# Proposed Defence Logistics Transformation Program

- 3.1 The Department of Defence (Defence) proposes to consolidate Joint Logistics Command staff and storage facilities across Australia to provide more efficient logistic support to Australian Defence Force personnel.
- 3.2 The purpose of the Defence Logistics Transformation Program (DLTP) is to deliver new or refurbished purpose-built infrastructure that enables the seven Joint Logistics Command units to provide enhanced support to Australian Defence Force elements and operations. This will provide consistency across all sites, with safe modern and sustainable work environments that meet current and anticipated future requirements.<sup>1</sup>
- 3.3 The DLTP will modernise and enhance the wholesale logistics functions to provide optimum support to Defence operations through efficient, effective and safe work practices.<sup>2</sup>
- 3.4 The cost of the project is \$752.7 million, excluding GST.
- 3.5 The project was referred to the Committee on 20 June 2012.

# Conduct of the inquiry

- 3.6 Following referral to the Committee, the inquiry was advertised in *The Australian* on 27 June 2012.
- 3.7 The Committee received one submission and five supplementary submissions from Defence. The list of submissions can be found at Appendix A.

<sup>1</sup> Department of Defence (Defence), Submission 1, pp. 14-15.

<sup>2</sup> Defence, Submission 1, p. 2.

3.8 The Committee received private briefings in Brisbane and Ipswich on 26 September 2012, Darwin on 27 September 2012, and Sydney on 4 October 2012.

- 3.9 The Committee conducted public hearings in Ipswich on 26 September 2012, Darwin on 28 September 2012, and Sydney on 4 October 2012.
- 3.10 The Committee conducted an in-camera hearing on the project costs in Sydney on 4 October 2012.
- 3.11 A transcript of the public hearing and the submissions to the inquiry are available on the Committee's website.<sup>3</sup>

#### Need for the works

- 3.12 The current Defence wholesale storage network operates from outdated infrastructure spread across 201 warehouses in 24 locations. The DLTP will consolidate the wholesale logistics network to seven primary sites, supported by nine specialty/retail sites.<sup>4</sup>
- 3.13 The current wholesale storage network is not enabled by industry standard technology and automation, has relatively high operating and maintenance costs and does not deliver efficient or effective outcomes when benchmarked with comparable commercial practices.<sup>5</sup>
- 3.14 The current maintenance system also operates from outdated infrastructure and facilities that fall short of comparable industry standards. In many cases the workshop facilities across the network are converted World War II warehouses. These outdated facilities contribute to increased cost of service and sub-optimal maintenance outcomes as the facilities are not purpose built for the function they currently serve.<sup>6</sup>
- 3.15 As a whole, the existing network drives a relatively high operating cost and does not deliver efficient or effective outcomes when benchmarked against comparable commercial practice.<sup>7</sup>
- 3.16 Approximately 23 per cent of the available network warehousing space is underutilised when compared with comparable industry benchmarks.<sup>8</sup>

<sup>3 &</sup>lt;www.aph.gov.au/pwc>

<sup>4</sup> Defence, Submission 1, pp. 1-2. For more detail, see Attachment 1.

<sup>5</sup> Defence, Submission 1, p. 1.

<sup>6</sup> Defence, Submission 1, p. 1.

<sup>7</sup> Defence, Submission 1, p. 1.

<sup>8</sup> Defence, Submission 1, p. 2.

3.17 The Committee is satisfied that there is a need for the works.

# Scope of the works

- 3.18 The project will deliver infrastructure in eight locations:
  - Moorebank, NSW
  - RAAF Base Amberley, Ipswich, Qld
  - Lavarack Barracks, Townsville, Qld
  - Robertson Barracks, Palmerston, NT
  - HMAS Stirling, Rockingham, WA
  - Palmer Barracks, Guildford, WA
  - RAAF Base Edinburgh, Edinburgh, SA
  - Wadsworth Barracks, East Bandiana, Vic. 9
- 3.19 The scope of works includes several common elements:
  - headquarters
  - general storage warehouses
  - loan and repair warehouses
  - dangerous goods stores
  - land materiel maintenance workshops. 10
- 3.20 Details of the works at each site can be found in Submission 1.11
- 3.21 Subject to Parliamentary approval, construction is planned to commence in late 2012 at Moorebank, Wadsworth Barracks and Lavarack Barracks, with other sites commencing progressively through early to mid-2013. All construction is expected to be completed by mid-2015. 12
- 3.22 The Committee finds that the proposed scope of works is suitable to meet the need.

