2

Need, Options and Scope

Introduction

- 2.1 Defence advised the Committee that the facilities proposed in the Stage 2 Redevelopment project should enable the Base to perform its role in a more efficient and cost effective way.¹ Defence is of the view that the redevelopment will replace what it terms older and dysfunctional facilities with those it suggests more likely to meet current occupational, health and safety standards, and modern workplace facilities.
- 2.2 The following project components are proposed for the Stage 2 Redevelopment:
 - air movements facilities;
 - transit accommodation;
 - combined messing facilities;
 - dangerous goods compound;
 - main Base entrance (including associated Base security facilities);
 - physical fitness complex;
 - replacing/upgrading engineering services; and
 - demolition.²

¹ A site plan of the Stage 2 proposed works is at Annex C-1.

² Submissions Volume 1, p. 12.

Air Movements Facilities

- 2.3 The facilities of the Air Movements Section at the Base handle the following functions:
 - housing, processing of incoming and outgoing domestic and international passengers, including Australian Defence Force and civilian personnel as well as foreign forces;
 - reception for special visitors, including VIPs and personnel from the Australian Customs Service and the Australian Quarantine Inspection Service;
 - planning, receiving, storage, packaging and dispatching of cargo and luggage;
 - road dispatch of freight;
 - storage and operation of ground support equipment; and
 - provision of aircrew planning office and rest areas.

Need

- 2.4 Defence submitted that because of their age (having been constructed in the 1960s and 1970s), Base facilities are becoming a maintenance liability and capable only of limited day to day operations. Increasing demand, modern processes and technology have overtaken the utility of the terminal and cargo facility.
- 2.5 Defence further maintains that traffic during significant activities causes severe crew and passenger overcrowding of the terminal facilities. At the same time, there are no external areas to cope adequately with shorterterm passenger overflow. The buildings are currently located close to a higher noise zone and cost-effective sound reduction measures are difficult to apply.³

Options

2.6 Defence considered two options. The first was refurbishment and extension of the current facilities and apron and the second option was constructing new facilities and apron.

2.7 According to Defence, the first option did not provide value for money because of the extent of remodelling and adaptation of existing facilities that have reached the end of their economic life. The second option provided an effective and efficient air movement facility and apron.⁴

- 2.8 Defence has argued that the proposed air movements facilities⁵ would address the shortcomings of the existing facilities. The proposed facilities comprise:
 - air movements passenger terminal;
 - cargo hangar;
 - ground support equipment shelter;
 - deployment staging area; and
 - apron extension.⁶
- 2.9 The Committee noted that the largest part of the package, apart from the engineering services was the air movements facility and questioned whether the proposed facility would be adequate to cope with irregular incoming personnel.
- 2.10 Brigadier Garry Kelly, noted that Defence could never build a facility capable of meeting peak demand. Brigadier Kelly stressed that Defence did not wish to build a facility that was not fully utilised for 75 to 80 per cent of the time.⁷
- 2.11 The Committee sought advice as to whether the new facility would conflict with the civil aviation movements, including in the area of security.
- 2.12 Wing Commander Christopher McHugh, noted that there was no conflict with civil aviation. Civil aviation, he said, catered for a different market, passenger numbers, and utilisation. Wing Commander McHugh further noted that 'extensive discussions' had been undertaken with the civil airport operators.
- 2.13 Wing Commander McHugh observed that there had been 'the odd security breach' from the area of civil aviation when people had jumped

⁴ Submissions Volume 1, p. 14.

⁵ The indicative air movements section plan and layout of the main facility is at Annexes C-12 and C-3.

⁶ Submissions Volume 1, pp.14-15.

⁷ Brigadier G R Kelly, Director General Capital Infrastructure, Infrastructure Division, Department of Defence, Evidence, p. 17.

the fence to Base area. However, the Base maintains its own security patrols and good relationships have prevailed with the airport operators.⁸

Transit Accommodation

2.14 Defence indicated in its submission that substantial demand was placed on transit accommodation for personnel involved in exercises and preparing for deployment. As a result, there was a requirement for transit accommodation. This can range from 200 to 300 beds in high demand periods and more than 1000 beds during peak load periods.

