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Performance Audit

AIR 8000 Phase 2 — C-27J Spartan Battlefield Airlift Aircraft

Department of Defence

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Canberra ACT
15 August 2013

Dear Mr President
Dear Madam Speaker

The Australian National Audit Office has undertaken an independent performance audit in the Department of Defence in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit to the Parliament. The report is titled *AIR 8000 Phase 2 — C-27J Spartan Battlefield Airlift Aircraft*.

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



Ian McPhee
Auditor-General

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

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Abbreviations

| | |
|--------|--|
| ACAT | Acquisition Category |
| ADF | Australian Defence Force |
| AMTC | Australian Military Type Certificate |
| AMTDU | Air Movements Training Development Unit |
| ANAO | Australian National Audit Office |
| AUSFTA | Australia–United States Free Trade Agreement |
| BFA | Battlefield Airlifter |
| CASA | Construcciones Aeronauticas Sociedad Anonima |
| CDD | Capability Definition Documents |
| CDG | Capability Development Group |
| CEI | Chief Executive Instructions |
| CGRB | Capability Gate Review Board |
| CPG | Commonwealth Procurement Guidelines |
| CPR | Commonwealth Procurement Rules |
| DCDH | Defence Capability Development Handbook |
| DCIC | Defence Capability and Investment Committee |
| DCP | Defence Capability Plan |
| DCS | Direct Commercial Sale |
| DGAD | Director-General Aerospace Development |
| DGTA | Director-General Technical Airworthiness |

| | |
|------|--|
| DMO | Defence Materiel Organisation |
| DSTO | Defence Science and Technology Organisation |
| FMA | Financial Management and Accountability (Act) |
| FMS | Foreign Military Sales |
| FPS | Function and Performance Specification |
| HASD | Head Aerospace Systems Division |
| HCS | Head Capability Systems |
| IOC | Initial Operating Capability |
| IP | Intellectual Property |
| ITR | Invitation to Register |
| JCA | Joint Cargo Aircraft |
| LOA | Letter of Offer and Acceptance |
| LOR | Letter of Request |
| LRA | Liability Risk Assessment |
| LTFW | Lightweight Tactical Fixed Wing |
| NPV | Net Present Value |
| OCD | Operational Concept Document |
| ORC | Options Review Committee |
| PFPS | Preliminary Function and Performance Specification |
| PM&C | Department of the Prime Minister and Cabinet |
| POCD | Preliminary Operational Concept Document |

| | |
|------|----------------------------|
| RAAF | Royal Australian Air Force |
| RFT | Request for Tender |
| TCD | Test Concept Document |
| US | United States |
| USAF | United States Air Force |

Summary

Summary

Introduction

1. AIR 8000 Phase 2 is a major capital acquisition project which aims to provide a light tactical fixed wing aircraft capability to the Royal Australian Air Force (Air Force) to replace the DHC-4 Caribou. The Caribou served as Air Force's primary light tactical transport aircraft for 45 years until its retirement in 2009, and was noted for its versatility and ability to operate from short rudimentary airstrips. The replacement aircraft are expected to undertake a similar role while providing Air Force with useful payload capacity, good range, and in-theatre survivability from a range of threats.
2. Replacing the Caribou has a long history. As part of an earlier project, AIR 5190, Defence conducted a tender process in the late 1990s but found no suitable solutions at the time. Instead, the Caribou's service life was extended through to 2009. A further project to replace the Caribou, AIR 8000 Phase 2, was included in the 2004 Defence Capability Plan (DCP) and began in 2004, but it was not given priority until mid-2011. At that point the project was accelerated, resulting in the Government approving a capability solution in May 2012.
3. Following government approval, Defence entered into a Foreign Military Sales (FMS) agreement with the United States (US) Government to supply 10 C-27J aircraft, configured in the same way as those in service with the United States Air Force¹, at a cost of AUD\$882.4 million.² This acquisition was approved as a direct source procurement: that is, one that does not require an open tender. Defence also entered into a AUD\$58.1 million contract with the aircraft's Italian manufacturer, Alenia Aermacchi (Alenia) for the Intellectual Property (IP) rights to the aircraft.
4. During a Parliamentary hearing on 29 May 2012, Senator the Hon. David Johnston expressed concerns as to whether this acquisition complied with the requirements of the *Financial Management and Accountability Act 1997*,

1 In this report the modified C-27J aircraft Australia is purchasing under this FMS arrangement are referred to as the US variant C-27J.

2 FMS is the means by which the Australian Government, through the Defence Materiel Organisation (DMO), procures defence-related goods and services from the US Government. FMS procurement helps to achieve standardisation and interoperability with US Defence Forces and can lower costs by creating access to economies of scale for acquisition and sustainment.

given that an open tender was not conducted, and whether the acquisition represented value for money.

5. Subsequently, on 31 May 2012, Senator Johnston wrote to the Auditor-General outlining his concerns about the procurement processes adopted by Defence for this project and whether the capability solution option selected would deliver value for money. Senator Johnston requested that the ANAO undertake a performance audit of the project. The Auditor-General agreed to Senator Johnston's request on 11 July 2012, and scheduled this audit.

Audit objectives and scope

6. The objective of the audit was to assess the adequacy of Defence's processes, including compliance with the *Financial Management and Accountability Act 1997* (FMA Act), the Financial Management and Accountability Regulations 1997 (FMA Regulations), and relevant Commonwealth and Defence procurement requirements, to select the capability solution recommended to the Government to satisfy the requirements of AIR 8000 Phase 2.

7. The scope of the audit encompassed the research and analyses undertaken by Defence to inform its recommendation to the Government to approve the selection of the US variant C-27J, under an FMS arrangement with the United States, as the capability solution to satisfy the requirements of AIR 8000 Phase 2.

Overall conclusion

8. As part of an accelerated approval process, the Australian Government provided combined pass approval³ in May 2012 for the direct source procurement of the Royal Australian Air Force's replacement for the Caribou light tactical fixed wing aircraft, which had been retired in 2009. The replacement aircraft, a variant of the C-27J as operated by the United States Air

3 Defence major capital acquisition projects undergo a staged government approval process that generally involves at least two passes. The first pass submission describes broad solutions to meet an identified capability gap and is presented to the relevant government approving authority. The second pass involves a detailed and rigorous acquisition business case for each capability option approved at first pass. The information provided to the government approving authority at second pass is more detailed and of a higher standard of accuracy. The approval of an individual project may be 'tailored' to take into account the particular circumstances. This can include varying the number of times it is considered by government—that is, the number of passes. In the case of AIR 8000 Phase 2, second pass approval was brought forward and agreed at the same time as first pass approval in what is known as 'combined pass' approval.

See paragraph 4.4 for a more detailed explanation and examination of the two pass approval process.

Force, would be procured under an FMS arrangement⁴ with a total approved acquisition budget of \$1.403 billion. Defence subsequently entered into a contract with the US Government for the purchase of 10 US variant C-27J aircraft and associated equipment on 4 May 2012.⁵ The US variant C-27J was selected in preference to a commercial version of the C-27J, and another aircraft type, the Airbus C-295.

9. Overall, Defence's processes to select the US variant C-27J met relevant Commonwealth legislative and procurement requirements applicable at the time. Defence conducted a direct source procurement process in compliance with the Commonwealth Procurement Guidelines (CPGs). Based on Defence's assessments, there was a reasonable basis for government to select the US variant C-27J as a better value for money option than the commercial version of the C-27J, and the Airbus C-295. Nevertheless, the department's advice to government during the earlier phases of the procurement did not cogently establish the case for undertaking a direct source FMS procurement, and there were also shortcomings in Defence's handling of relations with industry during the course of the procurement.

10. Following a request for additional information by government on the aircraft options to further inform its decision making, in October 2011 Defence approached the commercial suppliers of the C-27J and the C-295 to obtain further price, availability and capability data to compare against information sought from the US Government on the US variant C-27J option. Defence's approach to industry did not transparently communicate the status of the procurement process, and resulted in a misunderstanding by the commercial suppliers that Defence had initiated an open procurement process, rather than collecting additional information for government decision making in the pursuit of a direct source procurement. In that respect, Defence's approach did not have sufficient regard to the expectation in government procurement that suppliers will be treated in a fair and

4 The FMS program can be used to procure materiel and services for both acquisition and sustainment projects with items purchased directly from the US Government through its Security Assistance Program. Defence Instruction (General) LOG 4-3-002, *Procurement of Materiel and Services from the United States of America under the Foreign Military Sales Program*, 1 October 2010, p. 1.

5 In January 2012 the US cancelled future orders of the C-27J and announced plans to divest the aircraft. However, a debate over the future of the C-27J is continuing in the US.

transparent manner.⁶ Defence has acknowledged the lack of clarity attending its approach to industry and has amended its processes so as to improve communication with industry in the future.

11. By way of background, the option to pursue a direct source procurement was available to Defence under the applicable Australian Government and Defence procurement framework. The Government's Mandatory Procurement Procedures that were in place at the time⁷ were designed to encourage competition and, therefore, enhance value for money outcomes. However, there was a general exemption clause from these requirements in a number of circumstances, including national security.⁸ This exemption was, and continues to be used⁹ by Defence in the procurement of the majority of its military specific equipment, including the C-27J.¹⁰

12. Notwithstanding this exemption available to Defence, the department was required to promote the proper use of Commonwealth resources¹¹ and consider value for money, which the CPGs described as the core principle applying to all Australian Government procurement. Value for money involves a range of considerations, including cost, fitness for purpose, the performance history of prospective suppliers, the relative risk of proposals, and flexibility to adapt to change over the life cycle of the acquisition.¹² Reflecting these considerations, Defence based its recommendation for a direct

6 The CPGs highlighted the need for proper use of Commonwealth resources, which includes ethical use. Paragraph 6.18 of the CPGs observed that: 'Adopting an ethical, transparent approach enables business to be conducted fairly, reasonably and with integrity.'

7 On 1 July 2012, the Commonwealth Procurement Rules (CPRs) replaced the CPGs. The CPRs reflect the CPGs in that they also require procurements to represent value for money for the Commonwealth, and encourage competition in procurement. The Additional Rules in the CPRs have now replaced, and largely reflect the Mandatory Procurement Procedures in the CPGs.

8 Paragraph 2.7 of the CPGs stated:

Nothing in any part of these CPGs prevents an agency from applying measures determined by their Chief Executive to be necessary: for the maintenance or restoration of international peace and security; to protect human health; for the protection of essential security interests; or to protect national treasures of artistic, historic or archaeological value.

Applying such measures does not diminish the responsibility of Chief Executives under section 44 of the *FMA Act* to promote the proper use of Commonwealth resources. Proper use means efficient, effective, economical and ethical use of Commonwealth resources that is not inconsistent with the policies of the Commonwealth.

9 This exemption was retained in the CPRs.

10 The use of the exemption is further articulated in the Defence Procurement Policy Manual (DPPM).

11 Under section 44 of the *FMA Act*. See footnote 8.

12 *Commonwealth Procurement Guidelines 2008*, paragraph 4.4.

source acquisition of the US variant C-27J through an FMS contract on the following departmental assessments:

- the aircraft price offered by the US Government for the US version C-27J could not be matched by the commercial supplier of the C-27J (Raytheon) and this price was only available until June 2012 when the US contract with the supplier of the US variant C-27J (Alenia) was due to expire;
- by accelerating the acquisition process, and reducing the risk of schedule delays by exercising the FMS option, Defence could retire its ageing C-130H fleet of transport aircraft in 2013, avoiding increasing support costs¹³;
- the Airbus Military C-295 did not meet several essential capability requirements, including interoperability requirements with other ADF aircraft logistics systems¹⁴;
- the US variant C-27J was the only Military Off The Shelf (MOTS) option available¹⁵, incorporating ballistic protection, electronic warfare protection, and communications systems that provided battlefield survivability and interoperability with other ADF platforms and the US¹⁶;
- the commercial C-27J option offered by Raytheon could not offer substantial benefits over and above those offered by the US variant available under FMS arrangements; and
- the cost to industry of participating in a full tender process was high and Defence assessed (based on previous research and the most recent information received from commercial sources) that the commercial suppliers could not compete with the FMS offer in any case. Defence further considered that conducting a tender would have taken several

13 The 2012-13 Defence Portfolio Budget Statements reported that the savings to be achieved from the early retirement of the C130H fleet were forecast to amount to some \$251 million over the period 2012-13 to 2015-16.

14 The C-295 was considered unable to achieve the required level of interoperability mainly due to the smaller diameter of its cargo compartment and its inability to transport the standard sized cargo pallet used by Air Force on its C-130J and C-17 aircraft. Further, the C-295 was considered unable to carry a range of ADF vehicles, while the C-27J had the capacity or potential to do so.

15 The use of Commercial Off The Shelf (COTS) and MOTS products has been promoted by Defence as a risk mitigation measure in response to a recommendation by the Defence Procurement and Sustainment Review (Mortimer Review) in 2008.

16 Defence noted that at the time, another key advantage identified for the US variant C-27J was that the US Air Force planned to conduct certification work for the aircraft which could be relied on by the ADF.

months and resulted in the loss of the competitive aircraft price available through FMS until 30 June 2012.

13. As discussed in paragraph 9, Defence's assessments, when taken together provided a reasonable basis to select the US variant C-27J as a value for money option. However, in advice to government in September 2011, and April 2012, seeking approval to proceed with the acquisition of 10 US variant C-27J aircraft, Defence did not cite, for the benefit of Ministers, the legislative basis for a direct source procurement provided by paragraph 2.7 of the CPGs, or cogently present some core advantages of the US variant C-27J, namely its ability to carry the standard ADF cargo pallet, and its interoperability with Defence's other two fixed wing cargo platforms; the C-130J and C-17 aircraft. There was also scope to strengthen the case for the procurement by clearly outlining the benefits of an FMS acquisition, which can offer the potential to lower risk by taking advantage of: the US's superior purchasing power; proven capabilities; the ability to share the costs of upgrades and modifications; and a platform that is interoperable with the US.

14. Defence has acknowledged there would have been merit in highlighting the importance of the logistics advantages of the C-27J in its advice to government, to inform decision makers of the full range of considerations which formed the basis of Defence's longstanding preference for the C-27J. Given the long timeframes, cost and complexity of major Defence projects, it is important that advice to government on procurement decisions clearly identifies the key points to consider and the cost of various options to assist Ministerial decision making.¹⁷

15. Defence has further acknowledged limitations in its approach to industry in the course of developing its April 2012 advice to government. Following consideration of Defence's advice in September 2011, which included concerns about the planned cancellation of the US C-27J program, the Government indicated a wish to keep open its options, and a strong desire for reassurance that there was a compelling case for the direct source procurement of the US variant C-27J. The Government's decisions prompted a previously unplanned approach by Defence to two commercial suppliers in October 2011, to supplement its existing knowledge of the commercial C-27J and C-295, to

17 The April 2012 advice to government contained two different cost comparisons for the aircraft's acquisition, and estimated whole-of-life costs based on another type of aircraft (the C-130J), even though the manufacturers possessed data on the whole-of-life costs for the C-27J and C-295.

compare with the information that was being sought from the US Government on the US variant C-27J.

16. Defence's correspondence of 26 October 2011 to the commercial suppliers (Raytheon as an agent of Alenia for the commercial C-27J, and Airbus for the C-295), advised them that the information requested would be used to inform first-pass consideration by government; advice which could reasonably be interpreted as implying that the project was in the early stages of development and that a solicitation activity would be undertaken in the future when more detailed information would be sought. The Government's public announcement on 10 May 2012 that a decision had been made to acquire the US version C-27J through FMS, prompted criticism from industry that the correspondence from Defence had been misleading.¹⁸

17. The ANAO has not made any formal recommendations for administrative improvements, noting: that the approval and procurement processes have mostly concluded; and Defence's advice regarding the introduction of revised processes for future approaches to industry during the capability requirements phase. Nevertheless, the audit underlines the importance of: cogent advice to government on procurement options; and fair and transparent dealings with potential suppliers by government agencies when undertaking procurements.

Key findings

Selecting the capability solution for AIR 8000 Phase 2 (Chapter 2)

18. The C-27J has been the preferred capability solution for AIR 8000 Phase 2 since the inception of the project in 2004, due to its greater performance, load carrying capacity and interoperability with Air Force's existing cargo fleets.¹⁹ By the time the US Defence Department selected a modified version of the C-27J in 2007, Defence had developed a strong preference for the C-27J over

18 Airbus stated that 'despite Airbus expending considerable resources responding to enquiries and requests for rudimentary information, we are concerned that the outcome may have been pre-determined from the start.' Airbus Military public statement, see <http://www.asiapacificdefencereporter.com/articles/235/AIRBUS-MILITARY-EXPRESSES-SURPRISE-AT-CARIBOU-REPLACEMENT-DECISION> [accessed 19 September 2012, see also <http://www.flightglobal.com/blogs/asian-skies/2012/05/full-text-of-airbuss-statement.html> [accessed 19 September 2012].

19 Defence has advised that while an earlier project Air 5190 had found the C-27J to be developmental, the value for money of the C-27J improved, as the cost risk associated with its developmental nature decreased over time as the aircraft matured.

the Airbus C-295, and in particular the US variant C-27J based on the additional upgraded ballistic protection, electronic warfare and communication systems included in this aircraft.²⁰

19. While Defence developed detailed and robust capability definition documents (Preliminary Operational Concept Document and the Preliminary Functional Performance Specification Document)²¹, it did not finalise these documents prior to moving into the acquisition phase of Air 8000 Phase 2. Defence also did not obtain robust data as a basis for estimating whole-of-life costs for the three aircraft options. Defence instead estimated whole-of-life costs on the assumption that they would be two-thirds of the running cost of a C-130J aircraft. While Defence has advised that time constraints relating to the accelerated acquisition of the US variant C-27J in 2011 precluded the use of robust data, AIR 8000 Phase 2 had been running for several years prior to the accelerated process, providing Defence ample opportunity to source this data.