<sup>9</sup> Defence, Submission 1, p. 15.

<sup>10</sup> Defence, Submission 1, pp. 15-17.

<sup>11</sup> Defence, Submission 1, pp. 17-31. Note that the project budget now allows for the provision of the new headquarters facility at RAAF Base Edinburgh, SA (pp. 28-29).

<sup>12</sup> Defence, Submission 1, p. 44.

#### Cost of the works

3.23 The overall project cost is \$752.7 million, excluding GST. The Committee received confidential supplementary submissions detailing the project costs and held an in-camera hearing with Defence on these costs.

- 3.24 Defence elected not to deliver the project through a public-private partnership as it would not deliver the required results or savings.<sup>13</sup>
- 3.25 The Committee is satisfied that the costings for the project provided to it have been adequately assessed by the proponent agency.

# **Project issues**

### Consolidation of facilities

- 3.26 The DLTP will significantly consolidate warehousing facilities across Australia. It will support Defence capability until at least 2030. 14 It will also provide major savings for Defence. 15 In part, this will be due to the disposal of rented land and facilities, with the works to be undertaken on Commonwealth land. 16
- 3.27 Consolidating current facilities into newer, modernised warehouses and storage areas will bring efficiencies to the network. Defence outlined the deficiencies in the current warehousing network:

Basically at the moment on the warehousing side we have around 201 warehouses across the nation that vary in age from the 1920s all the way up to about the 1990s. Most of those particular types of warehouses that we have are what we call low-rise warehouses, along with warehouses that have large numbers of internal forests growing in them to stop the efficient movement of MHE [material handling equipment] as well as the ability to rack and stack. Modern warehouses traditionally have a high-rise warehousing capacity that takes modern shelving and modern warehousing up to around six pallets high. What that essentially means is that you

<sup>13</sup> Brig. P. Daniel, Department of Defence (Defence), and Mr P Griffiths, KPMG, *transcript of evidence*, 4 October 2012, p. 11.

<sup>14</sup> Brig. P. Daniel, Defence, transcript of evidence, 4 October 2012, p. 8.

<sup>15</sup> Brig. D. Naumann, Defence, and Mr P. Griffiths, KPMG, *transcript of evidence*, 26 September 2012, pp. 1-3.

<sup>16</sup> Brig. P. Daniel, transcript of evidence, 28 September 2012, pp. 3-4.

have a reduced footprint the size of your warehouse, but you maximise the amount of space that is in your warehouse. In our current low-rise warehouses we lose, in many instances, anything up to 60 per cent of the available warehouse space, simply because of the beams. The lowness of those means you cannot stack all the way up to the roof. You cannot therefore access those particular items. So, underutilised space in our existing warehouse is based purely on the way the warehouses are constructed. Removing those from our network means that we can consolidate our footprint, making it much smaller in scope, but, more importantly, give greater efficiency for moving the stock to the individual, as opposed to the individual to the stock.<sup>17</sup>

3.28 However, consolidation does provide a major challenge:

... we have to make sure that our distribution pipelines are now much more effective, so our ability to move around the network has to be much more critically aligned with various capacities and capabilities that the Australian Defence Force has around Australia with regard to its raise, train and sustain activities. So we are likely to hold less stock in certain locations than we would have held there traditionally. To make sure that we can still provide support to the Australian Defence Force, we need to have a greater understanding of our distribution nodes and our distribution requirements, but modern technology allows us to do that. Such things as RFID readers so that we can track stock as it moves around the country will certainly reduce that risk, and it saves Defence buying and holding stock for that just-in-case policy. We will be able to actually manage that much more closely. <sup>18</sup>

### Committee comment

- 3.29 The Committee viewed various warehouses that were not built for the purpose they presently serve. Most facilities were built during World War II and many have hardwood support poles every five metres. The Committee observed that this impinges on Defence's ability to efficiently store and maintain items.
- 3.30 The Committee noted that the warehouses and other facilities it inspected were difficult to heat, cool and ventilate effectively (particularly in areas

<sup>17</sup> Brig. P. Daniel, Defence, transcript of evidence, 4 October 2012, p. 8.

