The Parliament of the Commonwealth of Australia

Land Engineering Agency Test Services Relocation, Monegeetta, Victoria

Parliamentary Standing Committee on Public Works

March 2008 Canberra

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Research Officer Ms Penny Wijnberg

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Ms Jessica Butler

List of acronyms

AEPL Automotive and Electrical Performance Laboratory

ATS Accredited Test Services

DMO Defence Materiel Organisation

DSM Defence Site Maribyrnong

ECC Environmental Clearance Certificate

ECL Electronics and Communications Laboratory

EDF Explosives Development Facility

ELAF Enclosed Light Armament Factory

EPBC Act Environment Protection and Biodiversity Conservation Act

ESD Ecologically Sustainable Development

LCS Land Combat Systems

LEA Land Engineering Agency

LSD Land Systems Division

MEL Mechanical and Environmental Laboratory

POL Petrols Oils and Lubricants

PWC Public Works Committee

List of recommendations

3 Issues and Conclusions

Recommendation 1

The Committee recommends that the proposed Land Engineering Agency Test Services Relocation, Monegeetta proceed at an estimated cost of \$35.9 million

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Introduction

- 1.1 The Land Engineering Agency Test Services Relocation, Monegeetta, Victoria, was referred to the Public Works Committee (PWC) of the 41st Parliament on 31 May 2007. The Committee had completed the inquiry process and adopted its report but did not table the report prior to the dissolution of the Parliament. ¹ The referral therefore lapsed.
- 1.2 The Land Engineering Agency Test Services Relocation, Monegeetta, Victoria, was referred to the PWC of the 42nd Parliament on 13 March 2008. This Committee decided not to repeat the inquiry process as it was advised by the Department of Defence that there had been no significant changes to the works since the original referral. Evidence taken on this inquiry is available on the Committee's website.²
- 1.3 This Committee has resolved to adopt the report as adopted by the PWC of the 41st Parliament without amendment. The following chapters are the report as adopted by the PWC of the 41st Parliament. Therefore any references to 'the Committee' in Chapters 2 to 4 refer to the PWC of the 41st Parliament.

¹ In accordance with s.7 (a) of the Public Works Committee Act 1969 (the PWC Act), members of the Parliamentary Standing Committee on Public Works of the 41st Parliament ceased to hold membership of the Committee on Wednesday 17 October 2007 when the Parliament dissolved for the general election held on Saturday 24 November 2007.

^{2 &}lt;www.aph.gov.au/pwc>

1.4 The Committee thanks the former Chair, the Hon Judi Moylan MP and the members of the PWC of the 41st Parliament for their time and expertise in conducting the inquiry.

Introduction - Report of the Public Works Committee of the 41st Parliament

Referral of Work

- 2.1 On 31 May 2007 a proposal for Land Engineering Agency Test Services Relocation, Monegeetta, Victoria, was referred to the Public Works Committee for consideration and report to the Parliament in accordance with the provisions of the *Public Works Committee Act 1969* (the Act). The proponent agency for this work is the Department of Defence.
- 2.2 The Hon Peter Lindsay MP, Parliamentary Secretary to the Minister for Defence, informed the House that the estimated cost of the proposed work was \$35.9 million excluding GST. Subject to parliamentary approval construction could commence in early 2008 with completion in mid-2009.

Background

2.3 The Land Engineering Agency (LEA) is one of the four main business units of Land Systems Division (LSD) within Defence Materiel

¹ Extract from the Votes and Proceedings of the House of Representatives, No. 175, Thursday 31 May 2007.