20. In seeking government approval in April 2012 to purchase the US variant C-27J, Defence did not emphasise some core capabilities of the US variant C-27J; in particular, its interoperability with Air Force's C-130J and C-17 fleet; and its ability to carry the standard ADF cargo pallet. Rather, Defence emphasised other potential capabilities of the aircraft such as its ability to carry the Navy Special Operations vehicle. While the aircraft's potential to transport the Navy vehicle was relevant, the core role of the C-27J is as a cargo aircraft, operating in the context of a wider ADF logistics and transport framework.

21. The shortcomings in the quality of Defence's advice to government were partly attributable to AIR 8000 Phase 2 not undergoing a DMO Gate

20 Defence noted that at the time, another key advantage identified for the US variant C-27J was that the US Air Force planned to conduct certification work for the aircraft which could be relied on by the ADF.

21 The purpose of the Operational Concept Document (OCD) and Functional Performance Specification (FPS) documentation is discussed in paragraphs 2.6—2.10. By February 2009, Defence had developed a comprehensive set of requirements which were documented in the Preliminary OCD and the Preliminary FPS. However, these documents remained in preliminary form and final versions were not available when Defence sought pricing data in the second half of 2011 and when seeking government approval in May 2012.

Review²² until 11 July 2012, some two months after contract signature. While DMO requires that a Gate Review be conducted before a proposal goes forward to government for approval²³, Defence advised that the Gate Review for AIR 8000 Phase 2 was postponed due to the time constraints involved in meeting the US deadline of FMS contract signature by June 2012.

Compliance with relevant Australian Government and Defence procurement requirements (Chapter 3)

22. Defence pursued an accelerated acquisition strategy for the procurement of 10 US variant C-27J through a direct source FMS arrangement from July 2011. Defence advised that it pursued the direct source option on the basis that the two commercial options could provide no reasonable prospect of providing better value for money than the US variant C-27J sourced through an FMS process. In September 2011, Defence advised its then Minister on the strategy, who then sought the then Prime Minister's approval to approach the US Government to obtain cost, availability and schedule information on the possible acquisition of the US variant C-27J. While approving the approach, the Prime Minister also requested the development of alternate options and acquisition strategies, noting that the US C-27J program may ultimately be reduced or cancelled. The Prime Minister indicated that commercial information on the alternate options, 'akin to first pass', would be considered by the Government.

23. This resulted in an unplanned approach to industry, and Defence's letters to the commercial suppliers could reasonably be read as implying that the acquisition process for AIR 8000 Phase 2 was at a pre-first pass stage, stating that the purpose of the request was to 'support the Government First Pass considerations.' The letters gave no indication that Defence was considering accelerating the approval process, nor that Defence hoped to finalise an FMS

22 Gate reviews form part of DMO's internal assurance framework for capital acquisition projects. The results of Gate Reviews inform DMO's advice to Defence and government as to a project's health and outlook. These reviews are the most searching and critical internal review that major Defence acquisition projects are subjected to in the ordinary course of capability development and acquisition. Since mid-2011, it has been DMO's intention to conduct Gate Reviews at a number of key milestones in the project lifecycle, from DCP entry to delivery of equipment and development of a Materiel Acquisition Agreement. In particular, Gate Reviews are regarded as mandatory at three key stages: before first-pass and before second-pass consideration by government, and before contract signature. See ANAO Audit No. 52, 2011-12, *Gate Reviews for Defence Capital Acquisition Projects*.

23 Defence Materiel Instruction (Executive) 00-0-009, Gate Reviews for DMO Projects, Version 1.0, 3 May 2012, p. 6.

contract by June 2012. In this context, Defence's approach to industry did not transparently communicate the status of the procurement process.

24. Further, the commercial suppliers were not provided with the key capability requirement documents that Defence's Capability Definition Documents Guide states should be fully developed for the solicitation stage. Defence has acknowledged the limitations of its approach to industry on this occasion, and in the course of the audit amended its Defence Capability Development Handbook so that future approaches to industry follow a more formal procedure.

25. Defence evaluated the industry responses and compared them to the US offer. The information provided by the commercial suppliers reflected the request made by Defence, and was of a lower quality than the information provided by the US in respect to the US variant C-27J. Defence advised that it adopted this approach on the basis that it was seeking to confirm that the commercial options had no substantial benefits over the US variant. Defence was confident of the adequacy of this process to confirm its understanding of the relative merits of the various aircraft, developed over time, without conducting a formal tender process. Defence further advised that it was cognisant of the significant costs associated with developing second pass quality proposals, and wished to avoid having commercial suppliers commit to developing second pass data for this acquisition, when there was no reasonable prospect of them providing a better value for money option. That said, the commercial suppliers were led to believe they were engaging in the early stages of an open procurement process, when in fact they were providing supplementary information to confirm Defence's position to pursue a direct source FMS procurement of the US variant C-27J.

26. Based on this evaluation, Defence advised government that the US variant C-27J provided the lowest cost and lowest risk option for AIR 8000 Phase 2. However, no risk management process was undertaken by Defence during the acquisition process, contrary to Defence internal guidelines. The possible cancellation of the US C-27J program also presents additional risks to this acquisition in the future as several key advantages of the FMS acquisition may be negated.²⁴ Nevertheless, the possible cancellation of the US program

24 These risks include the inability of Defence to share the costs of through-life sustainment; aircraft upgrades and training with the US.

had not been settled at the time of the Australian decision to procure the aircraft, and debate regarding cancellation has continued in the US since then.

Final approvals and value for money (Chapter 4)

27. Based on Defence's April 2012 advice, the Government approved the purchase of 10 US variant C-27J aircraft through an FMS arrangement with the US Government on 16 April 2012 and the FMS contract was signed on 4 May 2012. The total contract values are:

- FMS contract with the US – \$882 502 873; and
- intellectual property contract with the aircraft's manufacturer Alenia Aermacchi – \$58 160 025.

28. In examining the value for money achieved by this acquisition, the ANAO found that in terms of cost, the procurement process adopted by Defence for AIR 8000 Phase 2—which compared tender quality information from the US Government (in respect to the US variant C-27J) to first pass data from the two commercial suppliers (in respect to the commercial C-27J and C-295), in itself provided a relatively limited basis for comparison between the three options. However, Defence has advised that it also had regard to other cost information on the various aircraft, acquired over the course of Project Air 8000 Phase 2. The comparison of FMS and commercial offers is inherently difficult, and without the benefit of tender quality documentation for the commercial offers, becomes even more so.

29. The Australian Government procurement policy framework does not limit the determination of value for money to cost.²⁵ FMS acquisitions can offer value for money by making available proven capabilities adopted by the US. FMS can also reduce risk and provide an opportunity to take advantage of the US's superior purchasing power; the ability to share the costs of upgrades and modifications; and a platform that is interoperable with the US. In this regard the ANAO observed that the US variant C-27J:

- allowed Defence to secure a discounted price for the aircraft, contributing to the value for money of the acquisition;

25 See paragraph 12 for discussion of the other considerations which may inform a value for money assessment.

- not only offered interoperability with the US variant C-27J fleet, but also with Air Force's existing C-17 and C-130J fleets; satisfying the fitness for purpose criterion of paragraph 4.4 of the CPGs;
 - provided ballistic protection, electronic warfare protection, and communications systems that enhanced battlefield survivability and interoperability with other ADF platforms and the US, also satisfying the fitness for purpose criterion of paragraph 4.4 of the CPGs;
 - removed the risk of Defence having to integrate flight control and electronic warfare systems into the aircraft, decreasing the risk of the acquisition in line with paragraph 4.4 of the CPGs; and
 - provided a relatively short timeframe to achieve Initial Operating Capability²⁶, allowing Air Force to retire its ageing C-130H fleet of aircraft earlier and achieve savings, contributing to the efficiency of the acquisition.
30. Taken together, these considerations provided a reasonable basis to select the US variant C-27J as the value for money option.

Summary of agency response

31. Defence's covering letter in response to the audit is reproduced at Appendix 1. Defence provided the following formal response to the audit report:

Defence acknowledges the findings detailed in this audit report on *AIR 8000 Phase 2—C-27J Spartan Battlefield Airlift Aircraft* and notes that the ANAO has not made any formal recommendations. Of particular note is that:

- The *Financial Management and Accountability Act 1997* was not breached by Defence during the procurement process for the C-27J Spartan Battlefield Airlift Aircraft;
- The chosen C-27J Aircraft constituted the best value for money for the Commonwealth when all factors were considered;
- The basis for a direct source procurement and articulation of the core advantages of the US variant C-27J could have been more cogently presented; and

26 Initial Operating Capability is the minimum number of aircraft, associated equipment, and training provided to personnel to deliver a capability to Air Force.

- Defence's engagement with industry, in this instance, could have been improved.

The approval and procurement processes for this project have mostly concluded. Defence has introduced revised (and improved) processes for future approaches to industry. As noted in the Audit Report, Defence has amended the Defence Capability Development Handbook to ensure that all future solicitation with industry, throughout the requirements phase of the capability life cycle, follows a more formal procedure to ensure the status of procurements are transparently communicated.

Audit Findings

1. Introduction

This chapter provides the background to the audit including an overview of the Royal Australian Air Force's Lightweight Tactical Fixed Wing capability. It also describes the audit objective and scope.

Australian Defence Force Airlift Capability

1.1 In 2009, the Royal Australian Air Force (Air Force) retired the last of its 26 DHC-4 Caribou short takeoff and landing transport aircraft (see Figure 1.1). The Caribou served as Air Force's primary light tactical transport aircraft for 45 years, and was noted for its versatility and ability to operate from short, rudimentary airstrips. The focus of this audit was the process to select the replacement for this important Australian Defence Force (ADF) capability.

Figure 1.1: DHC-4 Caribou Light Tactical Transport Aircraft



Source: Department of Defence.

1.2 The ADF's airlift capability comprises a range of aircraft types ranging from light helicopters to large cargo aeroplanes operating from four Air Force Bases. The airlift capability provides the following services to the ADF:

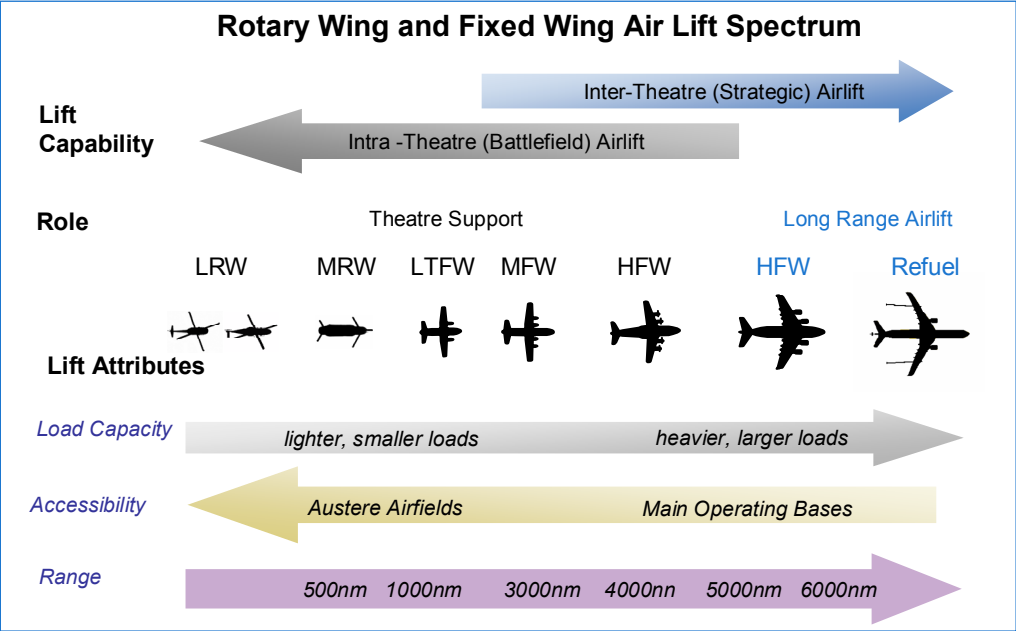
- aeromedical evacuation;
- air-to-air refuelling;
- airborne operations;
- air logistics support;
- joint personnel rescue;
- national support commitments; and
- special operations VIP transport.

1.3 Defence airlift capability is also used extensively for humanitarian missions such as support after natural disasters, search and rescue, medical evacuations and other emergencies. Airlift comprises Fixed Wing (FW) and Rotary Wing (RW) aircraft. The larger FW aircraft carry heavier loads over longer distances but need better quality landing facilities, whereas the smaller aircraft, including RW, carry less cargo over shorter distances but provide greater accessibility where the size and quality of airfields is limited.

1.4 The operational concept for the transport of cargo and personnel is referred to as a 'hub and spoke' approach. Under this approach, larger aircraft, carrying heavier loads deliver to transportation 'hubs' and smaller aircraft, both FW and RW, then carry lighter loads to local centres or 'spokes' which may lack prepared or sealed landing strips.²⁷ Figure 1.2 shows the range of airlift platforms and the activities for which they are used.

²⁷ Standardised cargo handling mechanisms, such as palletisation, facilitate the hub and spoke approach. This issue is discussed further in paragraph 2.18

Figure 1.2: ADF airlift platforms



Source: Adapted from Royal Australian Air Force, Airlift Capability Roadmap – Reshaping the Airlift Fleet, March 2006.

Note 1: L = light; M = medium; H = heavy; R = rotary; F = fixed; W = wing; nm = nautical miles, T = tactical.

1.5 Lightweight Tactical Fixed Wing (LTFW) airlift activities are characterised by the use of FW aircraft capable of utilising short, rudimentary airstrips with soft and rough surfaces in wet conditions. An LTFW capability allows for the delivery of combat forces and equipment in locations where larger aircraft are unable to operate due to the limited length or condition of the landing strip, and where RW aircraft are either unavailable or not appropriate for the nature of the supply task.

Need for a Caribou replacement

1.6 Air Force’s LTFW capability was provided by Caribou aircraft from 1964 until they were withdrawn from service in 2009. Since the withdrawal of the Caribou, Air Force has had no LTFW airlift capability and has relied on a combination of larger aircraft and RW aircraft for LTFW tasks previously conducted by the Caribou.²⁸

28 While helicopters can operate from ‘hubs’ to ‘spokes’, they have limited range and speed and are comparatively costly to operate.

1.7 Defence²⁹ first considered the replacement of the Caribou in the late 1970s with the commencement of a feasibility study, but progress was limited by Defence budget priorities and the lack of a suitable choice of aircraft. By the mid-1990s, Defence considered that feasible alternatives to the Caribou were becoming available and, in 1996, began project AIR 5190 to replace the Caribou. This project was suspended in June 2000 after a tender process. The tender evaluation found that none of the capability solutions offered were acceptable. Defence decided instead to extend the life of the Caribou fleet and maintain the existing LTFW capability further, to 2009. The Caribou was refurbished several times, enabling it to remain in service. Defence also undertook studies to determine the optimal configuration of the ADF's entire airlift fleet, including the need for the LTFW capability and whether this function could be achieved through a combination of other aircraft.

1.8 In 2004, a successor project to AIR 5190, AIR 8000 Phase 2—Battlefield Airlifter^{30,31}, was included in the Defence Capability Plan (DCP) as part of a plan to improve airlift capability. The Government's intention to increase airlift capability was subsequently discussed in the 2009 Defence White Paper:

The Government has decided to increase our air transport capability through the acquisition of two additional C-130J Hercules aircraft and up to ten light tactical fixed-wing aircraft to replace the DHC-4 Caribou aircraft. These new aircraft will complement the current air transport fleet of four C-17 and 12 C-130J aircraft. The older C-130H aircraft will be retired. The Government will ensure that these new light tactical fixed-wing aircraft will have significantly greater range, speed and payload than the retiring Caribou transports.³²

1.9 AIR 8000 Phase 2 aims to deliver to Air Force up to 10 LTFW aircraft, including through-life support, facilities and a flight simulator. Like their

29 The Defence Portfolio consists of a number of component organisations that together are responsible for the defence of Australia and its national interests. The three most significant bodies are: the Department of Defence, the Australian Defence Force (ADF) and the Defence Materiel Organisation (DMO). In practice, these three bodies have to work together closely and are broadly regarded as one organisation known as Defence (or the Australian Defence Organisation). All three are involved in the C-27J acquisition.

30 Lightweight Tactical Fixed Wing refers to the capability provided by the Caribou aircraft and being sought under AIR 8000 Phase 2. The project is often referred to as Battlefield Airlift although this term literally refers to a range of aircraft with airlift capability.

31 AIR 8000 Phase 1 addressed the provision of additional C-130J aircraft.

32 2009 Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030*, p. 80. <http://www.defence.gov.au/whitepaper/docs/defence_white_paper_2009.pdf> accessed 8 August 2012.

Caribou predecessors, the aircraft must operate from a wide range of rudimentary airstrips, and provide Air Force with useful payload capacity, range and in-theatre survivability.

Selection of the AIR 8000 Phase 2 capability solution, May 2012

1.10 In the years that followed the suspension of project AIR 5190, Defence focused on two aircraft as potential Caribou replacements:

- the C-295 (Figure 1.3), manufactured by Construcciones Aeronauticas Sociedad Anonima (CASA which became Airbus Military in 2009); and
- the C-27J (Figure 1.4), designed by Lockheed Martin and Alenia Aermacchi (Alenia), a subsidiary of Finmeccanica, and manufactured by Alenia.

