a number of less than adequate practices in relation to financial management within Munitions Branch.

³³⁶ Regulation 10 of the *Financial Management and Accountability Regulations 1997* relates to the approval of future spending proposals and provides that, if any of the expenditure under a spending proposal is expenditure for which an appropriation of money is not authorised by the provisions of an existing law or a proposed law that is before the Parliament, an approver must not approve the proposal unless the Finance Minister (or delegate) has given written authorisation for the approval.

³³⁷ Department of Defence, Defence Materiel Organisation, 'Conclusion Report – Review of Munitions Branch Procurement Practices', 30 January 2009.

6.45 The review conducted by the DMO's Procurement and Contracting Branch (PCB) of Munitions Branch's procurement practices in January 2009 reported four key findings (listed in paragraph 5.85) and nine recommendations.³³⁸

6.46 The review identified a 'number of potential breaches of the Commonwealth and Defence financial management and accountability framework'.³³⁹ The potential breaches identified, occurring during the period 2005 to 2008, included instances such as a Request for Tender being issued prior to Procurement Approval delegation being exercised, no Contract Approval being sought for a change in contract price, no evidence of FMA Regulation 10 Approval, and no Procurement or Contract Approval.

6.47 The report made nine recommendations focusing on delegations, contract and business acumen training for staff; development of checklists and SOPs for the Business Management Unit within Munitions Branch; involvement of the PCB in procurement activities; establishment of a current contracts register; updating contracting templates; mandatory use of the DMO's Financial Investigation Service to validate prices; greater use of competitive processes, better coordination between Munitions Branch units and with their ADF customers; and use of internal and external legal support.³⁴⁰

6.48 The Head Explosive Ordnance Division (HEOD) accepted the findings of the report on 11 February 2009 and requested an action plan and monthly progress reports from the Director General of Munitions Branch, Explosive Ordnance Division.³⁴¹

6.49 The Munitions Branch completed a 'Procurement Remediation Action Plan' on 30 March 2009 and advised HEOD that monthly reporting on progress would commence as of the end of April 2009.³⁴² The first progress report was provided to HEOD by Munitions Branch on 11 May 2009 and reported the

³³⁸ *ibid.*

³³⁹ The report listed 38 specific instances of potential breaches. Source: Department of Defence, Defence Materiel Organisation, 'Conclusion Report – Review of Munitions Branch Procurement Practices', 30 January 2009, SCCEO/OUT/2009/6, covering minute to Head Explosive Ordnance Division (HEOD).

³⁴⁰ Department of Defence, Defence Materiel Organisation, 'Conclusion Report – Review of Munitions Branch Procurement Practices', 30 January 2009, SCCEO/OUT/2009/6, Annex B, pp. 4-11.

³⁴¹ HEOD/OUT/2009/006, 'Review of Munitions Branch Procurement Practices', 11 February 2009.

³⁴² MUNITIONS/OUT/20091174, Review of Munitions Branch Procurement Practices', 30 March 2009.

majority of remediation activities as being underway and expected to be completed by 30 June 2009.³⁴³

6.50 The final progress report, dated 31 August 2009, identifies 13 of the 23 action plan activities as complete, two of the action plan activities as partially complete and the remainder ongoing. This progress report noted that: 'the critical items are closed and only the ongoing items are being captured as part of normal business'.³⁴⁴ A follow-up internal review of Munitions Branch procurement practices is planned for early 2010 to assure the efficacy of the remedial actions.

Strategic Reform Program

6.51 As noted in paragraph 3.69, the Government is seeking to derive substantial savings through the Strategic Reform Program (SRP)³⁴⁵ to fund necessary investments in Defence. Over the ten years to 2019, Defence aims to deliver through the Strategic Reform Program gross savings of around \$20 billion.

6.52 The DMO's contribution to the overall SRP is entitled the Smart Sustainment Program which focuses on three related elements namely maintenance reform, inventory reform and non-equipment reforms related to explosive ordnance, clothing and fuel. Specific savings related to explosive ordnance under the Smart Sustainment Program have been identified in two of these areas: non-equipment procurement and inventory management. In total \$180.2 million has been identified to be saved over the 10 year time-frame of the SRP, with the savings target for non-equipment procurement expected to be \$132.2 million, and the savings to be achieved through the reduction in excess holdings of explosive ordnance inventory expected to be \$48.0 million. The DMO informed the ANAO in January 2010 that 'while the total savings

³⁴³ MUNITIONS/OUT/2009/269, 'Munitions Branch Procurement Remediation Action Plan, Progress Report as at 30 Apr 09', 11 May 2009.

³⁴⁴ MUNITIONS/OUT/2009/829 - Munitions Branch Procurement Remediation Action Plan: Progress Report as at 31 August 2009.

³⁴⁵ Defence's Strategic Reform Program brings together the work of the Defence White Paper 2009 and other key reviews including the 2008 Audit of the Defence Budget, with the aim to 'create the efficient and accountable Defence organisation required to deliver and sustain Force 2030 within the funding envelope agreed by Government'. Department of Defence, *The Strategic Reform Program: Delivering Force 2030*, p. 3, 2009. <<http://www.defence.gov.au/publications/reformbooklet.pdf>> [accessed 14 September 2009].

targets have been agreed, their phasing over the 10 year SRP period is still under review and negotiation with the Services’.

6.53 As discussed in the earlier chapters of this report, at the time of the 2005–06 ANAO audit, it was apparent that there was opportunity for improvement in a variety of areas including consumption forecasting, procurement planning and inventory, contractual and financial management. Since the last audit, there has been a focus on many of these areas and while the understanding of these issues has improved, the delivery of lasting reforms is substantially still a work in progress with many of the required improvements yet to be delivered.

6.54 As identified in the *2008 Audit of the Defence Budget* and other work by Defence, there are clear opportunities to derive savings in the explosive domain. These savings need not be at the expense of capability but rather as a result of improvements in explosive ordnance management practices within Defence and the DMO. While some savings may be realisable in the short-term, there are likely to be costs associated with past explosive ordnance management practices that will continue to be incurred into the future including rebalancing inventory, addressing serviceability and personnel issues and ongoing payments under domestic manufacturing arrangements.



Ian McPhee

Auditor-General

Canberra ACT

10 March 2010

Appendices

Appendix 1: Defence and DMO Summary Comments

Defence welcomes the ANAO audit report on *Procurement of Explosive Ordnance for the ADF* which examined the effectiveness of Defence and DMO's management of procurement and through life support arrangements to meet the explosive ordnance requirements of the ADF. In particular this report reviewed the progress of Defence in implementing the recommendations of Audit Report ANAO 2005-06 of *Procurement of Explosive Ordnance for the Australian Defence Force (Army)*.

The procurement and through-life support of explosive ordnance is a complex process and Defence has implemented considerable changes following the ANAO's 2005-06 report. However, Defence accepts that reform must continue and agrees with the two recommendations in the audit.

Table A 1

Defence and DMO Response to Recommendations

No.	ANAO Recommendation	Defence and DMO Response
1	The ANAO recommends that Defence and the DMO develop processes for consolidating explosive ordnance inventory requirements of all stakeholders, at an appropriate level, to facilitate efforts to optimise explosive ordnance inventory holdings from both a capability and value for money perspective.	Agreed
2	<p>The ANAO recommends that Defence undertake a strategic review of domestic manufacturing arrangements to:</p> <ul style="list-style-type: none"> • evaluate the extent that value for money can be achieved from existing arrangements; and • determine the ongoing viability of investment in domestic manufacturing capabilities. 	Agreed

Source: Defence and DMO.

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