<sup>18</sup> Brig. P. Daniel, Defence, transcript of evidence, 4 October 2012, p. 9.

with significant weather variation such as Darwin) and required 'workarounds' to meet workplace health and safety requirements. These factors reduce productivity and limit Defence capability.

3.31 The Committee is satisfied that consolidating facilities will prove beneficial to the provision of logistic support.

# Improving efficiency

- 3.32 This project aims to improve the efficiency of logistic support. This requires improved infrastructure and technology, such as carousels. Such improvements can increase the stock pick rate.
- 3.33 A pick rate is a productivity measure and represents the number of items picked per person, per day.
- 3.34 Defence's stock pick rates vary, due to Defence's varied stock, from small items such as bullets to large items such as bridges. The average is 13 or 14.19
- 3.35 However, infrastructure and technology could improve this pick rate to 26 or higher,<sup>20</sup> which would allow Defence to almost halve the contracted workforce:

So if we have a pick rate of 13 picks per day per person, that equates to the workforce [at Moorebank] of around 126 personnel to meet that requirement. If we can increase that pick rate to, say, 26, which is coming towards the average within the industry we could reduce the number of contracted workforce that we would have to do that pick rate, from around 126 to around 63. That is almost half of the total workforce required to do the same amount of work. The intent behind increasing the pick rate, by improving the facilities, is to actually bring us to an industry standard. The philosophy is very simple: we want to take the best practices that are available commercially and to actually bring those into the defence arena.<sup>21</sup>

3.36 One way to increase stock pick rates for small items is the use of carousels. These are rotating vertical storage spaces which eliminate the need to store small items in warehouses. The Committee viewed a carousel in Darwin,

<sup>19</sup> Brig. P. Daniel, Defence, transcript of evidence, 4 October 2012, pp. 3-4.

<sup>20</sup> Mr P. Griffiths, KPMG, transcript of evidence, 26 September 2012, p. 4.

<sup>21</sup> Brig. P. Daniel, Defence, transcript of evidence, 28 September 2012, p. 2.

- which would hold the same volume of small items as the 100-metre-long warehouse that the Committee viewed in Sydney.<sup>22</sup>
- 3.37 Carousels bring the stock to the individual, enabling employees to locate items quickly and easily, without having to walk through a warehouse. This provides health and safety benefits while also reducing the time required to locate items.

#### Committee comment

- 3.38 The Committee is satisfied that Defence is combining appropriate infrastructure and technology to improve stock pick rates and therefore improve efficiency.
- 3.39 The Committee was impressed with the carousel it viewed in Darwin and understands the benefits that such technology provides for the organisation and distribution of small items.

# Community consultation

3.40 Defence conducted extensive community consultation for the DLTP.<sup>23</sup> During the consultation process, noise was raised as an issue by residents close to the Moorebank site. Defence explained that it had already mitigated the impact of noise on local residents through its design of the proposed works:

... all of the low-traffic activities, such as dangerous goods, aerial delivery equipment and all those low-movement activities, are placed closest to the residential areas, limiting the amount of noise that they would experience. We will also provide a bit of a buffer through that green buffer zone, which will also reduce some of the noise impacts to the residential areas.<sup>24</sup>

3.41 Traffic was raised as an issue in Darwin. Defence outlined its process for consultation in Darwin and stated that it was relatively positive:

On 14 June we had a formal consultation with the community, mainly attended by residents of Knuckey Lagoons. Sixteen people turned up. Most of them expressed their pleasure with what we had done to address this solution. Most of them were in agreement that, yes, that would address what we call the rat-running and the

<sup>22</sup> Brig. P. Daniel, Defence, transcript of evidence, 4 October 2012, p. 4.