Figure 1.3: Airbus Military C-295 Aircraft



Source: Airbus Military.

Figure 1.4: Alenia L-3 US variant C-27J Aircraft



Source: United States Air Force.

1.11 In 2007, the US Department of Defense selected a modified C-27J to replace its Army and Air Force Battlefield airlifters and contracted with a US company, L-3, under its Joint Cargo Aircraft (JCA) program. The US variant C-27J is based on the commercially available C-27J aircraft but incorporates additional equipment, including communications and navigation systems, electronic warfare self-protection systems and ballistic protection. The US decision to acquire a modified C-27J aircraft led Defence to consider the US version of the aircraft (sourced from the US under a Foreign Military Sales (FMS) arrangement) as an option to fulfil the requirements of AIR 8000 Phase 2, bringing the total number of contenders for the AIR 8000 Phase 2 project to three: the C-295, the commercial variant C-27J, and the US variant C-27J.

1.12 Although included in the DCP from 2004, AIR 8000 Phase 2 was not given priority until mid-2011. At that point, the project's approval process was accelerated, resulting in an approach to industry on October 2011 and the

project receiving combined pass government approval in 16 April 2012 with a total acquisition budget of \$1.403 billion.³³

1.13 On 4 May 2012, Defence entered into a contract with the US Government for the purchase of 10 US variant C-27J aircraft and associated equipment under that country's FMS program.³⁴ After the Government's decision to approve the purchase, the then Minister for Defence stated that:

A competitive down selection process to the C-27J was made following an exhaustive assessment by the Department of Defence, the Defence Materiel Organisation (DMO) and Air Force of information provided by the manufacturers of the C-27J and C-295 aircraft.³⁵

1.14 The aircraft Defence is acquiring are configured and equipped in the same way as those purchased by the US Department of Defense under its JCA program and are referred to throughout this report as the 'US variant C-27J'. In January 2012 the US cancelled future orders of the C-27J and announced plans to divest the aircraft. However, there has continued to be debate over the future of the C-27J in the US.

Request for this audit

1.15 On 29 May 2012, Defence officials appeared before the Senate Foreign Affairs, Defence and Trade Legislation Committee for the annual Budget Estimates hearing. During this hearing, the Shadow Minister for Defence, Senator the Hon. David Johnston, raised the following questions:

33 Defence major capital acquisition projects undergo a staged government approval process that generally involves at least two passes. The first pass submission describes broad solutions to meet an identified capability gap and is presented to the National Security Committee of Cabinet. The second pass involves a detailed and rigorous acquisition business case for each capability option approved at first pass. The information provided at second pass is more detailed and of a higher standard of accuracy. The approval of an individual project may be 'tailored' to take into account the particular circumstances. This can include varying the number of times it is considered by government—that is, the number of passes. In the case of AIR 8000 Phase 2, second pass approval was brought forward and agreed at the same time as first pass approval in what is known as 'combined pass' approval.

See paragraphs 4.4 for a more detailed explanation and examination of the two pass approval process.

34 The FMS program can be used to procure materiel and services for both acquisition and sustainment projects with items purchased directly from the US Government through its Security Assistance Program. Defence Instruction (General) LOG 4-3-002, *Procurement of Materiel and Services from the United States of America under the Foreign Military Sales Program*, 1 October 2010, p. 1.

35 Minister for Defence – Media Release – Opposition disarray over the C-27J aircraft acquisition, 16 May 2012 <<http://www.minister.defence.gov.au/2012/05/16/minister-for-defence-media-release-opposition-disarray-over-the-c-27j-aircraft-acquisition/>> [accessed 14 August 2012].

- first, whether Defence had complied with the relevant requirements of the *Financial Management and Accountability Act 1997* (FMA Act) and/or relevant Commonwealth and Defence Procurement Guidelines, in the conduct of the AIR 8000 Phase 2 procurement process; and
- second, whether value for money was achieved through the selection of the FMS option to acquire 10 C-27Js as the capability solution to replace the Caribou as the ADF's LTFW aircraft.

1.16 Subsequently, on 31 May 2012, Senator Johnston wrote to the Auditor-General outlining his concerns about the procurement processes adopted by Defence for this project and whether the capability solution option selected would deliver value for money. In support of his concern about the value for money offered by this option, Senator Johnston noted that other potential suppliers had provided him with information that he considered brought this into question. In the circumstances, Senator Johnston requested that the ANAO undertake a performance audit of the project.

1.17 After considering Senator Johnston's request, the Auditor-General decided to conduct this performance audit of Air 8000 Phase 2.

Audit objective, criteria and scope

1.18 The objective of the audit was to assess the adequacy of Defence's processes, including compliance with the *Financial Management and Accountability Act 1997* (FMA Act), the Financial Management and Accountability Regulations 1997 (FMA Regulations), and relevant Commonwealth and Defence procurement requirements, to select the capability solution recommended to the Government to satisfy the requirements of AIR 8000 Phase 2.

1.19 The high level criteria aimed to establish whether, in procuring the US variant C-27J, Defence:

- complied with the FMA Act and Regulations, and relevant Commonwealth and Defence procurement requirements; and
- undertook adequate inquiries and analysis to support its determination that this option represented the best value for money for its future light tactical transport aircraft capability requirements, in the context of the ADF's requirements and the relative cost and risk of alternatives.

1.20 The scope of the audit encompassed the research and analyses undertaken by Defence to inform its recommendation to the Government to

approve the selection of the US variant C-27J, under an FMS arrangement with the US, as the capability solution to satisfy the requirements of AIR 8000 Phase 2.

1.21 The audit was conducted in accordance with ANAO auditing standards at a cost to the ANAO of approximately \$477 000.

Report structure

1.22 The remainder of this report is structured as follows:

- Chapter 2: *Selecting the capability solution for Project AIR 8000 Phase 2*—identifies the capability requirements for project AIR 8000 Phase 2, and the process Defence undertook to determine the suitability of the US variant C-27J to provide this capability.
- Chapter 3: *Compliance with relevant Australian Government and Defence procurement requirements*—outlines the major procurement legislation and associated policies and procedures, and assesses Defence's performance against this framework.
- Chapter 4: *Final approvals and value for money*—examines the final approval process and value for money presented by the acquisition of the US variant C-27J.

2. Selecting the capability solution for Project AIR 8000 Phase 2

This chapter identifies the capability requirements for project AIR 8000 Phase 2, and the process Defence undertook to determine the suitability of the US variant C-27J to provide this capability.

Introduction

2.1 Air Force obtained an LTFW capability with the acquisition of the Caribou fleet during the 1960s. The need to secure a replacement for the Caribou was first identified in the late 1970s, but it was not until the establishment of the AIR 5190 project in 1995 that Defence began substantial work towards replacing its ageing Caribou fleet. AIR 5190 was first included as an unapproved project in the 1995–99 edition of *Defence New Major Capital Equipment Proposals*.³⁶ Described as an ‘acquisition of Light Tactical Aircraft to maintain the capability provided by the Caribou’, the project was approved by government in 1996.

2.2 In 1997, Defence issued a world-wide Invitation to Register (ITR) for AIR 5190 seeking expressions of interest from companies with the potential to provide a replacement for the Caribou. Five companies formally responded to the ITR and three of these were shortlisted as potential suppliers. A Request for Tender (RFT) was then issued to the three shortlisted companies in May 1998, and responses were received in August 1998. The capability solutions offered included:

- the C-235 manufactured by Construcciones Aeronauticas Sociedad Anonima (CASA, which, in 2009, became Airbus Military)³⁷;
- the C-295, also manufactured by CASA; and
- the C-27J, manufactured by Alenia Aermacchi, a subsidiary of Finmeccanica.³⁸

36 A five year rolling list of proposals also widely known in Defence circles as the ‘Pink Book’, a predecessor to the Defence Capability Plan, whose first edition appeared in 2001.

37 <http://www.airbusmilitary.com/Company/CompanyHistory08.aspx>

38 Finmeccanica is partly owned by the Italian Government.

2.3 A Defence Tender Evaluation Board assessed the responses. The Board determined that the C-235 aircraft was critically deficient against the required parameters; the C-295 was significantly deficient on operational and technical grounds; and the C-27J, although preferred, was significantly deficient due to its high cost and developmental nature, presenting high levels of risk to its acquisition. The Board noted that, at the time, neither the C-295 nor the C-27J met the required cost and capability needs.

2.4 In June 2000, Defence suspended Project Air 5190 and, in May 2001, the then Minister for Defence announced the approval of Project AIR 5190 Phase 1A to extend the life of the Caribou fleet until 2010.³⁹ Complementing Phase 1A, Project AIR 5190 Phase 2—Light Tactical Airlift Capability, subsequently appeared in the first public Defence Capability Plan (DCP) in June 2001. At this point, delivery of a replacement LTFW capability was expected by 2010 and an Airlift Study was ongoing to determine the project requirements.⁴⁰

2.5 With the release of the 2004 public DCP, Project Air 5190 Phase 2 evolved into Project AIR 8000 Phase 2—Battlefield Airlifter (BFA)⁴¹, with an estimated expenditure band of \$750 million to \$1 billion:

AIR 8000 Phase 2 seeks to acquire a Battlefield Airlifter (BFA) capability. This capability will focus on the provision of an inter-theatre and intra-theatre airlift solution which will operate primarily at lower altitudes (below 10 000 feet for intra-theatre operations) and be capable of operating from a wide range of rudimentary airstrips. Phase 2 may also have to provide appropriate training support, which could include the provision of a Full Flight Simulator. Notably, the BFA capability will require careful consideration of the interaction between rotary-wing assets and light/medium fixed wing platforms in the tactical environment.⁴²

Defining Defence's requirements for the LTFW capability

2.6 Capability definition is the process by which a capability gap is identified as a need and then progressively translated into documented

39 Minister for Defence media release 146/01, Major Defence Capital Equipment Projects, 22 May 2001, see <<http://www.defence.gov.au/minister/Reithtpl.cfm?CurrentId=681>> [accessed 23 July 2012]

40 The DCP is the successor to the Defence New Major Capital Equipment Proposals or 'Pink Book'.

41 The term 'Battlefield Airlifter' literally refers to a range of aircraft with airlift capability. Air 8000 Phase 2 will actually acquire a Lightweight Tactical Fixed Wing aircraft (LTFW) to be used in airlift roles. This report uses the description LTFW when referring to the aircraft to be acquired by AIR 8000 Phase 2.

42 Defence Capability Plan 2004–2014.

requirements for new capability systems or modifications to those systems. The requirements definition process is the responsibility of Defence's Capability Development Group (CDG) and is undertaken during the capability development process⁴³ leading to first and second pass approval by government.⁴⁴ The resulting requirements are then documented in a suite of Capability Definition Documents (CDD), notably the Operational Concept Document (OCD), the Function and Performance Specification (FPS) and the Test Concept Document (TCD).

2.7 The OCD and FPS are important descriptive documents intended to allow potential suppliers to understand Defence's requirements and enable them to provide tender quality pricing and schedule data during the solicitation stage of the project.⁴⁵ Defence's CDD Guide states 'The OCD and FPS would normally become part of the solicitation package.'⁴⁶ They are also essential when assessing the compliance of options offered by suppliers and for testing equipment, following delivery, for acceptance purposes. The OCD and FPS normally undergo development in which preliminary versions are created to inform first pass approval, and these are then refined for solicitation and second pass approval.

2.8 In the case of AIR 8000 Phase 2, capability definition commenced before the release in 1998 of the first Request for Tender for the project's predecessor, project AIR 5190. Many requirements from that project have been carried forward into AIR 8000 Phase 2 and the requirements documentation has been developed to reflect evolving operational needs and industry developments.

43 Capability development in Defence comprises those activities involved in defining requirements for future capability, occurring principally during the requirements phase of the capability systems life cycle. Capability development is supported by an extensive system of well-documented policies, instructions and procedures, in particular, the *Defence Capability Development Handbook*, which describes in detail the processes that support Government approval of new capability proposals.

44 As indicated in footnote 33, Defence major capital acquisition projects undergo a staged government approval process that generally involves at least two passes. The first pass submission describes broad solutions to meet an identified capability gap and is presented to the National Security Committee of Cabinet. The second pass involves a detailed and rigorous acquisition business case for each capability option approved at first pass. The information provided at second pass is more detailed and of a higher standard of accuracy. The approval of an individual project may be 'tailored' to take into account the particular circumstances. This can include varying the number of times it is considered by government—that is, the number of passes. In the case of AIR 8000 Phase 2, second pass approval was brought forward and agreed at the same time as first pass approval in what is known as 'combined pass' approval.

45 Solicitation means, literally, a petition or request. In this context it refers to an approach to industry to obtain cost and schedule data for a particular requirement. In Defence, solicitation usually refers to tendering activities.

46 Defence, Capability Definition Documents Guide, Version 1.4, February 2009, p. 27.

By February 2009, Defence had developed a comprehensive set of requirements for AIR 8000 Phase 2 which were documented in a 'preliminary OCD' (POCD) and a 'preliminary FPS' (PFPS).

2.9 Defence's CDD Guide requires the CDD used for solicitation to be 'fully developed' and states that the 'OCD and FPS would normally become part of the solicitation package.' The OCD or FPS had not been finalised when Defence sought prices from potential suppliers during the second half of 2011 following the acceleration of AIR 8000 Phase 2 and Defence did not provide the POCD or PFPS to them. Defence advised that these documents were not provided to potential suppliers due to time constraints imposed by the desire to finalise an FMS contract by June 2012, and to avoid unnecessary cost to industry.

2.10 The FPS and OCD had not been finalised at the point Defence sought and obtained in May 2012, the Government's combined first and second pass approval or the acquisition of the US variant C-27J.

Airlift capability studies

2.11 While Defence had not finalised the requirements definition process expected for major acquisitions, Defence had conducted two major studies of ADF lift capability (including the LTFW capability) to identify optimal solutions. The Defence Science and Technology Organisation (DSTO) undertook the first, in 2003, addressing the entire ADF lift capability, including airlift and sealift. DSTO outlined its findings in a draft report, *ADF Lift Study Phases 1–4*.⁴⁷

2.12 Although the draft report indicated that replacing LTFW capability was not then a high priority, the Phase III Report Executive Summary stated that the Caribou replacement would 'provide efficiency in moving cargoes which would not fully utilise the capacity of medium or heavy airlift.' Table 2.1 identifies the aircraft considered in this first ADF lift study.

47 A final report was not published.

Table 2.1: Aircraft considered by the 2003 ADF Lift Study Phase III

| Fixed Wing | Rotary Wing |
|-----------------------------|--------------------------------------|
| Heavy: Boeing C-17 | Medium: Boeing CH-47D Chinook |
| Heavy: Airbus A400M | Medium: Augusta Westland EH 101 |
| Medium: Lockheed C-130H | Troop lift: Sikorsky S-70A Blackhawk |
| Medium: Lockheed C-130-J-30 | Troop lift: Bell UH-1Y Iroquois |
| BFA: Lockheed C-27J | Troop lift: Bell Augusta AB139 |
| BFA: DeHavilland CC-08 | Troop lift: Eurocopter NH 90 |

Source: ADF Lift Study Phase III In-Theatre Lift, 2003, Executive Summary Update,

2.13 Air Force conducted the second study in 2006, specifically addressing airlift capability. This study recommended three options to achieve optimal airlift capability, all of which incorporated a mix of LTFW, additional CH47 Chinook helicopters, and/or additional C-130J aircraft to provide an enhanced airlift capability to meet regional accessibility requirements.

2.14 For each of these studies, Defence identified specific aircraft in each class to enable scenarios to be developed and relative capabilities to be compared. Although the two studies were not intended to identify a particular solution, both referred specifically to C-27J aircraft for the LTFW capability. The references to the C-27J reflect the position that, as a result of the 1999 findings of the Tender Evaluation Board for the predecessor project (AIR 5190)⁴⁸, Defence viewed the aircraft as a stronger candidate to fill this capability gap.

Proposal in 2006 for direct source acquisition of C-27J

2.15 As discussed in paragraph 2.3, the 1998 request for tender for the LTFW capability found that the C-295 was significantly deficient on operational and technical grounds, and the C-27J, although preferred, was significantly deficient due to its high cost and developmental nature, presenting high levels of risk to its acquisition. Defence advised the ANAO that in the period after the 1998 request for tender:

⁴⁸ As noted in paragraph 2.3, the Board determined at the time that the C-235 aircraft was critically deficient against the required parameters; the C-295 was significantly deficient on operational and technical grounds, and the C-27J, although preferred, was significantly deficient due to its high cost and developmental nature, presenting high levels of risk to its acquisition. The Board noted that, at the time, neither the C-295 nor the C-27J met the required cost and capability needs.

... the ability of the C-295 to meet the capability requirements decreased over time, the [value for money] of the C-27J improved, as the cost risk associated with its developmental nature decreased over time as the aircraft matured.

2.16 Defence further focussed upon the C-27J as the capability solution for AIR 8000 Phase 2 in July 2006, when CDG sought the Defence Capability Investment Committee's (DCIC)⁴⁹ agreement that the C-27J was the 'only viable, cost-effective candidate for the LTFW requirement' and to proceed with a sole source acquisition strategy. The sole source strategy put to DCIC was supported by CDG and the DMO. The submission to DCIC made a range of statements about the superior performance of the C-27J as compared to the C-295 (Table 2.2) and provided broad cost comparison figures between the two aircraft.