Organisation (DMO), and has responsibility to ensure the technical integrity of equipment and hardware, including vehicles of all description, weapons and tools, described by defence as land materiel. LEA testing and evaluation activities at Maribyrnong are conducted by two operational divisions:

- Land Combat Systems (LCS); and
- Accredited Test Services (ATS).²

Land Combat Systems

- 2.4 LCS provides a test and evaluation capability for small arms and ammunition including safety assessment, acquisition support, reports on defective or unserviceable materiel and provision of technical advice. LCS has technical and engineering expertise in the core technologies associated with Fire Support Systems including:
 - large calibre weapons systems;
 - small arms weapons systems;
 - ballistic performance and range safety; and
 - explosive ordnance systems.³

Accredited Test Services

- 2.5 ATS provides test and evaluation capability for electronic, mechanical, and environmental evaluation of large scale land materiel. It also supports LCS activities with test measurement. ATS also currently undertakes testing activities at Monegeetta, at its Automotive and Electrical Performance Laboratory (AEPL).
- 2.6 ATS is responsible for providing performance measurement and environmental testing encompassing communications, electrical, electrooptics, electromagnetic environmental effects, mechanical tests, environmental and vehicle tests. ATS activities currently undertaken at Maribyrnong are organised within two broad business units:
 - Electronics and Communications Laboratory (ECL); and
 - Mechanical and Environmental Laboratory (MEL).⁴

² Submission No. 1, paragraphs 9-10.

³ ibid., paragraphs 11-12.

⁴ ibid., paragraphs 14-15.

Site of Proposed Works

2.7 The site of the proposed infrastructure development is confined to the existing defence site (Monegeetta Proving Grounds) at Monegeetta, Victoria, which is located in the Macedon Ranges Shire approximately 55 kilometres from Melbourne's central business district.⁵

Inquiry Process

- 2.8 The Committee is required by the Act to consider public works over \$15 million⁶ and 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.⁷
- 2.9 The Committee called for submissions by advertising the inquiry in *The Weekend Australian* and *The Age* on Saturday, 9 June 2007. The Committee also sought submissions from relevant government agencies, local government, private organisations and individuals, who may be materially affected by or have an interest in the proposed work. The Committee subsequently placed submissions and other information relating to the inquiry on its web site in order to encourage further public participation.

Inspection and Hearing

2.10 On Friday 7 September 2007, the Committee inspected the site and environs of the proposed works. A confidential hearing by officers of the

⁵ Submission No. 1, paragraph 17.

⁶ Public Works Committee Act 1969, Part III, Section 18 (8).

⁷ ibid., Section 17.

Department of Defence and a public hearing were held at Monegeetta later that day.⁸

⁸ See <www.aph.gov.au/pwc> for the official Hansard transcript of evidence taken by the Committee at the public hearing on Wednesday, 25 July 2007 at Monegeetta, Victoria.

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The Proposed Works

Purpose

3.1 The purpose of the proposed works is to relocate the Land Engineering Agency (LEA) Test Services from Defence Site Maribyrnong (DSM) to the Monegeetta Proving Ground. The Maribyrnong site has been identified as surplus to Defence and Commonwealth Government requirements and is to be disposed of once all units currently located at the site have been relocated, which in the case of LEA, will be following construction on the site at Monegeetta.¹

Need

3.2 The need for the proposed works arises from the decision to dispose of the former site used by the LEA at Maribyrnong, and the opportunity to locate the LEA at one site rather than two which has previously been the case. Further, the relocation of the LEA from its former site in Maribyrnong will hasten the disposal of the DSM property when works at Monegeetta have been completed.²

¹ Submission No. 1, paragraphs 1, 2, 6.

² ibid., paragraphs 6-7.

Scope

3.3 Defence submitted that the proposed works will include new facilities; refurbishment of existing facilities; and upgrade to site infrastructure.

New Facilities

- 3.4 New facilities include:
 - construction of a new Enclosed Light Armaments Facility (ELAF) to accommodate LCS functions. The ELAF will provide floor space of approximately 920 square metres including:
 - ⇒ a magazine and armoury; and
 - ⇒ two fully enclosed firing tunnels (25 metres long and 100 metres long).
 - construction of a new laboratory, workshop, and administration building of approximately 4,730 square metres to support Accredited Test Services (ATS) functions. This building will include:
 - ⇒ an Electronic and Communications Laboratory (ECL) providing: Electro-Optics capability; Electro-Magnetic Compatibility chambers; and Electrical Testing and Calibration; and
 - ⇒ a Mechanical and Environmental Laboratory (MEL) providing: large climatic chamber; large cold chamber; small climatic chambers; mechanical calibration facility; heavy vibration test facility; and static and dynamic displacement and force measurement testing facility; and driving rain simulation facility.
 - construction of a new Petrols, Oils and Lubricants (POL) store.³

Refurbishment of Existing Facilities

- 3.5 Modifications to the existing headquarters building includes:
 - accommodating new communications and security facilities; and
 - providing disabled access through construction of a new ramp and entry.⁴

³ Submission No. 1, paragraph 43.