Need

- 2.15 Defence indicated that 70% of the bed capacity is located in buildings in a higher noise area. The buildings referred to date from World War II. Defence is of the view that due to their age and deterioration they are substandard, despite ongoing maintenance.
- 2.16 The remaining transit accommodation was constructed in the 1970s and is located in the lower noise zone to the east of the Base domestic area. This will be retained for transit accommodation purposes.⁹

Options

- 2.17 Defence considered three options in relation to their transit accommodation requirements. The first option was to refurbish existing accommodation, the second was to utilise off-base accommodation and the third was to construct new transit accommodation.
- 2.18 Defence's preferred option was the construction of new transit accommodation. Defence argued that the site for the proposed accommodation provided space for further development should that be necessary.¹⁰

⁸ Wing Commander Christopher McHugh, Executive Officer 395 Expeditionary Combat Support Wing, Royal Australian Air Force Base, Townsville, Evidence, p. 18.

⁹ Submissions Volume 1, pp. 15-16.

¹⁰ Submissions Volume 1, p. 16.

Scope

- 2.19 Defence proposes retaining the 1970s and 1980s residential accommodation area and constructing 200 additional rooms. Each room would accommodate two people and their equipment.¹¹
- 2.20 The Committee noted that the accommodation built in the 1940s was larger than the more modern 1970s and 1980s dwellings and asked Defence to indicate the preference of permanent Base personnel.
- 2.21 Wing Commander McHugh replied that personnel 'would always choose the more modern accommodation'. The choice of the modern facilities was based on the improved amenities. For example, the 1980s rooms had a 'semi en suite arrangement' and contained four rooms around a central common room core and backing onto that is a bathroom area which other blocks do not have.
- 2.22 Wing Commander McHugh further stated that transit personnel also chose the modern facilities, because they were air-conditioned. He said that transit accommodation was used up to 200 nights a year.
- 2.23 Wing Commander McHugh stated that the intention was to demolish the 1940s buildings and refurbish 1970s and 1980s dwellings. He said refurbishment would be done under maintenance money from the Defence Estate Organisation. If the 200 extra rooms were supplied under the proposal and the 1970s and 1980s dwellings are refurbished, the intention, ultimately, would be to keep one transit person per room.¹²
- 2.24 The Committee sought an explanation as to the reasons why the same accommodation could not be used for both transit and permanent personnel, particularly when transit accommodation was not in use.
- 2.25 Wing Commander McHugh replied that the segregation was made in order to ensure the privacy of the permanent personnel. He added that insurance policies become void if transit people are located in the same building or in the same areas as people who are permanent.¹³

Combined Messing Facility

2.26 Defence requires a catering facility to service both the on-base and transit personnel. The facility should be able to cater for 1000 meals in a single

¹¹ The indicative proposed facility is at Annex C-4

¹² Evidence, pp.10-12.

¹³ Evidence, p. 12.

sitting and to provide in-flight meals for aircraft from or travelling via the Base. The facility may be a combined facility, with separate messing for Officers, Senior Non-Commissioned Officers and Airmen.¹⁴

Need

2.27 Defence advised that the three existing messes are located in different areas. This results in considerable duplication of effort, double handling of rations and inefficient use of personnel, equipment and appliances. Defence has also noted that because of their age, the facilities would require substantial investment to upgrade them to meet demand and to address occupational health and safety concerns.¹⁵

Options

2.28 Defence considered two options. One was to refurbish and extend the existing facilities; the second was to build a new combined central kitchen and messes. Defence has submitted that the second option is preferred because a combined messing facility would promote effective and efficient catering operations and addresse occupational health and safety requirements.¹⁶

- 2.29 Defence intends to construct the following elements for the proposed facility:
 - Officers Mess with a dining area for up to 50 personnel, anteroom and bar;
 - Senior Non-Commissioned Officers with a dining area for up to 50 personnel, anteroom and bar;
 - Airmen's dining area for up to 300 personnel;
 - central kitchen to produce 1000 meals in a single sitting (in peak periods), as well as provision of in-flight meals;
 - ration store and goods delivery bay; and
 - carpark (to be shared with proposed accommodation blocks) for 150 vehicles.¹⁷

¹⁴ Submissions Volume 1, p. 17.