Table 2.2: Comparison of the C-27J and C-295 provided to DCIC in July 2006

| Criterion | C-27J | C-295 |
|----------------------|---|---|
| Max. take-off weight | 31 800 kg | 23 200 kg |
| Max. Payload | 11 500 kg | 9 250 kg |
| Troop transport | 68 | 71 |
| Ferry range | 5926 km | 5630 km |
| Max. operating speed | 325 Knots, true air speed | 260 Knots, true air speed |
| Altitude ratings | 9144 m (max. service ceiling) | 7620 m (normal operating altitude) |
| Vehicle carriage | The Supacat (Nary) will be able to be carried in a ready-to-fight configuration in the C-27J. | The C-295 cannot carry the Long Range Patrol Vehicle (LRPV) (5600kg) due to insufficient floor strength and fuselage dimensions. Therefore it will be unable to carry the Nary which is larger and heavier. |

Source: ANAO summary of Defence advice to DCIC, 12 July 2006.⁵⁰

49 DCIC, chaired by the Secretary of Defence, reviews major capability and investment issues and seeks to ensure resourcing, including capital investment and operating costs, are consistent with Defence's strategic priorities and resourcing strategy.

50 ANAO verified the data for the C-295 from open source documentation available at <<http://www.c295.ca/c295-canadian-sar/specifications/>>, and for the C-27J at <<http://www.c-27j.ca/c-27j-features-and-capabilities>>.

2.17 The cost comparisons provided to DCIC in July 2006 were based on data that Defence had obtained as part of the 1998 tender process under AIR 5190; and from an unsolicited proposal from Alenia Aermacchi for the C-27J received in 2005. No new cost data was sought from Airbus Military for the C-295 for the cost comparisons in the July 2006 submission to the DCIC. Defence advised the ANAO that there was little value in asking Airbus Military to update the cost data at the company's expense as Defence had previously determined that the aircraft could not meet essential performance requirements; the basis of the proposed sole source strategy.

2.18 Defence advised the ANAO that two additional discriminators informed its thinking: the ability to use standard ADF pallets and the ability to load standard field vehicles. These were attractive attributes of the C-27J over the C-295 as they had the potential to streamline cargo handling in the context of the 'hub and spoke' model. Defence has acknowledged to the ANAO that there would have been merit in more cogently arguing these advantages in the context of its advice to the DCIC.⁵¹

2.19 A further difference in capability between the two aircraft, raised in the July 2006 DCIC submission, related to vehicle carriage, in particular, their ability to carry the Nary special operations vehicle (known also as the 'Supacat'). The submission stated that 'The Supacat will be able to be carried in a ready-to-fight configuration in the C-27J.' This view is reflected in Table 2.2, which summarises essential characteristics of the two aircraft, as provided to the DCIC. However, this document did not include a reference to the source of the claim that the C-27J could transport the Nary vehicle, and Defence has acknowledged to the ANAO that while the C-295 is unable to carry the Nary at all, the observation in the submission that the Nary could be transported in 'ready-to-fight' configuration in the C-27J did not fully reflect the additional steps required to load the Nary into the C-27J, including some dismantling of the vehicle. These issues are discussed in more detail in paragraphs 2.28–2.35. The capacity to carry the Nary was also included as an essential criterion in a PFPS for AIR 8000 Phase 2 prepared in 2009 and became one of the major discriminators advanced in arguments in support of the C-27J as the only aircraft that met Defence's requirements.

51 Defence noted that minimum cruise altitude was another key discriminator in relation to respective capabilities of the C-27J and the C-295. As reflected in Table 2.2, the submission to DCIC compared altitude ratings for the two aircraft.

DCIC decision

2.20 Following consideration of CDG's request that the committee agree to a direct source option for AIR 8000 Phase 2, DCIC agreed that the C-27J was the preferred option.⁵² However, the committee also directed that additional work be undertaken on cost estimates for both the C-27J and the C-295 options to confirm whether there was a compelling case for a direct source acquisition strategy.

2.21 Notwithstanding the DCIC direction in July 2006, Defence did not seek further cost data until 2008⁵³, when it requested price and availability data from the manufacturers of the C-27J (Alenia Aermacchi) and the C-295 (Airbus Military) aircraft. At this time, Airbus Military responded to the request for information. Defence advised the ANAO that Alenia declined to respond for commercial reasons. Later, in 2011, Alenia changed its position and advised that it was able to offer a commercial sale.

US acquisition of modified C-27J

2.22 In 2007, the US Department of Defense selected a modified C-27J to replace its Army and Air Force Battlefield airlifters and contracted with a US company, L-3, under a program known as 'Joint Cargo Aircraft' (JCA). The US variant C-27J is based on the commercially available aircraft but incorporates additional combat equipment, including communications and navigation systems, electronic warfare self protection systems and ballistic protection.

2.23 The US decision to acquire a modified C-27J aircraft led Defence to consider the US version of the aircraft (sourced from the US under an FMS arrangement) as an option for AIR 8000 Phase 2, bringing the number of potential contenders for the project to three: the C-295, the commercial variant C-27J and the US variant C-27J.

Preparation in 2010 for a direct source acquisition

2.24 At its meeting of 23 June 2010, Defence's Options Review Committee (ORC) directed that market testing be conducted, taking into consideration all available acquisition strategies, before it would endorse a direct source

52 'Direct source' procurement is often referred to as 'sole source'. See paragraph 3.5 for a description of direct source procurement.

53 Defence advised that the delay was due to the 2007 Federal Election and the subsequent rewrite of the Defence White Paper and DCP.

strategy for the US variant C-27J to present to government for first pass approval.⁵⁴ An action item from this meeting states:

Capability Systems (CS) [Division] and the Defence Materiel Organisation (DMO) are to conduct market testing in order to support an updated acquisition strategy that addresses the options to be taken to first pass ... the option set presented at first pass must be inclusive and should not rule out an aircraft variant or acquisition strategy without irrefutable supporting evidence.

2.25 In response to this request, a brief was provided in August 2010 to the Chief, Capability Development Group (as ORC chair). Its purpose was to:

- (a) inform ORC members of the market testing and analyses completed by AIR 8000 Phase 2 [staff] and, before them, AIR 5190 staff, constituting irrefutable supporting evidence; and
- (b) seek agreement to AIR 8000 Phase 2 staff proceeding with a single option to acquire C-27J aircraft.

2.26 The brief stated that the C-295 did not comply with three essential PFPS requirements, namely the requirement to: carry Special Operations vehicles; load a 7000 kg vehicle; and achieve 25 000 ft pressure altitude cruise with a defined payload-range. The brief also provided details of each aircraft's performance against non-essential PFPS requirements and highlighted the greater speed, range and load capacity of the C-27J in comparison to the C-295.

2.27 However, the brief and attachment did not document the C-27J's compliance against the requirements. For example, the attachment stated that the Nary vehicle would not physically fit in the cargo space of the C-295 and that the floor strength of this aircraft was insufficient to carry a 7000 kg vehicle without the use of shoring.⁵⁵ This was based on advice from the manufacturer that the physical dimensions of the aircraft did not support the carriage of a vehicle of the size and weight of the Nary and was therefore a verifiable conclusion. In relation to the C-27J, the document stated that 'The C-27J floor strength matches or exceeds that of the C-130J-30,' but did not provide supporting evidence for this assessment. Defence advised the ANAO that this

54 ORC was an internal management board whose role was to review capability proposals and provide advice on available capability options. It was replaced by the Project Initiation Review Board in July 2012.

55 Shoring is a method used to distribute a load over a larger floor area to enable carriage of higher weight concentrations and prevent damage to floor structures. In practice shoring usually consists of timber planks inserted under the wheels of vehicles.

statement was based on advice from the aircraft supplier. In neither case was the statement physically tested. Based on the information provided in the August 2010 brief, CCDG indicated that he concurred that ‘sufficient market testing has been completed to satisfy the requirements of the 23 Jun 10 [ORC direction].’

Defence’s assessment of the capacity of the options to meet essential capability requirements

2.28 In advice provided to government in April 2012 recommending the purchase of the US variant C-27J, Defence provided extensive attachments detailing its analyses of the characteristics of the aircraft options and their capacity to meet Defence requirements. These were summarised in the submission in a statement that the C-27J is capable of meeting all essential requirements: ‘It has a cruise speed 20 per cent faster than that of the C-295, a 30 per cent greater range, a cruise altitude up to 30 000 feet, requires a shorter runway than the C-295, and can carry a Nary special operations vehicle.’ Defence advised the ANAO that information on the comparative capability of the C-27J and C-295 was based on the detailed analysis conducted in 1998 for Project AIR 5190.

2.29 Defence’s April 2012 advice also stated that the C-295 had key shortfalls in fuselage size, floor strength and flight performance and was unable to load most of the ADF’s field vehicles, including the Nary vehicle. It further stated that the C-27J could meet all Defence’s essential requirements including carriage of the Nary.

2.30 The dimensions of the C-295 do not allow it to load or carry the Nary vehicle and, therefore, it cannot meet this essential criterion set out in the PFPS:

The BFA [Battle Field Airlifter] shall accommodate the loading of a 4x4 version of the ADF Special Operations Vehicle - Special Reconnaissance (SOV-SR) in accordance with AMTDU requirements. Vehicle dimensions are: 2015mm high, 2020mm wide and 6290mm long. Some disassembly is allowed but the SOV-SR shall be ready to conduct operations within 30 minutes of being unloaded. (ESSENTIAL).

2.31 In contrast, the larger dimensions of the C-27J give it the capacity to carry a wider range of ADF field vehicles than the C-295; an important point of difference. However, Defence’s Air Movements Training Development Unit

(AMTDU) analysis shows that there are several conditions which limit the aircraft's capacity to carry the Nary vehicle.⁵⁶ AMTDU documented these limitations in December 2011, including the requirement to remove the Cargo Handling System to enable sufficient clearance for personnel and approximately 1000lbs of timber 'shoring' for weight distribution. The AMTDU concluded that:

Based on the most recent technical data supplied to AMTDU, the Nary SOV 4x4 in an unloaded and un-armoured configuration could be air transported by the C-27J only with the use of shoring, due to floor loading limitations.

A tactical insertion and extraction (Roll-On Roll-Off) capability is not practically achievable (based on current operational concepts).

There are OH&S and human factor considerations that cannot be assessed until a physical load trial is conducted.

2.32 In summary, while the Nary can physically fit into the cargo space of a C-27J from which the Cargo Handling System has been removed, the practical achievement of loading, transportation and insertion of the vehicle in an operational environment has not been trialled; a less clear cut situation than presented in Defence's April 2012 advice to government. Defence advised the ANAO that the use of shoring was a normal means of carrying heavy equipment in aircraft, and that a roll-on, roll-off capability was not required, notwithstanding the prominence given to this issue in the July 2006 advice to DCIC (see paragraph 2.16 and Table 2.2.)

2.33 Defence, in its advice to DCIC and government, placed significant emphasis on the benefits of the C-27J's capacity to transport the Nary when compared to the limitations of the smaller C-295. However, the Nary is not the only cargo that the ADF requires to be transported by its LTFW capability, which must also transport a variety of other field vehicles and cargoes, often in pallet form.

2.34 As previously discussed, the ADF's operational concept for the transport of cargo and personnel is referred to as a 'hub and spoke' approach, whereby larger aircraft carrying heavier loads deliver to transportation 'hubs' and smaller aircraft, both FW and RW, then carry lighter loads to local centres or 'spokes' which may lack prepared or sealed landing strips. In this context,

⁵⁶ AMTDU is a Defence test agency which provides advice to technical and operational airworthiness authorities.

during the audit, Defence emphasised the importance of the C-27J's capacity to use the standard ADF military pallet system. This makes it interoperable with current ADF materiel handling systems and able to exchange cargo rapidly with other, larger, ADF platforms such as the C-17A and C-130J. In contrast, Defence advised that the C-295 uses a different pallet system and its pallet capacity is more limited in height and cross-section. Defence advised the ANAO that the repackaging to meet safety requirements that would be required when moving cargo to a C-295 from a C-17A or C-130J (used by both the ADF and the US military) would limit interoperability, and reduce the efficiency and effectiveness of Defence's logistics process.

2.35 Although discussion of this issue was present in the supporting material put to DCIC and government, this fundamental aspect of Defence's analysis was not cogently presented in Defence's July 2006 advice to DCIC in support of a sole source acquisition strategy for the C-27J, or its later April 2012 advice to government as a basis for proposing a sole source acquisition of the US variant C-27J. Defence has acknowledged there would have been merit in focussing its advice on the importance of the logistics process, as a basis for informing decision makers of the full range of considerations which formed the basis of Defence's preference for the C-27J.

Cost considerations in selecting a capability solution for AIR 8000 Phase 2

Whole-of-life cost estimates

2.36 Whole-of-life cost estimates involve the calculation of not only acquisition and initial support costs, but also the cost of supporting and sustaining a capability throughout its service life (in the case of the AIR 8000 Phase 2, some 25 – 30 years). The cost of operating and sustaining Defence capability over its service life is often greater than the acquisition cost and can vary substantially among the options available. Government requires realistic estimates of the overall capability costs to make an informed decision at second pass approval and to allow adequate planning for future expenditure. In 2003 the Defence Procurement Review (the 'Kinnaird Review') found that:

The development of reliable whole-of-life costs for defence capabilities is vital for the efficient management and performance of Defence, and underpins its

ability to communicate effectively with Government on the costs of maintaining existing capability.⁵⁷

2.37 In the light of that review, the Department of the Prime Minister and Cabinet’s drafter’s guide for cabinet submissions specifies that both first and second pass submissions for Defence major projects must include budget estimates of total acquisition and whole-of-life costs and that the cost, capability, schedule and risk trade-offs among the options be identified. Defence stated in its April 2012 advice to government that the preferred US variant C-27J represented the lowest cost, schedule and capability risk. However, the advice contained the whole-of-life estimates for only the preferred solution—the US variant C-27J, acquired through the FMS program. It did not provide government with a documented comparison of the whole-of-life costs of the three capability options considered.

2.38 To assess the relative cost of sustaining an operational capability such as the LTFW, it would reasonably be expected that Defence would seek estimates from industry sources and other users, to develop reliable whole-of-life cost estimates to inform cost, capability, schedule and risk trade-offs among the options and support a value for money decision. However, seven years after the project commenced, Defence was yet to develop reliable whole-of-life cost estimates for any of the three potential options: the C-295 or either of the C-27J variants. The information provided to government in Defence’s April 2012 advice drew on a number of sources discussed below.

2.39 On 3 May 2011, the DCIC had directed CEO DMO to investigate supply chains for the C-27J and provide a comparison of the support costs for the C-27J and the C-130J. During a visit to the US in late June 2011 to discuss price and availability of the US variant C-27J, the AIR 8000 Phase 2 project team obtained data on the US Air Force experience of support costs for the C-27J. That data indicated that C-27J support costs were ‘significantly less than that of a C-130J.’ However, this investigation did not elicit an actual estimate for the support costs of the C-27J in the Australian environment. The project team’s August 2011 report also advised that:

The Italian Air Force operate the C-27J in a similar configuration to that which could be procured for the RAAF, so it was expected that the operating and support costs would be relevant. No visit to Italy was made. Rather, data was

57 Kinnaird, Report of the Defence Procurement Review, 15 August 2003, p. v, p. 27.

sought via [the] Defence Attaché in Spain, but no data could be provided in the required timeframe due to European holidays.

2.40 Defence also sought to develop whole-of-life cost estimates for the three capability options between December 2011 and April 2012. These relied heavily on extrapolating support cost data from the ADF's existing C-130J fleet. In response to ANAO enquiries as to why support costs were presented in this way, Defence advised that it 'did not seek costs related to Contractor Logistics Support ... as Defence was best positioned to price this activity.' Defence further advised that the C-130J is a similar aircraft to operate to the C-27J, for which the operating and maintenance costs are understood within Defence. Defence also acknowledged that the data for all three options was of 'limited quality' and that 'comparison would have not had much value.'

2.41 The low quality of the available whole-of-life cost estimates, and the reasons for not including comparative information on the other aircraft, was not highlighted as a risk factor in the April 2012 advice to government. As a consequence, government was not given the opportunity to consider reliable whole-of-life cost estimates for the US variant C-27J, or any whole-of-life cost estimates for the two other commercial options.

Costs of an Australian Military Type Certificate

2.42 All new aircraft introduced into ADF service must undergo rigorous certification to ensure they are safe and fit for service. The estimated cost of certification is incorporated in the acquisition cost estimate and project approval submission. For AIR 8000 Phase 2, the difference between the estimated cost of achieving an Australian Military Type Certificate (AMTC) and Service Release for the US variant C-27J, as compared to either the commercially available C-27J or the C-295, was presented to government as an important consideration in favour of the US variant C-27J. Defence estimated the cost at around \$3.1 million for the US variant C-27J as compared to around \$47 million for either of the two alternative aircraft (see Table 2.3).

Table 2.3: Certification status of AIR 8000 Phase 2 options, April 2012

| Certification Type | C-27J US Variant | C-27J Commercial Variant | C-295 |
|---|---|---|--|
| Civilian Certification | US Federal Aviation Authority (FAA) | European Aviation Safety Agency (EASA) US Federal Aviation Authority (FAA) | US Federal Aviation Authority (FAA) Spanish Airworthiness Certification Authority |
| Military Certification | Partial completion of US Military Certification | Italian Defence Direzione Generale Armamenti Aeronautici (DGAA) | Spanish Military Authorities |
| Defence's estimate of cost to achieve ADF Certification | \$3.1 million | \$47 million | \$47.2 million |

Source: ANAO: compiled from information supplied by Defence and commercial sources.