<sup>23</sup> Defence, Submission 1.2.

<sup>24</sup> Lt. Col. D. Drain, Defence, transcript of evidence, 4 October 2012, p. 6.

traffic going through the quiet residential area, which currently happens.<sup>25</sup>

3.42 Defence also provided a letter from the Chair of the Knuckey Lagoon Recreational Reserve Board, confirming that the group was satisfied with the consultation process:

In regards to the level of public consultation on the DLTP [proposed works] at Robertson Barracks. I advise that we had media advertising, multiple letter drops and a very well attended public information session. It is our hope that this consultation model is used for all future development proposals for the Barracks.<sup>26</sup>

3.43 While in Darwin, the Committee also facilitated broader discussion of Defence's relationship with the community.<sup>27</sup>

### Committee comment

- 3.44 The Committee is satisfied with Defence's community consultation in relation to the DLTP and expects Defence to continue to consult with the community for all future projects.
- 3.45 The Committee is particularly pleased with Defence's communication with the Knuckey Lagoon Recreational Reserve Board.

#### Road and traffic concerns

- 3.46 Three road and traffic issues were raised, at RAAF Base Amberley, Robertson Barracks and Moorebank.
- 3.47 Around RAAF Base Amberley, traffic studies were undertaken at all intersections leading into the base. These studies determined that increases in traffic to the base during and after the proposed works will not exceed the capacity of the existing traffic network.<sup>28</sup>
- 3.48 On the day the Committee visited RAAF Base Amberley, the Cunningham Highway turnoff to the base had been blocked by a traffic crash. Defence stated that this intersection is poor and will be upgraded by the Queensland Government to include a bypass. This will provide an exit

<sup>25</sup> Lt. Col. D. Drain, Defence, transcript of evidence, 28 September 2012, p. 8.

<sup>26</sup> Defence, Submission 1.4, p. 4.

<sup>27</sup> Transcript of evidence, 28 September 2012, pp. 10-15.

<sup>28</sup> Mr M. Mooney, Leighton Contractors, transcript of evidence, 26 September 2012, p. 10.

- and overpass, to remove the need for vehicles to cross the path of oncoming traffic.<sup>29</sup>
- 3.49 Concerns were raised over the proposed new western access road at Robertson Barracks, NT. Defence outlined the process for determining the location of the new western access road, including its consultation with the local council, the landowner, the community and the NT government, as well as environmental, flooding and traffic implications. The proposal has received the required approvals.<sup>30</sup>
- 3.50 Defence considered various options for the proposed new western access road's intersection with McMillans Road. Defence advised that a roundabout was not deemed suitable:

The issues around putting a roundabout in that location were more to do with the flow of traffic on McMillans Road. In putting in a roundabout we would actually give preferential treatment to Defence traffic coming onto the new road as opposed to the high volume of traffic on an 80 kilometre an hour road travelling through Darwin. It would mean we would have to slow traffic down on that road to 60 kilometres an hour for about 200 metres in either direction and you would get quite a significant traffic build up on McMillans Road to the detriment of the wider community by doing that.<sup>31</sup>

3.51 Defence also provided a letter from the Chair of the Knuckey Lagoon Recreational Reserve Board, which stated that:

... the vast majority of residents are happy with the proposed Western Access Road to Robertson Barracks. It goes a long way towards resolving our long standing issues with Defence use of local roads.<sup>32</sup>

3.52 In relation to the proposed works at Moorebank, Defence stated that access to the site will be off Moorebank Avenue, not Anzac Avenue:

Again that reflects the fact that Moorebank Avenue is the heavy transport route and will become potentially more so with future use of that land. So it made sense from a planning perspective and also from New South Wales's perspective in our negotiations with

<sup>29</sup> Mr M. Mooney, Leighton Contractors, transcript of evidence, 26 September 2012, p. 10.