⁴ ibid.

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Site Infrastructure Upgrade

3.6 The existing site infrastructure requires upgrade to support the additional facilities. The infrastructure works includes:

- a minor upgrade of the storm water and sewer services;
- separating the domestic water supply to provide a dedicated fire service as required by the Country Fire Authority;
- installing a new substation to meet the increased power demand;
- constructing roads to new buildings; and
- landscaping.⁵

Project Delivery

- 3.7 A head contract delivery system is proposed for this project. According to Defence, this form of delivery is particularly well suited to projects where the scope is well defined and works can be constructed unhindered by operational constraints. Specialist sub-contractors will be identified for the supply of specialised equipment.⁶
- 3.8 A project manager has been appointed to represent Defence and act as contract administrator for development of the project. A designer has been appointed to prepare designs and, subject to parliamentary clearance of the project, will finalise the design documentation and undertake inspection services during the construction phase.⁷

⁵ Submission No. 1, paragraph 43.

⁶ ibid., paragraph 86.

⁷ ibid., paragraphs 86-87.

Issues and Conclusions

Background

- 4.1 Defence described the purpose of the proposed works as being to provide an overall infrastructure solution for Land Engineering Agency (LEA) test services.¹ It is proposed to relocate the existing test services facility from Defence Site Maribyrnong (DSM) which is surplus to Defence requirements and will be disposed of at some time in the near future.²
- 4.2 The LEA comes under the umbrella of the Defence Materiel Organisation and is responsible for ensuring the technical integrity of the land combat capability in support of Defence, and the Army in particular. The Agency's facilities that support its test and evaluation capabilities do not exist elsewhere in Australia. Monegeetta was selected as the preferred site to relocate the LEA, having the necessary range of facilities to support its role and functions, including the Monegeetta Proving Ground that complements the activities of the LEA at the DSM; the long-term retention of Monegeetta within the strategic plan for the defence estate, and its proximity to Melbourne.³

¹ Official Transcript of Evidence, page 2.

² Statement of Evidence, Submission No. 1, paragraph 2.

³ Official Transcript of Evidence, page 2.

- 4.3 The Committee expressed interest in the reasons for the decision to dispose of the DSM, particularly as to whether the decision was initiated by the Department of Finance and Administration or by the Department of Defence.
- According to the LEA witness, the decision to dispose of the DSM had its genesis in the late 1980s as part of the Cooksey Review. This Review which included a total review of Defence facilities recommended *inter alia* the early closure of what was then the Maribyrnong explosives factory that led to the removal of elements of the explosives factory in the early 1990s. The Defence Science and Technology Organisation that was also located on the same site has been relocated in recent years, leaving the LEA as the sole occupant of a 127 hectare site. With the decision to relocate the Agency to Monegeetta, the DSM will, subject to the undertaking of appropriate remediation works be freed up for disposal.⁴
- 4.5 The Committee referred to the remediation of soil contamination at Randwick Barracks, noting the ongoing problems associated with these works, and asked what remediation works would be required at the DSM prior to disposal.
- 4.6 Defence responded that given the history of the site as including a former explosives factory, Maribyrnong is heavily contaminated in a number of areas, and that significant land remediation will need to occur. In preparation for these works, Defence stated that it was in discussion with the Victorian Government and the Victorian Environmental Protection Agency as to how the works could be advanced. The department estimated that it would cost 'millions of dollars' for these works, and that they would be referred to the Public Works Committee in due course.⁵

Tender Process

- 4.7 According to its Statement of Evidence at paragraph 86, the method of delivery for the project will be by Head of Contract. A Project Manager has been appointed to represent the department and act as contract administrator for the development of the project.⁶
- 4.8 To clarify the tender process followed by Defence, the Committee asked the department witness to describe how the tender process operated.