2.43 When conducting the certification process for new aircraft, or for major changes to the type design of an aircraft in service, existing certification material produced by the manufacturer and other users of the aircraft is used to minimise the additional analysis and testing by Defence.

2.44 As previously noted, in 2007, following the selection of the C-27J by the US under its JCA program, the US variant C-27J became a contender to fulfil AIR 8000 Phase 2 requirements. Defence expected that US military certification would be completed before Air Force received the aircraft, and that it would be able to rely on work already undertaken by the US. US military certification was expected to greatly reduce the effort required to achieve Australian military certification, resulting in a much lower estimated cost to achieving an AMTC and Service Release for the US variant C-27J in comparison with the two commercial aircraft. When the US cancelled future orders of C-27J aircraft in January 2012, US military certification remained incomplete.

2.45 In its April 2012 advice to government, Defence's conclusion for both the commercial options was that 'the recognition of prior certification cannot be assumed without a comprehensive Commonwealth evaluation of the pedigree of the separate certifications, and the reliance on the original certifications.' For the US variant, Defence's assessment was that the aircraft had 'almost completed additional USAF military certification'.⁵⁸ As part of its

⁵⁸ Advice on the amount of certification activity still required and the basis for the estimated cost of completion was not provided.

April 2012 advice, Defence also noted that the US Government planned to cancel its C-27J program.⁵⁹ Defence's advice did not address the additional effort that might be required by Defence to complete ADF certification.⁶⁰

Reviews and committee endorsement of the capability solution for AIR 8000 Phase 2

2.46 Capability proposals are expected to be reviewed and endorsed by a number of Defence committees and boards before being submitted for government consideration. For AIR 8000 Phase 2, Defence committees carried out key roles in progressing the project.

2.47 During the relevant period, the committee responsible for review of capability proposals in the early stages of development was known as the Options Review Committee (ORC). Its role was to review capability proposals and provide advice on the broad capability options available during the requirements phase.⁶¹ Two other senior committees, the Defence Capability Committee (DCC) and the Defence Capability Investment Committee (DCIC), consider whether proposals are consistent with strategic guidance and government direction.⁶² In addition, a Capability Gate Review Board (CGRB), conducted by CDG endorses the capability proposal and supporting documentation as the basis for developing the submission to government. Projects are also required to undergo DMO Gate Reviews prior to first and second pass.⁶³

2.48 Since the project's inception in 2004, DCIC has reviewed AIR 8000 Phase 2 on at least six occasions. Only after its requests for further information, particularly on the cost estimates and capability requirements, were satisfied did DCIC agree (31 August 2011) that Defence should prepare a project approval submission to government (a combined first and second pass submission), recommending an FMS acquisition of the C-27J.

2.49 AIR 8000 Phase 2 did not undergo a DMO Gate Review until 11 July 2012, some two months after contract signature, contrary to the internal

59 In early August 2013, legislation to divest the US Air Force's C-27J fleet was before the US Congress.

60 There has subsequently been further debate in the US over the future of the C-27J in US service.

61 The ORC was replaced by the Project Initiation Review Board in July 2012.

62 Defence Capability Development Handbook, 2011, p. 11, 12.

63 Defence Materiel Instruction (Executive) 00-0-009, Gate Reviews for DMO Projects, 3 May 2012. For more information on DMO's Gate Review process see Audit Report. No.52 2011-12.

DMO requirement that a Gate Review be conducted before a proposal goes forward to government for approval.⁶⁴ This contributed to the shortcomings in the advice provided to government. Defence advised that the Gate Review was postponed due to the time constraints involved in meeting the US deadline of FMS contract signature by June 2012.^{65,66}

Conclusion

2.50 The C-27J has been the preferred capability solution for AIR 8000 Phase 2 since the inception of the project in 2004, due to its greater performance, load carrying capacity and interoperability with Air Force's existing cargo fleets.⁶⁷ By the time the US Defence Department selected a modified version of the C-27J in 2007, Defence had developed a strong preference for the C-27J over the Airbus C-295, and in particular the US variant C-27J based on the additional upgraded ballistic protection, electronic warfare and communication systems included in this aircraft.⁶⁸

2.51 While Defence developed detailed and robust capability definition documents (Preliminary Operational Concept Document and the Preliminary Functional Performance Specification Document)⁶⁹, it did not finalise these

64 Defence Materiel Instruction (Executive) 00-0-009, Gate Reviews for DMO Projects, Version 1.0, 3 May 2012, p. 6.

65 Gate reviews form part of DMO's internal assurance framework for capital acquisition projects. The results of Gate Reviews inform DMO's advice to Defence and government as to a project's health and outlook. These reviews are the most searching and critical internal review that major Defence acquisition projects are subjected to in the ordinary course of capability development and acquisition. Since mid-2011, it has been DMO's intention to conduct Gate Reviews at a number of key milestones in the project lifecycle, from DCP entry to delivery of equipment and development of a Materiel Acquisition Agreement. In particular, Gate Reviews are regarded as mandatory at three key stages: before first-pass and before second-pass consideration by government, and before contract signature. See ANAO Audit No. 52, 2011-12, *Gate Reviews for Defence Capital Acquisition Projects*.

66 Defence advised that 'While the 2nd Pass/Combined pass Gate Review ... would examine the definition and stability of the requirements, as suitable to support DMO's procurement activity following 2nd Pass/Combined Pass Government approval, it is unlikely to have addressed or solved many of the shortcomings of the process raised by the audit report.'

67 Defence has advised that while an earlier project Air 5190 had found the C-27J to be developmental, the value for money of the C-27J improved, as the cost risk associated with its developmental nature decreased over time as the aircraft matured.

68 Defence noted that at the time, another key advantage identified for the US variant C-27J was that the US Air Force planned to conduct certification work for the aircraft which could be relied on by the ADF.

69 The purpose of the Operational Concept Document (OCD) and Functional Performance Specification (FPS) documentation is discussed in paragraphs 2.6—2.10. By February 2009, Defence had developed a comprehensive set of requirements which were documented in the Preliminary OCD and the Preliminary FPS. However, these documents remained in preliminary form and final versions were not available when Defence sought pricing data in the second half of 2011 and when seeking government approval in May 2012.

documents prior to moving into the acquisition phase of Air 8000 Phase 2. Defence also did not obtain robust data as a basis for estimating whole-of-life costs for the three aircraft options. Defence instead estimated whole-of-life costs on the assumption that they would be two-thirds of the running cost of a C-130J aircraft. While Defence has advised that time constraints relating to the accelerated acquisition of the US variant C-27J in 2011 precluded the use of robust data, AIR 8000 Phase 2 had been running for several years prior to the accelerated process, providing Defence ample opportunity to source this data.

2.52 In seeking government's approval in April 2012 to purchase the US variant C-27J, Defence did not emphasise some core capabilities of the US variant C-27J; in particular, its interoperability with Air Force's C-130J and C-17 fleet; and its ability to carry the standard ADF cargo pallet. Rather, Defence emphasised other potential capabilities of the aircraft such as its ability to carry the Navy Special Operations vehicle. While the aircraft's potential to transport the Navy vehicle was relevant, the core role of the C-27J is as a cargo aircraft, operating in the context of a wider ADF logistics and transport framework.

2.53 The shortcomings in the quality of Defence's advice to government were partly attributable to AIR 8000 Phase 2 not undergoing a DMO Gate Review until 11 July 2012, some two months after contract signature. While DMO requires that a Gate Review be conducted before a proposal goes forward to government for approval⁷⁰, Defence advised that the Gate Review for AIR 8000 Phase 2 was postponed due to the time constraints involved in meeting the US deadline of FMS contract signature by June 2012.

70 Defence Materiel Instruction (Executive) 00-0-009, Gate Reviews for DMO Projects, Version 1.0, 3 May 2012, p. 6.

3. Compliance with relevant Australian Government and Defence procurement requirements

This chapter identifies the procurement framework applicable to the acquisition of the C-27J aircraft and assesses Defence's compliance with the relevant Australian Government and internal Defence requirements.

Introduction

3.1 The central procurement activity conducted to date for Project AIR 8000 Phase 2 consists of the FMS contract Defence signed with the US Government in May 2012 for the supply of 10 US variant C-27J aircraft, including support equipment and services. This contract is valued at AUD\$882.4 million. An additional contract valued at AUD\$58.1 million has been placed with the aircraft manufacturer, Alenia Aermacchi (Alenia), for the supply of intellectual property and technical data required for the support of the C-27J aircraft over their life.⁷¹ This chapter identifies the procurement framework applicable to the acquisition of the C-27J aircraft, and assesses Defence's level of compliance with this framework.

Australian Government Procurement Policy Framework

3.2 The Australian Government Procurement Policy Framework establishes the principles for Defence's acquisition of property and services. The framework is based on the principles of value for money; the efficient, effective, economical and ethical use of resources; and accountability and transparency in Australian Government procurement activities.⁷² The following sections describe this framework and Defence's application of the framework to the AIR 8000 Phase 2 procurement.

⁷¹ These contracts constitute only a portion of the total project budget of \$1.4 billion. Other elements of the project budget include training, testing and certification and personnel and operating costs over the life of the aircraft.

⁷² Australian Government Procurement information, <http://australia.gov.au/topics/business-and-industry/government-contracts-and-tenders>, accessed 10 September 2012.

Commonwealth Procurement Guidelines 2008

3.3 Until 30 June 2012, the Commonwealth Procurement Guidelines 2008 (CPGs), issued by the Finance Minister under the Financial Management and Accountability Regulations 1997, established the core procurement policy framework and articulated the Government's expectations for departments and agencies in relation to procurement. The CPGs formed part of the wider financial management framework established by the *Financial Management and Accountability Act 1997* (FMA Act) and focused on achieving value for money through the efficient, effective and ethical use of public resources and ensuring accountability and transparency in government procurement activities.

3.4 The CPGs were applicable⁷³ at the time Defence awarded the two major contracts for AIR 8000 Phase 2, specifically the FMS contract for the C-27J aircraft and the commercial contract with Alenia for intellectual property and technical data.

Mandatory Procurement Procedures (MPP)

3.5 Division 2 of the CPGs referred to Mandatory Procurement Procedures (MPPs)⁷⁴ which applied to procurements known as 'covered procurements'. Division 2 also described the procurement methods available in government procurement and when to use those methods:

- *Open Tendering*—involved publishing a request for tender and receiving all submissions delivered by the deadline;
- *Select Tendering*—involved issuing an invitation to tender to those potential suppliers selected from an existing multi-use list; a list of suppliers that responded to a request for expressions of interest; or suppliers that complied with an essential legal requirement or licensing arrangement; and
- *Direct Sourcing*—where an agency may invite potential suppliers of its choice to make submissions. Generally, direct sourcing was only allowed under specific circumstances or where it was the only practical alternative available to the agency.

73 On 1 July 2012, the Commonwealth Procurement Rules (CPRs) replaced the CPGs. The CPRs reflect the CPGs in that they also require procurements to represent value for money for the Commonwealth, and encourage competition in procurement.

74 The Additional Rules in the CPRs have now replaced, and largely reflect the Mandatory Procurement Procedures in the CPGs.

Defence and DMO Specific Exemptions

3.6 While the MPPs were designed to encourage competition and, therefore, enhance value for money outcomes, Paragraph 2.7 of the CPGs provided a general exemption clause:

Nothing in any part of these CPGs prevents an agency from applying measures determined by their Chief Executive to be necessary: for the maintenance or restoration of international peace and security; to protect human health; for the protection of essential security interests; or to protect national treasures of artistic, historic or archaeological value. Applying such measures does not diminish the responsibility of Chief Executives under section 44 of the FMA Act to promote the efficient, effective and ethical use of Commonwealth resources.⁷⁵

3.7 This exemption was, and continues to be used⁷⁶ by Defence in the procurement of the majority of its military specific equipment, including the C-27J. The use of the exemption is articulated in the Defence Procurement Policy Manual (DPPM), discussed below.

Defence internal procurement guidance

Chief Executive Instructions (CEIs)

3.8 For FMA Act purposes there are two Chief Executive appointments in Defence and, consequently, two sets of Chief Executive Instructions (CEIs)—the *Defence Chief Executive Instructions* and the *DMO Chief Executive Instructions*. The Secretary holds the Chief Executive position in Defence and the CEO DMO holds the Chief Executive position within DMO. As this audit deals primarily with procurements managed by DMO, references to Chief Executive Instructions will be to the DMO CEIs. Essentially, with regard to procurement activity, both the Defence and DMO CEIs reiterate the requirement set out in the FMA Act to promote the proper use of Commonwealth resources and

75 Department of Finance and Deregulation, Commonwealth Procurement Guidelines, 2008, p. 4, <<http://www.finance.gov.au/archive/archive-of-publications/fmg-series/CPG/docs/CPGs-2008.pdf>> accessed 7 September 2012.

76 This exemption was retained in the CPRs.

direct Defence officials to conduct procurement activities in accordance with the relevant legislation and Departmental policy guidance.⁷⁷

Defence Procurement Policy Manual (DPPM)

3.9 Within Defence, the (DPPM) is the primary reference document for personnel involved in procurement. It incorporates mandatory procurement policy drawn from higher level Commonwealth and Defence procurement guidance such as the CPGs and CEIs. The DPPM contains detailed information on the policy and processes to be used in Defence procurement. In relation to the Mandatory Procurement Procedures in Division 2 of the CPGs, the DPPM states that:

While the MPPs do not represent mandatory policy for non-covered procurements, they are generally considered to represent 'best practice' in the conduct of tender processes and should be complied with where possible consistent with achieving a value for money procurement outcome.⁷⁸

3.10 The Defence Secretary and the CEO DMO, as Chief Executives of their respective agencies, have relied on clause 2.7 of the CPGs to determine that certain Defence procurements should be exempt from the MPPs for the protection of essential security interests.⁷⁹ A list of 25 general categories of equipment which are exempted under the Australia–United States Free Trade Agreement (AUSFTA) have been categorised as Defence Exempt Procurements in the DPPM, including Aircraft and Airframe Structural Components; and Aircraft Components and Accessories. This process essentially exempted the AIR 8000 Phase 2 procurement from the MPPs, and the requirement to conduct a tender.

Foreign Military Sales (FMS) Procurement

3.11 As discussed in Chapter 1, the FMS program is the primary means by which the Australian Government, through DMO, undertakes government-to-

77 The DMO CEIs are issued under the authority of the DMO Chief Executive pursuant to section 52 of the FMA Act and FMA Regulation 6. They are principles based and apply to all DMO officials. Where necessary, further procedural guidelines have been developed such as those contained in DMO Instructions, Manuals or Guidelines and these are referenced in the CEIs.

78 Defence Procurement Policy Manual DPPM, 1 July 2011, p. 1.2–3. The content of this statement has been retained in the current version of DPPM which has been amended in light of the CPRs.

79 Defence Procurement Policy Manual DPPM, 1 July 2011, p. 1.2–5. The list of Defence Exempt Procurements has been retained in the current version of the DPPM, which was amended following release of the CPRs.

government procurement of goods and services from the US Government. The FMS program can be used to procure materiel and services for both acquisition and sustainment projects with items purchased directly from the US Government through its Security Assistance Program.⁸⁰

3.12 To comply with US processes, Letters of Request (LOR) and Letters of Offer and Acceptance (LOA) are the formal basis for establishing FMS procurement. The LOR is raised by the Australian Government to request materiel and services from the US Government. In response to a LOR, the US Government provides either a 'Price and Availability' (P&A) response, providing estimated costs and projected availability data, or an LOA, which constitutes an offer by the US Government to a foreign customer. Upon signature of the LOA, the offer becomes a FMS contract.

3.13 The FMS system provides for estimated prices and payment schedules at the time of contract signature. The final price is not known until the contract is completed and is determined by the actual cost to the US Government. This is in contrast to Direct Commercial Sale (DCS) contracts which typically specify a known and fixed price, and a fixed payment schedule. The US Defense Security Cooperation Agency advises:

It is difficult to predict whether it would be more or less expensive to employ the FMS system or direct commercial channels for a particular acquisition. The differing contractual pricing and financing approaches, as well as variations in the total package content, make cost comparisons between FMS and DCS quite difficult.⁸¹

3.14 In addition to the uncertainty over price, entering into an agreement with the US Government via an FMS contract exposes Defence to indemnification and limitation of liability arrangements which differ greatly from the standard Commonwealth approach applying to commercial contracts. This increased risk exposure is dealt with in Part 8.6 of the DMO CEIs and requires an additional Contingent Liability approval by the relevant delegate who must ensure that 'the expected benefits from the proposed transaction and/or arrangement, financial or otherwise, have been assessed

80 Defence Instruction (General) LOG 4-3-002, *Procurement of Materiel and Services from the United States of America under the Foreign Military Sales Program*, 1 October 2010, p. 1.

81 Defense Institute of Security Assistance Management, *A Comparison of Foreign Military Sales and Direct Commercial Sales*, see <http://www.disam.dsca.mil/pubs/DR/15%20Chapter.pdf> accessed 13 September 2012.

and are sufficient to objectively outweigh the level and cost of the additional risk.’⁸²

3.15 The DMO CEIs also require that a risk assessment must be undertaken when establishing an FMS case to determine the level of risk associated with the procurement. This liability risk assessment is in addition to the Risk Management Plan and associated risk register which is to be developed and maintained for all Defence capital acquisition projects.