<sup>30</sup> Mrs D. Lund, Trapp Architects, transcript of evidence, 28 September 2012, p. 7.

<sup>31</sup> Mrs D. Lund, Trapp Architects, transcript of evidence, 4 October 2012, p. 13.

<sup>32</sup> Defence, Submission 1.4, p. 4.

them that we make our access off that side to keep heavy vehicles off Anzac Avenue as best we could.<sup>33</sup>

#### Committee comment

3.53 The Committee accepts that Defence has addressed road and traffic issues at and around the project sites.

#### **Environmental issues**

- 3.54 Three key environmental issues are the removal of trees near Robertson Barracks, the transient population of koalas at RAAF Base Amberley and the proximity of the Cumberland Plains Woodland to Moorebank.
- 3.55 The proposed works at Robertson Barracks, including the new access road, will involve tree clearance. Defence stated that the Armstrong's cycads (*Cycas armstrongii*), declared vulnerable under NT legislation, would be relocated:
  - ... we are planning to relocate the 450 cycads. As part of that internal process for Defence, I will issue a directive in terms of an environmental assessment report directing the project director to liaise directly with the Northern Territory Department of Natural Resources, Environment, the Arts and Sport to ensure that they are translocated in a proper manner.<sup>34</sup>
- 3.56 Defence confirmed that all required approvals had been sought and granted for the project.<sup>35</sup>
- 3.57 Koalas are known to be present at RAAF Base Amberley. Defence advised that it had followed the required Department of Sustainability, Environment, Water, Population and Communities protocols for vulnerable species and surveyed the area surrounding the proposed works. As a result of these assessments, a koala-friendly fence will be installed so that koalas can access vegetation.<sup>36</sup>
- 3.58 The proposed works at Moorebank are in close proximity to a Cumberland Plain Woodlands area. Defence stated that it has ensured a buffer zone between the works and the woodlands:

<sup>33</sup> Brig. D. Naumann, Defence, transcript of evidence, 4 October 2012, p. 13.

<sup>34</sup> Mr L. Woodford, Defence, transcript of evidence, 28 September 2012, p. 9.

<sup>35</sup> Defence, Submission 1.4, pp. 1-2.

<sup>36</sup> Mr L. Woodford, Defence, *transcript of evidence*, 26 September 2012, p. 6.

We were certainly very conscious of the need to not impact on the Cumberland Plain Woodlands area. As you are aware, that is a critically endangered ecological community so there are certain obligations on us under the various governing legislation. We endeavour to keep to the north of that growth area and we have been able to do that. ... We have designed a buffer ... to ensure that we do stay well clear of the Cumberland Plain Woodlands environment.<sup>37</sup>

#### Committee comment

3.59 The Committee is satisfied with Defence's approach to environmental issues.

#### **Final Committee comment**

- 3.60 The Committee's site inspections included an armoury, a kitting store and a parachute maintenance facility that were operating in buildings that were not adequate for Defence's needs. At these locations, the Committee also viewed aged, inefficient and inadequate warehousing facilities that were not built for purpose and were insufficient to support Defence capabilities. The Committee noted that these operations require better configured facilities, with unobstructed ceiling and floor space.
- 3.61 The Committee met various Defence personnel during this inquiry and thanks them for their contributions to the extensive briefings and inspections.
- 3.62 The Committee was satisfied with the evidence provided by Defence regarding the proposed Defence Logistics Transformation Program.
- 3.63 The Committee is satisfied that the project has merit in terms of need, scope and cost.
- 3.64 Having regard to its role and responsibilities contained in the *Public Works Committee Act 1969*, the Committee is of the view that this project signifies value for money for the Commonwealth and constitutes a project which is fit for purpose, having regard to the established need.

# **Recommendation 2**

The Committee recommends that the House of Representatives resolve, pursuant to Section 18(7) of the *Public Works Committee Act* 1969, that it is expedient to carry out the following proposed work: Defence Logistics Transformation Program.