¹⁵ Submissions Volume 1, p. 17.

¹⁶ Submissions Volume 1, p. 18.

¹⁷ Submissions Volume 1, p. 19.

Dangerous Goods Compound

2.30 The Dangerous Goods Compound stores acids, alkalis, flammable liquid and gasses, pesticides and aviation oil. These goods are used primarily to support aircraft operations.

Need

2.31 According to Defence the existing facility is inappropriately located adjacent to the existing Airmen's accommodation. Its location, therefore contravenes storage standards. Because of inadequate separations between the buildings, the Dangerous Goods Compound does not conform to the Building Code of Australia requirements. In order to achieve compliance, investment in emergency equipment is necessary. Added to this, the existing site is part of the redevelopment proposal for the Combined Messing Facility.¹⁸

Options

2.32 Defence argued that relocation is the only option in order to achieve full building code compliance. Defence identified a suitable site presently occupied by Fuel Farm No. 1.¹⁹ Defence reminded the Committee that demolition of this facility was approved in the Committee's Sixth Report of 1999 as part of the Stage 1 Redevelopment proposal.

Proposal

- 2.33 The new Dangerous Goods Compound will be a fenced facility and comprise the following separate buildings:
 - administration building, including ablution facilities;
 - drum store;
 - acid store;
 - alkali store;
 - flammable liquids store;
 - flammable gases;
 - polychlorinated biphenyl store; and

¹⁸ Submissions Volume 1, p. 19.

¹⁹ Submissions Volume 1, p. 19. See also Parliamentary Standing committee on Public Works, RAAF Base Townsville Redevelopment, Stage 1, (Sixth Report of 1999), pp. 11-12.

- emergency eye wash/deluge showers, power supply, fire protection, voice and data communications and special containment measures.²⁰
- 2.34 The Committee asked Defence why the dangerous goods compound had not been moved earlier, particularly as its inappropriate location had long been acknowledged.
- 2.35 Mr Peter Mollison, advised that its current location satisfied Defence's current requirements. Mr Mollison admitted, however, that the Dangerous Goods Compound's location did not meet the requirements of the Building Code of Australia in its separation from the other buildings.
- 2.36 Mr Mollison observed that the move was prompted by the requirement of the site, which is proposed for the development of a new mess facility. Mr Mollison indicated that the dangerous goods facility could still be operated in its current location, although the building code requirements would not be met.²¹
- 2.37 Mr Graham Moss, added that a reason for not relocating the dangerous goods compound earlier was due to some doubt being placed on the original Master Plan site. Defence subsequently reviewed and adopted alternative planning. The 1998 endorsed master plan shows the dangerous goods compound adjacent to Fuel Farm No 1. As part of the Stage 2 redevelopment, alternative sites were considered for the dangerous goods compounds before settling on the Fuel Farm No 1 site. This was considered the optimum location.²²
- 2.38 The Committee noted that the closure of Fuel Farm No 1 was approved in the Stage 1 Redevelopment proposal.²³

Main Base Entrance

2.39 Defence noted that the main base entrance is necessary to provide a safe and efficient point of controlled entry to the Base and to facilitate the operations of the RAAF Security Police and security contractor. Defence advised that the main entrance must also provide for pass issue and

²⁰ Submissions Volume 1, p. 20. An indicative layout of the buildings is at Annex C-6.

²¹ Mr Peter Mollison, Project Director, Infrastructure Division, Department of Defence, Evidence, p. 4.

²² Mr Graham Moss, National Service Line Manager – Aviation, Infrastructure Division, Department of Defence, p. 4.