3.16 The DPPM provides some useful guidance on the use of FMS contracting arrangements. Section 4.2.33 states that:

there are significant additional risks associated with the use of FMS arrangements which Procurement officers should be aware of. FMS arrangements involve substantial changes to the standard contractual risk allocation in favour of the US Government.

3.17 Some of the additional risks identified in the DPPM include delivery delay, cancellation costs and limited warranties.

3.18 As noted previously, the use of an FMS contractual arrangement often has the advantage of ensuring compatibility with US forces and can provide assurance of ongoing support from the US military, especially if the equipment remains in service with the US. However, in the case of the C-27J, the USAF has reduced its original order and is considering divesting itself of the capability, potentially reducing the benefits for the ADF normally associated with FMS acquisitions.

Procurement process undertaken for AIR 8000 Phase 2

Decision to pursue an accelerated acquisition

3.19 The public DCP 2011 identified that a decision was expected to be made by government on AIR 8000 Phase 2 in the period 2012–15. However, during 2011, the acquisition of the AIR 8000 Phase 2 capability was accelerated, with the contract for the purchase of 10 US variant C-27J aircraft signed in May 2012. This accelerated acquisition process led to a tailoring of the procurement processes normally undertaken before seeking second pass

82 DMO Chief Executive Instructions 8.6.3, Approving a Contingent Liability, available on Defence Intranet.

approval.⁸³ One feature of the tailored process was that tender quality data was not sought from the commercial suppliers of the C-295 and C-27J. Table 3.1 summarises procurement events during the acquisition of the 10 US variant C-27J aircraft.

Table 3.1: Summary of procurement events for AIR 8000 Phase 2

| Date | Procurement Event |
|-------------------|---|
| 19 July 2011 | The then Minister for Defence and Chief of Air Force discuss the early retirement of the C-130H fleet, and the accelerated acquisition of the US variant C-27J. |
| 31 August 2011 | DCIC considers the acquisition of the US variant C-27J and determines it to be high risk in terms of schedule, but worth further consideration. |
| 11 September 2011 | The then Minister for Defence is advised of a list of possible short notice, high priority acquisitions. C-27J is not included in this list, although AIR 8000 Phase 2 was highlighted in the Ministerial advice as a high schedule risk option that had been discussed at DCIC, and it was noted that Defence would bring forward a proposal as soon as practicable. |
| 13 September 2011 | Minister for Defence is advised to seek approval from the then Prime Minister to release a Letter of Request to the US Government for the acquisition of 10 US variant C-27J aircraft. |
| 29 September 2011 | Minister for Defence writes to the Prime Minister seeking the release of the Letter of Request to the US Government. Defence also finalises the acquisition strategy for the procurement of 10 US variant C-27J aircraft through FMS. |
| October 2011 | Prime Minister approves the release of the Letter of Request. This approval provides specific direction on the development of alternatives to FMS, as follows: 'Noting your advice that the US C-27J program may ultimately be reduced or cancelled, the development of alternative options and acquisition strategies for consideration will be important.' The approval further specifies that: '...advice on other capability options, including the Airbus Military C295 aircraft, would be considered (akin to First Pass).' |

83 As noted in footnote 33 and discussed further in the section commencing at paragraph 4.4, Defence capital acquisition projects undergo a government approval process that generally involves two passes. The first pass submission is intended to describe broad solutions to meet an identified capability gap and is presented to the National Security Committee of Cabinet for consideration. The second pass stage involves development of a detailed and rigorous acquisition business case for each capability option approved at first pass. The information provided at second pass is much more detailed and of a higher standard of accuracy. The approval process for an individual project may be 'tailored' to take into account the particular circumstances involved. This can include varying the number of times it is considered by the Government – that is the number of passes. In the case of AIR 8000 Phase 2, second pass approval was brought forward and agreed at the same time as first pass approval in what is known as combined pass approval.

| Date | Procurement Event |
|-----------------|---|
| 19 October 2011 | Minister for Defence publicly announces that the Government has taken steps to acquire a replacement for the Caribou fleet, and that a Letter of Request has been released to the US Government. The Minister also states in his media release that other aircraft including the C-295 will be considered by the Government as a possible replacement. |
| 26 October 2011 | Defence writes to the commercial suppliers of the C-27J and the C-295 seeking first pass price and availability data. The commercial suppliers are given until 16 December 2011 to respond—both suppliers meet the deadline. |
| 26 January 2012 | US Government announces, subject to congressional approval, the cancellation of its C-27J program and the intended divestiture of the USAF's C-27J fleet. |
| 11 April 2012 | US Government responds to Defence's October 2011 Letter of Request with a Letter of Offer and Acceptance. Information and data contained in the Letter of Acceptance is compared by Defence to the information and data provided in the commercial suppliers' December 2011 submissions. |
| April 2012 | Defence seeks government approval to: purchase via an FMS arrangement 10 US variant C-27J aircraft; and a combined first/second pass approval process. Defence advises government that Intellectual Property Rights will not be included in this FMS arrangement and an after-market contract will need to be signed with the aircraft's manufacturer to obtain these rights. |
| 16 April 2012 | The Government approves the purchase of the US variant C-27J through a combined first/second pass approval process; and the procurement of Intellectual Property Rights through an after-market contract with the aircraft manufacturer. |
| 10 May 2012 | Commercial suppliers of the C-27J and C-295 are advised that they have been unsuccessful in providing a capability solution for AIR 8000 Phase 2. |
| 4 May 2012 | Contract signed with the US Government for the procurement of the aircraft through an FMS arrangement. |
| 25 May 2012 | Contract signed with the aircraft manufacturer for the Intellectual Property Rights. |

Source: ANAO analysis of Defence documentation.

3.20 Accelerated acquisitions normally occur in exceptional circumstances, where a vital priority has been established.⁸⁴ The ANAO requested from Defence the relevant documentation identifying the reasons for the mid-2011 decision to pursue AIR 8000 Phase 2 as an accelerated acquisition. In December 2012, Defence advised that:

On the 19 Jul 11, [Chief of Air Force] and [the Minister for Defence] discussed the composition of the RAAF's airlift fleet. [Chief of Air Force] proposed that if Defence purchased an additional C-17 and brought forward the purchase

⁸⁴ Capability Development Group *Instructions, Materiel Acquisition Agreements for Major Capital Equipment Projects*, p. 5.

of the C-27J, the RAAF could retire the C-130H fleet as planned in 2013 and save the additional \$245m required to extend the life of the C-130H to 2016. The revised airlift plan also allowed the RAAF to close the tactical airlift gap created when the Caribou was retired. The advantages of having a [US Air Force] certified aircraft, akin to C-17A, with all the equipment the RAAF needed was also discussed. [The Minister for Defence] thought the proposal had merit and agreed that it should be further developed by Defence as a priority.

3.21 Defence's further advice to the ANAO of April 2013, relating to the reasons for accelerating the procurement of the US variant C-27J was that '... there was no reasonable prospect for the two commercial options to offer better [value for money] than the C-27J FMS solution.'

3.22 The proposal to develop the AIR 8000 Phase 2 acquisition as a priority progressed through August and September 2011. On 11 September 2011, Defence provided a submission to the then Minister for Defence which included a list of possible short notice acquisitions of high priority capabilities for the financial year 2011–12. While AIR 8000 Phase 2 did not appear on that list, Defence advised the Minister in the submission that, on 31 August 2011, DCIC had considered AIR 8000 Phase 2 as a possible short notice acquisition carrying significant risk, and had concluded that it warranted further consideration. Defence further advised the Minister that a proposal would be developed for AIR 8000 Phase 2 as soon as practicable.

3.23 Two days later, on 13 September 2011, Defence provided a submission to the Minister for Defence advocating an accelerated acquisition for the project. It proposed that approval be sought from the Prime Minister to release a Letter of Request to the US Government for the purchase of 10 C-27J aircraft under an FMS arrangement. In its submission, Defence did not cogently advise on the full range of relevant issues to facilitate Ministerial decision making. Its advice focussed on:

- the current lack of a light tactical fixed-wing capability;
- the strain being placed on the C-130H and Beechcraft aircraft which were partly filling the capability gap;
- Defence's assessment that the US variant C-27J aircraft was the only aircraft which met Defence's capability needs;
- Defence's assessment that the US variant C-27J aircraft provided the lowest cost, schedule and capability risk of the available aircraft in its class; and

- the imminent (June 2012) expiry of the US Government contract with the aircraft's suppliers, which could reduce the cost effectiveness of an FMS purchase after that date.

3.24 However, Defence did not focus its advice on the main strengths of the US variant C-27, namely:

- its interoperability with Air Force's existing C-17 and C-130J fleets; and
- ballistic protection, electronic warfare protection and communications systems that enhance battlefield survivability and facilitate interoperability with the US, which removes the risks associated with Defence having to integrate flight control and electronic warfare systems into the aircraft.

3.25 In relation to the imminent expiry of the US Government contract with the aircraft's suppliers, Defence advised that an FMS purchase before June 2012 would take advantage of the superior price the US had received from the manufacturer for the purchase of its fleet of C-27J aircraft. The US had been able to obtain a substantial discount through its original order of 78 aircraft in 2007. This order was subsequently reduced to 38 in 2009, and in the event, the US has only taken delivery of 13 aircraft. Due to the reduction of the US program⁸⁵, the price afforded to the US was no longer profitable for the manufacturer, which had signalled to the US Government that it intended to increase its price per aircraft after the expiry of the US contract in June 2012.

3.26 Defence informed the ANAO that the basis for its advice to the Minister that the US variant C-27J represented the lowest cost, schedule and capability risk was:

through a combination of available data in relation to the FMS and [Direct Commercial Sale] C-27J solutions gathered over a number of years, and significant experience over many years in acquiring complex military systems through a range of methods and sources, Defence considers it had sufficient information to determine that the US variant would provide the lowest risk to cost schedule and capability.

3.27 While Defence had formed the view, over time, that the Airbus C-295 aircraft did not meet the capability requirements of Air Force and Army (see

⁸⁵ The US has been considering cancellation of the program since January 2012 after the delivery of 13 aircraft.

Chapter 2), at this stage Defence had not obtained any firm data on the cost and schedule risk posed by the commercial variant C-27J. The only data available to Defence at this time on the commercial variant C-27J were unsolicited proposals from the manufacturer received in November 2006, February 2007, and September 2007. Further, Defence had only limited cost and schedule information regarding a potential FMS purchase of the US variant C-27J, in the form of price and availability data it had gathered from the US Government during June 2011. However, Defence was aware that bringing the commercial C-27J up to the level of capability of the US variant C-27J would involve delays while acquiring and integrating the additional equipment included in the US variant, such as electronic warfare systems. The subsequent approach to industry and the US, discussed below, offered an opportunity to improve the information available to Defence on aircraft options.

Proposal to release of Letter of Request (LOR) to the US Government

3.28 Following receipt of Defence's 13 September 2011 submission, the Minister for Defence wrote to the then Prime Minister on 29 September 2011, seeking approval for the Department of Defence to release a non-binding Letter of Request to the US Government to obtain cost and schedule information for the purchase of up to 10 C-27J aircraft under an FMS arrangement. The Minister reiterated in his letter Defence's advice that the US variant C-27J was the preferred aircraft to provide the required capability, but also signalled to the Prime Minister that the US C-27J program may be at risk due to the then pending cuts to the US Defence budget. The Minister informed the Prime Minister that:

The future of [the US C-27J program] and the continued inclusion of the C-27J fleet in US service would need to be clarified by the US before our Government could consider an acquisition decision.

3.29 On 29 September 2011 Defence also finalised development of the acquisition strategy document for AIR 8000 Phase 2. The acquisition strategy recommended approval by the appropriate delegate of a direct source procurement of the US variant C-27J via an FMS agreement. This document, recommending a direct source procurement, was finalised before Defence approached the two potential commercial suppliers (26 October 2011) to obtain updated price and availability data on the capability solutions they could offer.

3.30 The Prime Minister responded to the Minister for Defence in early October 2011⁸⁶ approving the release of the Letter of Request to the US Government and noting the possibility of the US Government cancelling its C-27J program. Significantly, the Prime Minister also highlighted the importance of alternative options and acquisition strategies for AIR 8000 Phase 2 being developed:

... before any costed proposal is presented for final consideration, a Submission outlining, among other things, the strategic justification and advice on other capability options, including the Airbus Military C295 aircraft, would be considered (akin to first pass).

Noting your advice that the US C-27 program may ultimately be reduced or cancelled, the development of alternative options and acquisition strategies for consideration will be important.

3.31 The Letter of Request was provided to the US Government on 30 September 2011. Defence also approached the two commercial suppliers on 26 October 2011 to comply with the Australian Government's request for additional information on alternative options.

3.32 On 19 October 2011, the Minister for Defence announced in a media release that the Government had taken steps to acquire a replacement for the Caribou aircraft. The Minister stated that analysis undertaken by Defence had established the C-27J as the preferred replacement aircraft. The Minister also stated that a Letter of Request had been released to the US Government for the possible acquisition of the C-27J and that:

The information from the Letter of Request will inform Government consideration of capability, cost and schedule issues associated with this project as well as consideration of the acquisition strategy, including whether a broader tender process will be pursued.

Future Government consideration of this project will involve consideration of other aircraft which could meet Australia's need. This includes the Airbus Military C-295 aircraft.

Requests for information from potential commercial suppliers

3.33 As discussed in Chapter 2, Defence had conducted a tender process in 1998 for a predecessor project (AIR 5190) which gathered cost and capability

86 The Prime Minister's letter was undated.

data on the C-295 and C-27J aircraft from the commercial suppliers. Defence had also received unsolicited proposals from the C-27J's manufacturer, Alenia in November 2006, February 2007 and September 2007.

3.34 Between the initiation of AIR 8000 Phase 2 in 2004 and Defence's September 2011 submission to the Defence Minister, Defence had made only one formal approach to industry (in 2008) to obtain information on the C-295 and C-27J commercially available options (see paragraph 2.21).

3.35 Subsequent to the Minister's 19 October 2011 media release, Defence wrote on 26 October 2011 to Airbus Military as the manufacturer of the C-295 aircraft, and Raytheon Australia as the agent of Alenia Aermacchi, manufacturer of the commercial variant C-27J. The letters requested updated price, capability and availability information, including details on unit costs per plane, engineering, through-life support, technical manuals and testing and evaluation. The letters indicated that:

- the Government was investigating possible options under AIR 8000 Phase 2 to provide the capability provided by the retired Caribou aircraft;
- first pass Government approval for AIR 8000 Phase 2 was planned for 2012; and
- the Government would be in a position to order the aircraft in late 2014/early 2015; however, the suppliers were asked to confirm whether they could deliver the aircraft earlier than this date if the Government required.

3.36 Defence's letters to the commercial suppliers could reasonably be read as implying that the acquisition process for AIR 8000 Phase 2 was at a pre-first pass stage, stating that the purpose of the request was to 'support the Government First Pass considerations.' Consequently, the quality of data sought (and subsequently received) from the two companies was commensurate with pre-first pass requirements. Defence advised the ANAO that:

... Defence is very cognisant of the significant costs associated with developing Second Pass quality proposals and did not want the two companies to commit to such an outcome through this enterprise.

3.37 The letters provided to the two companies gave no indication that Defence was considering accelerating the two-pass approval process, nor that Defence hoped to finalise an FMS contract by June 2012. Further, the commercial suppliers were not provided with the key capability requirement

documents (OCD and FPS)⁸⁷ that Defence's Capability Definition Documents Guide states should be fully developed for the solicitation stage. The commercial suppliers were led to believe they were engaging in the early stages of an open procurement process, when in fact they were providing supplementary information to confirm Defence's position to pursue a direct source FMS procurement of the US variant C-27J.

3.38 As discussed in paragraph 2.7, the CDD Guide indicates that the OCD and FPS 'would normally become part of the solicitation package.' The fact that Defence did not provide these documents, a key element of the solicitation stage, would have reinforced the impression that the process was at a pre-first pass stage. The information provided by the commercial suppliers reflected the request made by Defence, and was of a lower quality than the information provided by the US in respect to the US variant C-27J. Further, both commercial suppliers were given until 16 December 2011 (seven weeks) to provide their responses, whereas the US took seven months to respond to the September 2011 LOR.

3.39 Although Defence requested price and availability data from the two commercial suppliers, this did not trigger a tender process. Defence was still planning to exercise its option to pursue a direct source acquisition under the exemption provided for in paragraph 2.7 of the CPGs. However, the commercial suppliers were not aware of this when Defence wrote to them, and they did not become aware of the decision to acquire the US variant through direct source until that decision was announced publicly by the Minister for Defence on 10 May 2012⁸⁸, prompting industry to publicly express its concern that it had been misled by Defence.⁸⁹

3.40 Defence's approach to industry did not transparently communicate the status of the procurement process, and did not have sufficient regard to the expectation in government procurement that suppliers will be treated in a fair

87 The purpose of OCD and FPS documentation was discussed in paragraphs 2.6—2.10. By February 2009, Defence had developed a comprehensive set of requirements which were documented in the Preliminary OCD and the Preliminary FPS. However, these documents remained in preliminary form and final versions were not available when Defence sought pricing data in the second half of 2011 and when seeking government approval in May 2012.

88 Defence Media Release, 10 May 2012, available at <http://www.minister.defence.gov.au/2012/05/10/minister-for-defence-and-minister-for-defence-materiel-joint-media-release-new-battlefield-aircraft-for-the-air-force/>, accessed 26 March 2013.