⁴ ibid., page 3.

⁵ loc. cit.

⁶ Submission 1, paragraph 87.

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4.9 The Defence witness described the current tender process as the preapproval phase. This involved developing the main elements of the project – scope, budget and schedule – with a view to arriving at a final estimated project cost that includes estimates of risks built into the escalation and design contingency elements of the project's estimated budget.⁷

- 4.10 In the case of the current project that will be based on a Head Contract arrangement, the project estimate will be refined into a pre-tender estimate, broken down into the integral component elements of the project that in turn will be used to evaluate different tenders when they are submitted by tenderers.⁸
- 4.11 Defence informed the Committee that it had established a panel of ten companies from which it selected, again on a tender basis, the Project Manager/Contract Administrator for projects that will be addressed under the Head Contract arrangement. According to Defence:

The panel's purpose is to provide...professional services. We engage them at the start of the project and we engage them, generally speaking for the whole project. When we go to tender, in this case it is for the Head Contractor to do the construction work....We do not have a panel for construction services; we have to go to open tender.⁹

Options

- 4.12 In deciding that Monegeetta was the preferred site for the relocation of the LEA, the Committee enquired whether other sites had been assessed and if so where were these located.
- 4.13 The Defence witness informed the Committee that a number of other sites had been looked at for their suitability as alternative sites for the LEA. These included continuing to use part of Maribyrnong; Fishermens Bend, another area with Defence zones; Ballarat; Geelong which has existing Defence establishments; Simpson Barracks, Watsonia; Puckapunyal; Crows Nest; Queenscliff; Portsea, and a number of other places including Defence establishments in the Melbourne CBD.¹⁰

⁷ Official Transcript of Evidence, page 3

⁸ ibid., page 4

⁹ loc. cit.

¹⁰ ibid, page 5

- 4.14 However the key criterion was the opportunity to integrate the services provided by the LEA with others. From this perspective, Monegeetta offered the most attractive solution because of the considerable advantages of bringing the activities of the LEA and those undertaken at Monegeetta together.¹¹
- 4.15 In response to the Committee's question as to why Victoria was preferred over sites in other States, the witness informed the Committee that the Headquarters of the LEA is located in Melbourne. Some 500 staff are employed at that location, and only 75 personnel are employed at four locations outside Melbourne Maribyrnong, Monegeetta, Laverton North and Bandiana North. According to Defence, the focus of the agency's operations and those of its parent organisation is Victorian oriented, including liaison with industry, and the prospect of moving the entire operations of the DMO would not be cost effective.¹²

Master Planning

- 4.16 The Committee sought assurances from Defence that the work being undertaken at by the LEA at Monegeetta would have a long term future.
- 4.17 Defence responded that:

...this site that we see here today, including the proving ground...has a long-term future as part of the Defence Materiel Organisation's capability to test and deliver equipment to the ADF in general but, in this case, to the Army in particular. I am certainly not aware...that there is any current prospect or plan to change what we do here at Monegeetta.¹³

- 4.18 According to Defence, the current proposal is based on it having a life-span of 30 years. In support of this, the department made mention of the number of rigorous reviews over the last ten years that had been undertaken into the activities of the LEA, and that so far as the department has been able to ascertain no further reviews of the role and functions of the LEA is anticipated.¹⁴
- 4.19 The Committee enquired as to whether evolving technologies had been considered in considering the current project, and whether the proposed

¹¹ loc. cit.

¹² loc. cit.

¹³ ibid., page 7.

¹⁴ loc. cit.

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works could adapt to these, particularly against the background of value for money.