²³ Parliamentary Standing Committee on Public Works, RAAF Base Townsville Redevelopment, Stage 1, (Sixth Report of 1999), p. 12.

general inquiries as well as a short-term waiting area for vehicles and personnel requiring escort or clearance.²⁴

Need

2.40 The main entrance operates for 24 hours a day. At peak periods the main entrance suffers from traffic congestion. Defence stated that the existing RAAF Security Police building is poorly located at the main gate and its layout is functionally inefficient.²⁵

Options

- 2.41 Defence considered upgrading the existing entrance. However, it discounted this option on the grounds that it involved making improvements to the layout of traffic lanes, in order to minimise disruption, and would not solve the RAAF Security Police building deficiencies.
- 2.42 Defence has opted, instead, to relocate the main entrance to a position opposite an existing roundabout at the Pilkington Street/Ingham Road intersection. Defence has argued that the existing roundabout provides improved control in access and egress. The proposed location would also provide for a new building for the RAAF Police and security contractor.²⁶

- 2.43 The proposed facilities for the main entrance²⁷ include:
 - new RAAF Security Police and security contractor building;
 - new access road including guard house, carparking facilities adjacent to the building; and
 - new security fencing.²⁸
- 2.44 At the public hearing, Wing Commander McHugh observed that the Base has a policy of 'no pass, no entry'. The present gate was designed to be operated by service police.
- 2.45 Currently, the entrance is attended by a combined force of civilian and service personnel. Added to this, the numbers and functions of personnel

²⁴ Submissions Volume 1, p. 20.

²⁵ Submissions Volume 1, p. 21.

²⁶ Submissions Volume 1, pp.21-22.

²⁷ Indicative plans are at Annexes C-1 and C-7

²⁸ Submissions Volume 1, p. 22.

has changed and the current facility is no longer capable of accommodating those who work in the area.

- 2.46 Wing Commander McHugh added that safety was another reason for changing the location of the gate. He advised that the road is 'actually displaced from he entrance by about 10 to 15 feet.' As a result property owners of buildings nearby have complained about possible accidents.
- 2.47 Wing Commander McHugh noted that the Police and local council have also drawn the Base's attention to the way personnel exit the Base because of the close proximity of Ingham Road, the main access road to Townsville. Wing Commander McHugh said: 'we believe we are setting ourselves up for further action in future'.²⁹
- 2.48 The Committee raised the appropriateness of using security as a reason for changing the entrance. Brigadier Kelly, indicated that primarily, the Base wished to provide a place for people to stop in order to be issued with passes. The change, therefore was more 'the ease and functionality of imposing the security requirements.'³⁰
- 2.49 The Committee sought elaboration from Defence regarding any breaches of security as a result of the current placement of the Base's entrance. In subsequent information received by the Committee, Defence replied that there had been no reported security breaches. Defence stressed, that the proposal for a new main entrance stemmed from the need to construct a safer more functional facility for the Base security section.³¹

Physical Fitness Complex

2.50 Defence submitted that a physical fitness facility assists service personnel in maintaining Defence Force physical fitness standards.³²

Need

2.51 The existing facilities include a gymnasium, swimming pool and tennis courts for the 1200 permanent RAAF and Army personnel as well as for transit personnel accommodated at the Base. Defence argued that these facilities do not provide the scale or type of amenity necessary to ensure personnel maintain the required fitness standards.

²⁹ Wing Commander Christopher McHugh, Evidence, p. 10.

³⁰ Brigadier Garry Kelly, Evidence, p. 10.

³¹ Further information submitted on 8 August 2001 from Brigadier G R Kelly, p. 3, Committee File 2.3

³² Submissions Volume 1, p. 22.

- 2.52 The gymnasium was constructed in World War II as a cinema and Defence maintains that it is inappropriate for many activities, including minor team sports.
- 2.53 In addition, the present facilities contain a range of occupational health and safety deficiencies and do not comply with Building Code of Australia standards.³³

Options

2.54 Defence considered three options. The first was refurbishment and extension of existing facilities; the second was an off-Base facility and the third, construction of a new facility on-Base. Defence has argued that option 3 satisfied the intent of the Australian Defence Force policies on physical fitness.³⁴

Scope

- 2.55 The proposed facilities detailed below would be air-conditioned with mechanical ventilation where appropriate.³⁵ They are:
 - an auditorium to accommodate one basketball court, which can be used for four badminton courts or two volleyball courts;
 - a weight training room and separate cardio/aerobic theatre;
 - two squash courts;
 - office, physiotherapy and storage areas;
 - toilets and change rooms; and
 - an external swimming pool.³⁶

Base Training and Support Complex

- 2.56 Defence advised that a venue is required for the preparation and conduct of on-Base training, and to accommodate a number of key support functions. These functions include:
 - office accommodation for the ground defence organisation;

- 35 An indicative layout is at Annex C-8.
- 36 Submissions Volume 1, p. 24.