89 See paragraph 4.1.

and transparent manner.⁹⁰ In response to ANAO concerns regarding Defence's approach to industry in October 2011, Defence informed the ANAO that:

.... the language used in some of the material created for briefings and other correspondence with industry did not accurately reflect the process that was being undertaken, and that this choice of language has contributed to a lack of clarity. In particular, Defence acknowledges that the 26 October 2011 letters to Raytheon Australia and Airbus Military could have provided better explanation of the status of the project. Defence has since made changes to its processes to ensure better crafted communication. This change ensures that solicitation communication with industry, throughout the requirements phase of the capability systems life cycle, is undertaken by the Defence Materiel Organisation. This change is reflected in the 2012 update to the Defence Capability Development Handbook.

Defence analysis of data obtained from the three potential suppliers

3.41 Defence conducted an evaluation of the information provided in December 2011 by the two commercial suppliers and compared this information with that contained in the Letter of Offer and Acceptance (LOA) received from the US Government on 11 April 2012.⁹¹

Capability

3.42 The Airbus C-295 had already been assessed by Defence at numerous stages during the life of the AIR 8000 Phase 2 project and its predecessor, AIR 5190. On each occasion it was assessed as not meeting Defence's requirements. Defence's assessment of the December 2011 information provided by the supplier also concluded that the Airbus C-295 did not meet the capability requirements for AIR 8000 Phase 2.

3.43 Defence also assessed the commercial variant C-27J as being deficient against the capability requirements for AIR 8000 Phase 2. This was because it would require major modifications to meet Defence's required capability, and result in Defence having to bear the risk of certifying the aircraft for use by the

90 In particular, Defence's approach did not have proper regard to the *Commonwealth Procurement Guidelines*, 2008, advice that 'Adopting an ethical, transparent approach enables business to be conducted fairly, reasonably and with integrity', paragraph 6.18.

91 This was the response to the Australian Government's Letter of Request (LOR) of 30 September 2011.

ADF (that is, achievement of an Australian Military Type Certificate and Service Release).⁹²

3.44 Defence considered that acquisition of the commercial variant C-27J, as compared to the FMS US variant, would delay the projected initial operating capability⁹³ (IOC) of the fleet by at least two to three years past the then projected IOC of 2014–16. Defence informed the ANAO that selecting the commercial variant C-27J would delay IOC due to the:

... time required to complete a [Direct Commercial Sale] tender process for complex military equipment; significant complexity to then acquire US International Traffic in Arms Regulations controlled items, arrange required aircraft modifications, then integrate and test the equipment.

3.45 These delays and additional processes would, in Defence's view, add substantial costs and risks to this option.

Price

3.46 Although Defence assessed the C-295 as not meeting the capability requirements, Defence conducted pricing comparisons between it and the two C-27J options. Defence's evaluation of the offers is documented in cost template documents. These cost templates are complex spreadsheets with formulas in the structure that allow for the presentation of pricing outcomes according to different inputs, such as different estimates of variable factors. Table 3.2 shows Defence's total project cost estimates for the three options, including contingency and cost growth escalation in out-turned dollars.⁹⁴

92 As discussed in paragraph 3.37, neither commercial supplier was provided with the key capability requirement documents (OCD and FPS) for AIR 8000 Phase 2 to more fully inform the development of their offers. However, access to these documents would have been of limited value in terms of addressing the assessed deficiencies of the Airbus C-295 as the US variant C-27J comes already fitted out with additional complex military equipment required to meet Defence's capability requirements for AIR 8000 Phase 2.

93 Initial Operating Capability is the minimum number of aircraft, associated equipment, and training provided to personnel to deliver a capability to Air Force.

94 Out-turning is a method used by Defence, and approved by the Department of Finance and Deregulation, to predict cost escalation over time.

Table 3.2: Total project cost acquisition estimates

| Option | Risk rating | Total Project Cost (\$m) |
|--------------------------|-------------|--------------------------|
| US variant C-27J | Low–Medium | 1404.0 |
| Commercial Variant C-27J | High | 1462.5 |
| C-295 | High | 1245.8 |

Source: Defence Cost Template Spreadsheets.

3.47 Defence applied different contingency values to the three offers according to the quality of the estimates provided. The estimates provided by the US in the Letter of Offer and Acceptance were considered by Defence to be of second pass quality (that is, tender quality) and therefore attracted the lowest contingency rate. The two commercial offers were not of tender quality and reflected only first pass quality estimates—as requested by Defence—and therefore attracted higher contingency rates. The ANAO asked Defence to comment on the appropriateness of this process. Defence confirmed that contingency was applied according to the quality of the data provided and that this was consistent with Defence standards.

3.48 The contingency rates applied by Defence had a substantial effect on the cost estimates for the different aircraft. The C-295 was the lowest cost option before and after the application of the contingency rates. However, comparison of the two C-27J options was materially affected by Defence’s treatment of contingency. Before its application of contingency rates to the baseline data provided by Raytheon, the commercial C-27J offer was substantially cheaper than the US variant. With contingency included, the estimated cost of the US variant C-27J was less than the commercial variant C-27J.

3.49 While it is prudent to assess the relative risks of different offers and set aside appropriate contingency to manage those risks, in this case, Defence’s assessment of the contingency flowed directly from the significant difference in the quality of the data included in the offers from the commercial suppliers as compared to the US Government LOA. The commercial suppliers were not given the opportunity by Defence to prepare and submit second pass quality data for consideration. Defence advised the ANAO that:

While the quality of data was not second pass quality it was of similar quality to first pass data. This was consistent with Defence's interpretation of the Prime Minister's requirement to provide cost data 'akin to first pass'.⁹⁵

Defence evaluation recommendation

3.50 The evaluation recommended that Defence proceed with the purchase of the US variant C-27J on the basis that it represented value for money. The evaluation stated that the US variant C-27J 'meets the scope of the Letter of Request, is within the project financial provision and has an acceptable schedule,' and was the 'only available off-the-shelf platform capable of satisfying the AIR 8000 Phase 2 PFPS [Preliminary Function and Performance Specification].'

April 2012 combined first/second pass submission to Government

3.51 Defence sought approval from government on 16 April 2012 to proceed with an FMS purchase of the US variant C-27J through a combined first/second pass approval process.⁹⁶ In its advice to the Government, Defence:

- relied on data of a first pass standard to develop the costing of the commercial options, contrary to Defence policy that requires that tender quality data be provided for second pass approval⁹⁷;
- referred to information provided in Raytheon's previous unsolicited proposals, rather than the latest available information available in Raytheon's December 2011 submission, in the context of demonstrating the level of suitability of the commercial variant C-27J; and
- provided no comparison of whole-of-life costs between the different aircraft types, contrary to PM&C and Defence guidance (see paragraph 2.37).

3.52 Defence provided two acquisition cost estimate comparisons in its submission to government. Table 3.3 illustrates the advice provided in a cost comparison table included in the submission, which stated that the acquisition

⁹⁵ See discussion of the Prime Minister's letter to the Defence Minister in paragraph 3.30.

⁹⁶ However, Defence did not cite the legislative basis for proceeding with the direct source option it proposed, in particular paragraph 2.7 of the CPGs.

⁹⁷ The *Defence Capability Development Handbook* (DCDH) requires tender quality data be presented for second pass approval.

of the US variant C-27J through an FMS arrangement represented a saving of over \$140 million compared to the commercial variant C-27J acquisition.

3.53 Defence informed the ANAO that the cost comparison table included in the submission (see Table 3.3) was based on costs exclusive of contingency 'to remove any bias that may have been applied due to the quality of costs.'⁹⁸ These figures, which indicate that the US variant C-27J had a cost advantage over the commercial variant, showed the cost estimates for selected project cost line items.⁹⁹ Defence did not advise government that if the same methodology was applied to all of the project cost line items, the total cost estimate (exclusive of contingency) for the commercial variant estimate was actually \$82 million lower than the estimate for the US variant.

Table 3.3: Defence's cost comparison for selected line items (\$ million)

| Option | Aircraft (A) | Additional Certification (B) | Mission System sub total (A+B) | Mission System per unit | Training Devices (C) | Spares (D) | Total for these line items for 10 aircraft (A+B+C+D) |
|--------------------------|--------------|------------------------------|--------------------------------|-------------------------|----------------------|------------|--|
| US variant C-27J | 400.2 | 3.1 | 403.3 | 40.3 | 117.4 | 146.8 | 667.5 |
| Commercial variant C-27J | 503.1 | 47.0 | 550.1 | 55.0 | 117.4 | 146.8 | 814.3 |
| C-295 | 358.5 | 47.3 | 405.8 | 40.6 | 114.0 | 71.7 | 591.5 |

Source: Department of Defence advice to government, April 2012.

3.54 The April 2012 advice to government contained two different cost comparisons:

- the cost comparison set out in Table 3.3 indicates that the US variant C-27J had a price advantage of some \$10 million per aircraft compared to the commercial variant C-27J, and
- the submission to government also referred to a \$140 million price variation (for 10 aircraft), but did not make clear the additional costs included in this comparison.

⁹⁸ Defence Response to ANAO Request for Information of 1 November 2012, 15 November 2012, p. 2.

⁹⁹ The cost templates used to estimate the total project cost contain over 100 line items. The comparison used in the advice to government (Table 3.3) included eighteen selected line items.

3.55 On 2 May 2012, an internal approval request to sign the FMS contract was sent to Defence’s Head Aerospace Systems (the relevant delegate). The request stated that the FMS option provided a price advantage of \$17 million per aircraft in comparison to the commercial variant C-27J (see Table 3.4).¹⁰⁰ Defence used another source of cost estimation data to underpin its internal advice that the US variant C-27J offered a \$17 million per aircraft price advantage over the commercial variant C-27J. This data was from the US Department of the Air Force Budget Estimates of February 2011, as opposed to the more recent October 2011 Letter of Offer and Acceptance data (which represented the US Government offer) that Defence used to formulate its advice to government.

Table 3.4: Cost Comparison for Aircraft Only

| Offer | Prices | Price Basis | Normalised to May 2012 Prices |
|--------------------------|----------------------|---------------------------|-------------------------------|
| US variant C-27J | USD \$31.650 million | May 2012 (extended price) | A\$30.396 million |
| Commercial variant C-27J | A\$46.965 million | December 2011 | A\$47.555 million |

Source: Defence Minute Objective ID: AB10701448, 9 October 2012.

3.56 In summary, the ANAO identified shortcomings in the cost estimation data presented to government in Defence’s April 2012 combined first/second pass submission and in subsequent advice to the Defence delegate:

- contrary to the requirements set out in the Defence Capability Development Handbook (DCDH), Defence only collected refined, second pass quality data from the one supplier, the US Government in respect to the US variant C-27J, and sought to compare this data with the first pass quality data it had requested from the potential commercial suppliers¹⁰¹;
- Defence applied contingency exclusive cost estimates only to selected project items, which had the effect of presenting a more positive pricing picture for the preferred US variant C-27J option than provided by the complete cost data set (see paragraph 3.53); and

100 Defence, Proposal and Contract Approval Submission, 2 May 2012, p. 3.

101 Defence Capability Development Handbook, 2011, p. 44.

- Defence presented different assessments of the price differential between the two C-27J variants, ranging from \$10 million to \$17 million per aircraft based on different data sources.

3.57 Adding to the limitations in the acquisition cost estimates prepared by Defence, there was also a lack of evidence to support the sustainment cost estimates which Defence developed for the various capability options and which were used to advise the Government. While Defence developed estimates of whole-of-life costs for all three aircraft options, only the estimate for the US variant C-27J was included in the combined first/second pass submission to the Government. This estimate was not based on a rigorous assessment of data from the manufacturer, supplier or users of the aircraft. Rather, it was based largely on the assumption that the support costs for a C-27J would be less than half that of a C-130J aircraft.¹⁰² The whole-of-life cost estimates developed for all three aircraft also relied heavily on support cost data developed by extrapolating information from the ADF's experience with the existing C-130J fleet (see paragraph 2.36).

3.58 Given the length, cost and complexity of major Defence projects, it is important that Defence's advice to government on procurement decisions cogently identifies the key points to consider and the cost of various options to assist decision making.

Intellectual property rights

3.59 Intellectual property rights (IP) are important in acquisitions such as the C-27J as they allow Defence to conduct its own maintenance and modifications to the aircraft, and can produce savings over the life of an aircraft.¹⁰³ Although Defence sought the necessary IP in its Letter of Request, the US Air Force Letter of Offer and Acceptance advised that current US Government procurement contracts had not acquired this level of IP, and that Defence would need to procure the IP separately and directly from the aircraft manufacturer, Alenia.

¹⁰² Response to DCIC, AIR 8000 Phase 2 – Battlefield Airlift – Caribou Replacement Support Cost Comparison of USAF C-27J and C-130J-30, 3 August 2011, p. 10.

¹⁰³ See US Government Accountability Office (GAO), *Joint Strike Fighter Impact of Recent Decisions on Program Risks*, testimony of Michael Sullivan, Director Acquisition and Sourcing Management before the Subcommittees on Air and Land Forces, and Sea and Expeditionary Forces, Committee on Armed Services, House of Representatives, 11 March 2008.

3.60 In this context, Finmeccanica, the parent company of Alenia, had recorded a USD \$3 billion loss in the previous financial year.¹⁰⁴ Finmeccanica had also been carrying negative financial ratings by the leading credit reporting agencies.¹⁰⁵

3.61 Notwithstanding these developments, and the prospect of the cancellation of the US order for C-27J aircraft, Defence attached a one per cent risk rating in its Liability Risk Assessment regarding Alenia's financial position. Defence informed the ANAO that the basis for the one per cent risk rating for Finmeccanica included that:

- The Government of the United States of America has advised the Australian Department of Defence that they will support Foreign Military Sales Case, even if divestiture of the C-27J platform was to occur in the USAF.
- L-3 Communications and Alenia Aermacchi (subsidiary of Finmeccanica Group) have demonstrated their commitment through the release of a joint statement on 30 March 2012, reinforcing their collective commitment to deliver the C-27J as Australia's Battlefield Airlifter.
- Finmeccanica and L-3 Communications are numbered 8 and 9 (Stockholm International Peace Research Institute Top 100 arms producing companies and Defense News Top 100) respectively of the largest arms producing companies in the world, both with revenues in excess of USD\$10 billion.

In considering the above, the risk of the financial consortium failing is considered Rare, resulting in a 1% likelihood of the event occurring.

3.62 Although the FMS contract is with the US Government, and not with the aircraft's manufacturer, a failure of the manufacturer could result in the aircraft not being produced. If this were to occur during production, there is a risk that Defence may not receive all aircraft, and may forfeit any funds already paid to the US.

3.63 Defence advised government that, in order to secure IP rights for the US variant C-27J aircraft, Defence would have to sign an aftermarket contract,

104 Defense Industry Daily, *Rapid Fire*, 28 March 2012, <http://www.defenseindustrydaily.com/Rapid-Fire-March-28-2012-07345/> [accessed 14 August 2012].

105 Finmeccanica, *Half Year Financial Report*, 30 June 2012, identifies credit ratings attached to the company in the previous period. Finmeccanica's credit ratings were unchanged from 31 December 2011: Baa2 with a negative outlook from Moody's (from A3 with stable outlook at 31 December 2010), BBB- with a negative outlook from Fitch (from BBB+ with stable outlook at 31 December 2010); and BBB- with a negative outlook from Standard and Poor's (from BBB with negative outlook at 31 December 2010), p. 52.

separate to the FMS contract with Alenia. The ANAO enquired as to how Defence determined the market value for this contract. Defence informed the ANAO that:

.... a valuation based on the Defence business case of avoidance of sustainment cost through competition was adopted. US Government Accountability Office (GAO) papers indicate a 10% to 20% savings in contract price can be achieved when through-life support and minor modifications contracts are competed on the open market. This finding resonates with DMO experience. The value for money assessment presented in support of the financial delegate submission (provided) included a Net Present Value assessment of the long term support, maintenance and upgrade of the C-27J weapon system.

3.64 The ANAO noted that the possible 10 per cent to 20 per cent savings in the aftermarket contract identified by Defence was based on assumed market competition. However, in response to ANAO enquiries, Defence was unable to provide any market testing analysis to indicate it could realise these potential savings in the Australian context.

Possible Cancellation of the United States C-27J program

3.65 In addition to the need to purchase IP rights, a second major issue was encountered during the procurement process. The US Government announced in January 2012 that it planned to cancel its C-27J program. Defence advised government, when seeking approval to acquire the C-27J in April 2012, that the risks for Australia arising from the US decision were as follows:

- there would now be limits on the Commonwealth's ability to benefit from the United States' use of the same aircraft with regard to through-life support costs and non-recurring engineering upgrades, such as the aircraft's protection system;
- Air Force would now bear the responsibility of obtaining certification of the aircraft; and
- Defence would not be able to share through-life support costs with the United States.

3.66 Defence further advised government that:

Despite these implications, it is Defence's assessment that acquisition of the C-27J system under FMS remains the best value for money option. This is on the basis that US Government budget deliberations are unlikely to determine the fate of the program before late 2012—given the current US production

contract will expire in June 2012, Defence would likely face significant cost increases if it waited until the fate of the US program was confirmed.

3.67 At that stage of the procurement process, April 2012, it was clear that AIR 8000 Phase 2 was facing increased risk due to the planned cancellation of the US C-27J program.¹⁰⁶ The next section examines how Defence assessed that risk.

Assessment of risk

3.68 In response to challenges that it has previously faced in managing the risks associated with procurement, Defence has developed a range of procedures—outlined in *Defence's Project Risk Management Manual*—aimed at identifying and mitigating procurement risks. One of the mandatory requirements set out in the *Project Risk Management Manual* is the development of a risk register for each project. Notwithstanding this requirement, as at May 2013, some 22 months after the commencement of procurement, no register had been developed. This was so despite the size and complexity of AIR 8000 Phase 2, and the risks posed by the US Government's potential cancellation of its C-27J program.