- 4.20 The witness responded that as far as practicable, all factors are taken into account when it comes to the design of buildings. According to Defence, in the case of the current project, a number of design reviews were undertaken, together with a value management process to work out the detailed design of particular parts of buildings. Because the proposed facility has some unique requirements, the design has incorporated elements of flexibility to provide the opportunity to adapt it to meet changing circumstances. These include open truss arrangements, and partitioning that is capable of being moved to other configurations, or being removed entirely should circumstances warrant.¹⁵
- 4.21 The witness also stated that in developing the design works, the Defence Capability Plan was used as a guide in order to determine what items of equipment will need to be tested in the future.¹⁶

Consultations

- 4.22 On the matter of staff consultations, the Committee sought comment from Defence on the extent of staff involvement with the new facilities, particularly since the new arrangements involving the relocation of staff from the DSM to Monegeetta may impact on staff conditions.
- 4.23 According to Defence there had been discussions with staff related to the relocation from Maribyrnong to Monegeetta. The department reminded the Committee that the number of staff involved was small some 25. During the course of the consultative process 17 staff indicated that they would be happy to move to the new site. Of the remaining eight, some of those will be retiring during the period between construction and occupancy of the facility. To restore the numbers of people employed at Monegeetta, the department will be canvassing the local employment market with the view to employing people from the local community.¹⁷
- 4.24 The Committee enquired as to the extent of consultations with the local community particularly those with the local council.
- 4.25 According to the Defence witness, consultations have been held with the Federal Members for Maribyrnong and McEwen, and the State Members

¹⁵ ibid., page 8.

¹⁶ ibid., page 9.

¹⁷ loc. cit.

- for Macedon and the Western Metropolitan region. Consultations have also been conducted with the Mayor of Monegeetta, the local Aboriginal association, the Australian Greenhouse Office, the Country Fire Authority, the Macedon Ranges Shire Council, Western Water, and other service providers.
- 4.26 Defence is of the opinion that the proposed works have been favourably received. Two neighbours immediately adjacent to Monegeetta have also been consulted. One expressing satisfaction with the project, the other is yet to be convinced of the value of the project. This latter situation has emerged largely as a result of that landholder being absent; however, Defence have recently had a meeting with him, and is confident because of the good relationship existing between he and Defence any outstanding issues can be resolved.¹⁸

Re-use of Storm Water

- 4.27 The Committee sought clarification that water collected from the main would flow into a testing pond and that other water collection points would be used internally and for fire fighting.
- 4.28 Defence explained that the current water reticulation system was dual purpose providing potable water to taps and other outlets around the site, as well providing 'fire services water'. As part of the new development, the water system would be split to provide a potable drinking water supply and a separate system for fire fighting. This was a requirement identified by the Country Fire Authority as part of the overall fire protection measures being installed as part of the current project, or that currently exist.

Energy Efficiency

- 4.29 Clarification was sought by the Committee of the term 'separate digital on marketing status metering' referred to in the department's Submission.
- 4.30 Defence explained that this referred to the installation of intelligent metering of buildings. These new metres provide a range of information associated with the use of energy consumed by buildings. They provide information as to energy demand and consumption, providing useful information in terms of peak demand. The installation of intelligent

metres will allow greater energy efficiency, and contribute to savings on energy costs.¹⁹

Project Costs

- 4.31 The Committee is being asked to consider an estimated cost of this project of \$35.9 million that includes:
 - all construction costs;
 - professional fees;
 - furniture and fittings; and,
 - contingencies.

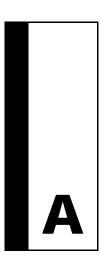
Recommendation 1

The Committee recommends that the proposed Land Engineering Agency Test Services Relocation, Monegeetta proceed at an estimated cost of \$35.9 million

Mark Butler MP

Chair

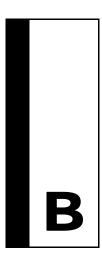
17 March 2008



Appendix A - List of Submissions

Submissions

1. Department of Defence



Appendix B - List of Witnesses

AITKEN, Mr Shane Peter, Director, Prototype and Test Services, Land Engineering Agency, Department of Defence

FRENCH, Mr David John, Director, Property Disposals, Department of Defence

McDONALD, Mr Adam John, Project Manager, Sinclair Knight Merz

McGRATH, Mr Alan Leslie, Executive Director, Infrastructure Asset Development, Department of Defence

TAMPI, Mr Vijay, Project Director, Victoria, Department of Defence