³³ Submissions Volume 1, p. 23.

³⁴ Submissions Volume 1, p. 24.

- motor transport training; and
- a parade venue for the Air Force Reserve personnel.³⁷

Need

- 2.57 Defence noted that at present a number of training, briefing and other support facilities are located at various sites throughout the Base. This results, in the duplication of classrooms and orderly room functions.
- 2.58 Defence further stated that the existing conditions under which the staff operate contain a number of deficiencies associated with security, Building Code of Australia provisions and occupational health and safety requirements.
- 2.59 Added to this some of the facilities are 'very old' and potentially have high maintenance overheads. The main briefing room is noisy, old and inappropriate to extend and refurbish.³⁸

Options

- 2.60 Defence considered that the refurbishment and extension option of the existing facilities would require extensive investment, including asbestos removal and remodelling. Even if refurbishment was undertaken, Defence regarded the inefficiency of the dispersed location to be inappropriate.³⁹
- 2.61 Defence's preferred option is to construct a combined complex to be located in a lower noise zone in accordance with the Master Plan.⁴⁰

- 2.62 The scope of the proposal is a single new facility⁴¹ comprising the following elements:
 - Ground Defence Section;
 - Base Training Organisation;
 - No 27 Squadron;
 - motor transport driver training;

³⁷ Submissions Volume 1, p. 24.

³⁸ Submissions Volume 1, p. 25.

³⁹ Submissions Volume 1, p. 25.

⁴⁰ Submissions Volume 1, p. 25.

⁴¹ An indicative layout of the complex is at Annex C-9.

- common use facilities comprising:
 - \Rightarrow briefing room;
 - \Rightarrow training rooms;
 - \Rightarrow ablutions area; and
 - \Rightarrow carparking.⁴²
- 2.63 The Committee sought elaboration as to whether combing the Base training and support complex and the sharing of training experts is likely to lead to a reduction in the numbers of training experts employed.
- 2.64 Wing Commander McHugh advised that the intention was to put staff involved with training and education into one building in order to ensure better usage of the facilities. Collocation should alleviate current inefficiencies, which have resulted from having disparate facilities around the Base.⁴³
- 2.65 Brigadier Kelly advised the Committee that the Base training and support complex would only be delivered if cost savings were achieved in the design and construction process. Brigadier Kelly foreshadowed a further redevelopment stage in order to complete work at the Base.⁴⁴

Combined Headquarters Complex

- 2.66 The Headquarters 395 Expeditionary Combat Support Wing is responsible for contingency operations and exercises. Headquarters 323 Combat Support is responsible for the management of the Base support functions.⁴⁵
- 2.67 Both of these Headquarters support Headquarters Air Command and 3rd Brigade. Defence advised that Headquarters 395 and 323 are essential for maintaining Australian Defence Force operational preparedness at the Base.

Need

2.68 Defence noted in its submission that the existing facilities are functionally poor, crowded and adjacent to high noise areas. Because of the style and size of the existing structures, they could not be adapted for re-use. The facilities also lack privacy, confidentiality and security.

45 Submissions Volume 1, p. 26.

⁴² Submissions Volume 1, p. 26.

⁴³ Wing Commander McHugh, p. 18.

⁴⁴ Evidence, p. 2.

2.69 Staff amenities at the facilities such as lunchrooms, showers and toilets are cramped and inadequate.⁴⁶

Options

- 2.70 Defence considered two options. The first was refurbishment, extension and refit of existing buildings and the second was to construct replacement buildings.
- 2.71 Defence chose the second option. This option involves the co-location of the two major Headquarters into a single building in the appropriate noise zone and in accordance with the Master Plan. Defence argued that this option also provided the most cost-effective solution.⁴⁷

Scope

- 2.72 Defence's proposal for the two Headquarters is the provision of two separate areas for the core functions of the respective Headquarters with shared amenities.⁴⁸ The proposed facilities comprise:
 - Headquarters 395 Expeditionary Combat Support Wing building zone to provide office requirements and intelligence and planning functions;
 - Headquarters 323 Combat Support Squadron building zone to provide office and orderly room requirements;
 - combined area to include:
 - \Rightarrow conference room;
 - \Rightarrow storage areas;
 - \Rightarrow general amenity; and
 - \Rightarrow carparking.⁴⁹
- 2.73 Brigadier Kelly advised the Committee that, at this stage, the Combined Headquarters Complex had the lowest priority, and would not be built if there were insufficient funds left in the budget.⁵⁰

49 Submissions Volume 1, p. 28.

⁴⁶ Submissions Volume 1, pp. 26-27.

⁴⁷ Submissions Volume 1, p. 27.

⁴⁸ Indicative plan of the facility is at Annex C-10.

⁵⁰ Evidence, p. 15.

Engineering Services

2.74 The engineering services include electrical, water supply, sewerage, stormwater drainage, communications, earthworks and landscaping.

Need

2.75 Most of the services are ageing dating back to the 1940s. Since that time limited upgrading working had been undertaken. The electrical infrastructure, including the present Central Emergency Power Station is unable to provide the required services and the generators have reached their useful life.⁵¹

Scope

- 2.76 The scope for the proposed engineering services includes the following elements:
 - upgrading localised services and connection to proposed works;
 - replacing cable in selected areas to cope with higher demand;
 - upgrading electrical infrastructure, including the provision of a new emergency power station;⁵² and
 - additional internal roadwork, fencing and landscaping.⁵³
- 2.77 The Committee asked Defence to comment on the proposed emergency powerhouse.⁵⁴ Mr Mollison replied that the current emergency power capacity at the Base is 1.7 megawatts whereas an assessment of requirements has placed the required capacity at about 4.4 megawatts. Mr Mollison suggested that given the strategic role of the Base for mounting operations, inadequate emergency power would restrict the ability of the Base to undertake its primary tasks.⁵⁵
- 2.78 Mr Moss added that the existing system has two diesel generators, which have reached the end of their useful life. At present they operate at 75% of their rated capacity. When there is a power failure, only one of the generators cuts in for a period of time and an operator has to manually synchronise the second generator.

54 Department of Defence, Exhibit No. 1.

⁵¹ Submissions Volume 1, p. 28.

⁵² For description see Annex C-11.

⁵³ Submissions Volume 1, p. 29.

⁵⁵ Mr Mollison, Evidence, p. 22.

2.79	Mr Moss reminded the Committee that the inadequacy of the power system was highlighted in the Stage 1 Redevelopment proposal. The Committee noted that further upgrades to the Base's electrical system would be proposed in a subsequent redevelopment project.
2.80	In reply to questions from the Committee about the use of fibre optic cables in upgrading telecommunications infrastructure, Mr Moss

facilities to the Base communications network. ⁵⁶

confirmed that fibre optic cabling would be used to connect all the new

Demolition

2.81 Defence proposes to demolish a number of facilities in order to create space for replacement facilities.⁵⁷ Other facilities will be demolished because they are either located in inappropriate high noise zones or are potential maintenance liabilities and surplus to Defence requirements.⁵⁸

Scope

- 2.82 Demolition works will include:
 - removal of all materials from site;
 - decontamination where necessary; and
 - filling and landscaping where appropriate.⁵⁹

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⁵⁶ Mr Moss, Evidence, pp. 22-23. See also Parliamentary Standing Committee on Public Works, *RAAF Base Townsville Redevelopment, Stage 1*, (Sixth Report of 1999), p. 14.

⁵⁷ Demolition required to make way for new construction is at Annex C-12.

⁵⁸ Submissions Volume 1, p. 29.

⁵⁹ Submissions Volume 1, p. 29.