3.69 The only document relating to risk management that Defence was able to provide the ANAO was the *AIR 8000 Phase 2 Battlefield Airlift Capability Liability Risk Assessment (LRA)*. The LRA was developed on 2 May 2012, just before the signing of the FMS contract, and is essentially a compliance document as opposed to an active risk management document. It is specifically intended to help in obtaining financial delegation approvals which are required for an FMS procurement, rather than forming the basis for a project risk management process.

3.70 The LRA identified 11 possible risks to the project and attached to each a likelihood of one per cent. Table 3.5 lists these risks.

¹⁰⁶ While the US originally planned to cancel its program, the situation in early to mid 2013 was less clear, and a final decision was pending.

Table 3.5: AIR 8000 Phase 2 Liability Risk Assessment

| Risk | Likelihood |
|--|-----------------|
| Minor injury to Commonwealth/US Government/ third party personnel | Rare 1 per cent |
| Major injury to Commonwealth/US Government/third party personnel | Rare 1 per cent |
| Death to Commonwealth/US Government/third party personnel | Rare 1 per cent |
| Minor damage to Commonwealth/US Government/third party property | Rare 1 per cent |
| Major damage to Commonwealth/US Government/third party property | Rare 1 per cent |
| Total destruction to Commonwealth/US Government/third party property | Rare 1 per cent |
| Minor infringement of IP or TD rights | Rare 1 per cent |
| Major infringement of IP or TD rights | Rare 1 per cent |
| The supplies provided under the contract do not work | Rare 1 per cent |
| FMS case fails to complete contract | Rare 1 per cent |
| Supplies delivered and accepted behind schedule | Rare 1 per cent |

Source: Air 8000 Phase 2 Battlefield Airlift Capability Liability Risk Assessment.

3.71 The LRA made no mention of the increased risk to the project arising from the US Government's announcement of its intention to cancel its C-27J program. Further, the LRA rated the risk that the 'FMS case fails to complete the contract' as one per cent, even though the parent company of the aircraft's manufacturer was reported as experiencing financial difficulty (see paragraph 3.60).

3.72 In the absence of an active risk management register—contrary to Defence's internal requirements—and lack of consideration in the LRA of the risks posed by the possible US cancellation of its C-27J program, Defence had a more limited basis than it would otherwise have had in advising government that the US variant C-27J provided the lowest risk option for AIR 8000 Phase 2. Nonetheless it did so in its April 2012 submission. Cancellation of the US C-27J program would negate some of the principal advantages of entering into an FMS arrangement, namely that of standardisation and interoperability with the US. In the longer-term, any decision by the US to no longer operate this aircraft would mean that the US will no longer undertake further development of the aircraft, leaving the costs and risks of future modifications and upgrades to be borne by Defence.

3.73 The possible cancellation by the US Government of its C-27J program also has implications for the airworthiness certification process to be undertaken by Defence. Defence initially considered that the US would complete military certification for the aircraft acquired under the JCA

program; enabling Defence to achieve ADF certification with minimal effort. However, the US has not completed military certification. Both the US variant and the commercial C-27J aircraft have achieved US FAA (civilian) certification, but US Military certification for the US variant has not been completed.¹⁰⁷

3.74 Should Defence need to undertake significant additional work to achieve ADF certification of the US variant C-27J, the result would be the loss of another major advantage in acquiring the aircraft through an FMS arrangement. As noted in paragraphs 2.42–2.45, Defence’s advice to government in April 2012 was that its estimate for obtaining certification for the US variant C-27J was \$3.1 million as opposed to more than \$40 million for either of the commercial options. Defence did not provide data to the ANAO to explain the significant variation in its cost estimates for the certification of the US variant C-27J compared to the commercial options. Defence informed the ANAO that the significant difference in estimated certification costs was based on the premise that:

The ADF does not recognise the European certification achieved by the Military Industrial Baseline Aircraft (MIBA) C-27J produced by Alenia as being sufficient to achieve ADF certification. A significant test and evaluation program would be required on the MIBA C-27J to meet ADF certification requirements. The US certification achieved by the [United States Air Force] C-27J meets ADF requirements and therefore minimal further evaluation of this variant would be required to achieve Australian certification, at significantly lower cost, technical and schedule risk.

3.75 In respect to the C-27J manufacturer’s reported financial status discussed in paragraph 3.60, the cancellation of the majority of the US order appears to have had additional implications for the manufacturer. Further, it is reported to be facing the reduction of orders from European governments due

107 In June 2013, Defence advised the Senate Foreign Affairs, Defence and Trade Legislation Committee that:

... we have done some analysis on the USAF certification [of the US variant C-27J] and quantified it as about 85 per cent complete certification. At the moment our people are working through what USAF have done, to determine what needs to be done, in some detail. We are reasonably confident from what they have done. As I said, it is 85 per cent complete, but that extra work will not be out of our capabilities. (Hansard, Senate Foreign Affairs, Defence and Trade Legislation Committee, Estimates 3 June 2013, p. 153)

to financial constraints.¹⁰⁸ These reported financial risks were known at the time of combined pass approval, and were highlighted by both the Department of Finance and Deregulation and the Department of the Prime Minister and Cabinet when considering Defence's April 2012 submission to government. However, Defence did not revise its risk rating for the manufacturer's financial viability, and advised government in April 2012 that:

In relation to Alenia ... Defence sought further advice from the Italian Ministry of Defence, who confirmed that Alenia remains financially viable, noting that Alenia is a subsidiary of Finmeccanica SpA, the world's eighth largest Defence supplier, and that Finmeccanica has a stable financial position.

3.76 Since then, the manufacturer's parent company (Finmeccanica) has also had its debt rating further downgraded in January 2013.¹⁰⁹

Conclusion

3.77 Defence pursued an accelerated acquisition strategy for the procurement of 10 US variant C-27J through a direct source FMS arrangement from July 2011. Defence advised that it pursued the direct source option on the basis that the two commercial options could provide no reasonable prospect of providing better value for money than the US variant C-27J sourced through an FMS process. In September 2011, Defence advised its then Minister on the strategy, who then sought the then Prime Minister's approval to approach the US Government to obtain cost, availability and schedule information on the possible acquisition of the US variant C-27J. While approving the approach, the Prime Minister also requested the development of alternate options and acquisition strategies, noting that the US C-27J program may ultimately be reduced or cancelled. The Prime Minister indicated that commercial information on the alternate options, 'akin to first pass', would be considered by the Government.

3.78 This resulted in an unplanned approach to industry, and Defence's letters to the commercial suppliers could reasonably be read as implying that the acquisition process for AIR 8000 Phase 2 was at a pre-first pass stage,

¹⁰⁸ *The Sofia Echo*, Bulgarian Air Force receives its third Spartan C-27J, 31 March 2011, see <http://sofiaecho.com/2011/03/31/1068124_bulgarian-air-force-receives-its-third-spartan-c-27j> [accessed 26 September 2012].

¹⁰⁹ Bloomberg, S&P Cuts Finmeccanica Debt to Junk on Disposal Disappointment, 19 January 2013, <http://www.bloomberg.com/news/2013-01-18/s-p-cuts-finmeccanica-debt-to-junk-on-disposal-disappointment.html> [accessed 19 January 2013]

stating that the purpose of the request was to 'support the Government First Pass considerations.' The letters gave no indication that Defence was considering accelerating the approval process, nor that Defence hoped to finalise an FMS contract by June 2012. In this context, Defence's approach to industry did not transparently communicate the status of the procurement process.

3.79 Further, the commercial suppliers were not provided with the key capability requirement documents that Defence's Capability Definition Documents Guide states should be fully developed for the solicitation stage. Defence has acknowledged the limitations of its approach to industry on this occasion, and in the course of the audit amended its Defence Capability Development Handbook so that future approaches to industry follow a more formal procedure.

3.80 Defence evaluated the industry responses and compared them to the US offer. The information provided by the commercial suppliers reflected the request made by Defence, and was of a lower quality than the information provided by the US in respect to the US variant C-27J. Defence advised that it adopted this approach on the basis that it was seeking to confirm that the commercial options had no substantial benefits over the US variant. Defence was confident of the adequacy of this process to confirm its understanding of the relative merits of the various aircraft, developed over time, without conducting a formal tender process. Defence further advised that it was cognisant of the significant costs associated with developing second pass quality proposals, and wished to avoid having commercial suppliers commit to developing second pass data for this acquisition, when there was no reasonable prospect of them providing a better value for money option. That said, the commercial suppliers were led to believe they were engaging in the early stages of an open procurement process, when in fact they were providing supplementary information to confirm Defence's position to pursue a direct source FMS procurement of the US variant C-27J.

3.81 Based on this evaluation Defence advised government that the US variant C-27J provided the lowest cost and lowest risk option for AIR 8000 Phase 2. However, no risk management process was undertaken by Defence during the acquisition process, contrary to Defence internal guidelines. The possible cancellation of the US C-27J program also presents additional risks to

this acquisition in the future as several key advantages of the FMS acquisition may be negated.¹¹⁰ Nevertheless, the possible cancellation of the US program had not been settled at the time of the Australian decision to procure the aircraft, and debate regarding cancellation has continued in the US since then.

110 These risks include the inability of Defence to share the costs of through-life sustainment; aircraft upgrades and training with the US.

4. Final approvals and value for money

The following chapter examines the final approval process for the acquisition of the US variant C-27J and value for money presented by this capability option for AIR 8000 Phase 2.

Government approval

4.1 Based on advice provided by Defence (see paragraphs 3.51–3.56), in April 2012 the Government approved the acquisition of 10 US variant C-27J aircraft under an FMS arrangement with the US Government. The approval also authorised a combined first/second pass approval process for AIR 8000 Phase 2. The approval included cost-capped acquisition funding of \$1.14 billion, and an additional \$1.8 billion for personnel and operating costs. Defence wrote to Airbus Military (C-295) and Raytheon (commercial C-27J) on 10 May 2012 advising that they were unsuccessful in providing a capability solution to AIR 8000 Phase 2. In response Airbus Military publicly stated:

Despite Airbus expending considerable resources responding to enquiries and requests for rudimentary information, we are concerned that the outcome may have been pre-determined from the start.¹¹¹

4.2 As discussed in Chapter 3 (see paragraphs 3.2–3.7), the Defence Secretary and the CEO DMO, as Chief Executives of their respective agencies, have relied on clause 2.7 of the CPGs to determine that certain Defence procurements should be exempt from the Mandatory Procurement Procedures (MPPs) for the protection of essential security interests.¹¹² This essentially exempted the AIR 8000 Phase 2 procurement from the MPPs requirement to tender. Defence had recognised that the selection process had not been conducted in the manner of an open tender when, in March 2012, just before seeking government's approval to purchase the US variant C-27J, it advised

111 Airbus Military public statement, see <http://www.asiapacificdefencereporter.com/articles/235/AIRBUS-MILITARY-EXPRESSES-SURPRISE-AT-CARIBOU-REPLACEMENT-DECISION> [accessed 19 September 2012], see also <http://www.flightglobal.com/blogs/asian-skies/2012/05/full-text-of-airbuss-statement.html> [accessed 19 September 2012].

112 Defence Procurement Policy Manual DPPM, 1 July 2011, p. 1.2–5. A list of 25 general categories of equipment which are exempted under the Australia–United States Free Trade Agreement (AUSFTA) have been categorised as Defence Exempt Procurements in the DPPM, including Aircraft and Airframe Structural Components; and Aircraft Components and Accessories. The list of Defence Exempt Procurements has been retained in the current version of the DPPM, which was amended following release of the CPRs.

the then Minister for Defence of the following risk in proceeding with the FMS acquisition:

Commercial organisations may continue to make representation for an open competitive tender process. [The commercial suppliers] may contest the outcome if the US variant C-27J aircraft via FMS is approved. DMO's initial assessment is that the merits of either case are weak and that Defence's exposure is limited.

4.3 A key factor limiting Defence's exposure was its exemption from open procurement processes, discussed earlier. In the event, the processes adopted by Defence were neither competitive nor exhaustive.

Two pass approval process

4.4 Procedures to secure government approval of major Defence capital acquisition projects have been evolving over the last decade.¹¹³ The starting point is the general expectation that most projects will undergo a two pass approval process, although the precise approach can be tailored to the circumstances of the individual project. *The Drafter's Guide—Preparation of Cabinet Submissions and Memoranda* sets out the expectations for first and second pass submissions.¹¹⁴

4.5 The first pass submission is intended to describe broad solutions to meet an identified capability gap and is presented to the National Security Committee of Cabinet for consideration.¹¹⁵ The second pass stage involves the development of a 'detailed and rigorous Acquisition Business Case for each capability option approved at first pass.' This includes a solicitation process, where Defence approaches industry to ascertain cost and schedule data for each proposal identified at first pass approval. Solicitation usually involves a tender whereby prospective suppliers provide detailed and robust cost and schedule information.

4.6 The second pass submission is expected to include the cost, capability, schedule and risk trade-offs between the different options identified. Each

113 ANAO conducted an audit of Defence's Two Pass process in 2008–09 (see Audit Report No. 48 2008–09 *Planning and Approval of Defence Major Capital Equipment Projects*). ANAO is also currently undertaking an audit of Defence's *Capability Development Reform*, which is due to table in -2013.

114 Department of the Prime Minister and Cabinet, *Drafter's Guide—Preparation of Cabinet Submissions and Memoranda*, Third Edition, July 2009, Attachment G: Defence Procurement.

115 Ibid.

Acquisition Business Case is also required to include the budget estimates of total acquisition and whole-of-life costs.¹¹⁶ Second pass approval marks the point at which Defence can commence contract negotiations with the preferred tenderer and subsequently enter into a contract for supply of the equipment to support the capability.

4.7 In some instances it may be acceptable for Defence to seek a ‘combined pass approval’ whereby second pass approval is brought forward to be agreed at first pass consideration. This approach is documented in both the Drafter’s Guide and the Defence Capability Development Handbook (DCDH) which state that ‘For less complex projects where formal project definition phases have been completed ... it may be acceptable for Defence to bring forward a proposal for second-pass approval to be agreed at the first-pass consideration.’¹¹⁷ The DCDH also states that ‘the documentation must be of Second Pass quality’ and that ‘Combined Pass approval should not be considered as a mechanism for shortening project schedules.’¹¹⁸

4.8 As discussed in Chapter 3, AIR 8000 Phase 2 did not undergo the standard two pass approval process. Both first and second pass approvals were provided concurrently in a ‘combined pass approval’ in May 2012. Defence informed the ANAO that the reason for adopting the combined pass approval approach related to the need to accept the US Government Letter of Offer and Acceptance by 4 May 2012 in order to access the pricing structure which was current at that time between the US Government and the aircraft manufacturer.

4.9 As discussed in paragraph 4.7, the Cabinet Handbook and the DCDH each state that a combined pass approach may be acceptable for ‘less complex’ projects; should not be used to shorten project schedules; and the documentation in the proposal must be of Second Pass quality. The combined pass approval of AIR 8000 Phase 2 was not in line with the guidance provided in the Cabinet Handbook and DCDH on any of these points in that:

- AIR 8000 Phase 2 is an ACAT Level 2 project¹¹⁹ which is at the higher level of complexity for Defence projects;

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Defence Capability Development Handbook, 2011 p. 44.

¹¹⁹ The Acquisition Category or ACAT level of a project refers to the complexity of managing a particular project. There are four ACAT levels, from ACAT I (most complex) to ACAT IV (least complex).

- Defence's explanation that a combined pass approval was required to access a particular pricing arrangement,¹²⁰ which was available for a limited time, demonstrates it has been used as a mechanism for shortening the project schedule; and
- the cost data requested by Defence, and then used to compare and evaluate the offers from commercial suppliers, was determined by Defence to be of first pass quality.

4.10 Defence advised the ANAO that:

The combined pass approach was not compliant with the DCDH, however it was nonetheless the approach that the Minister and Prime Minister had settled on through the exchange of letters.^[121] This approach was tailored to achieve the benefits of entering into an FMS arrangement before the contract option expired with considerable savings to Defence. This reflects [the] Mortimer recommendation to tailor the process to project circumstances.

Value for money assessment of the AIR 8000 Phase 2 procurement process

4.11 Following receipt of combined pass approval by the Government on 30 April 2012, the acquisition proposal – that a direct source procurement for AIR 8000 Phase 2 of the US variant C-27J be undertaken via an FMS agreement – was approved by DMO's Head Aerospace Systems Division (HASD) on 4 May 2012. The Acquisition Strategy and Contract Approval documentation formed the basis for justification and approval by the relevant delegates that the direct source acquisition through an FMS agreement represented value for money. The Acquisition Strategy stated:

Defence should recommend the acquisition of the JCA [US variant C-27J] through a Foreign Military Sales (FMS) case with the United States Government (USG), noting that FMS is a proven method of demonstrating value for money.

4.12 Defence proceeded to contract with the US Government for the supply of the aircraft, spare parts and training; and with Alenia Aermacchi for access to IP rights.¹²² Initial operating capability is forecasted for 2014–15, with final

120 See paragraph 3.66.

121 This correspondence is discussed in paragraph 3.30.

122 See paragraph 3.59.

operating capability forecast for 2016–17. The total contract values are as follows:

- FMS contract with the US — \$882 402 873;
- IP contract with Alenia — \$58 160 025.

4.13 Section 44 of the FMA Act requires agency heads to promote the ‘proper use’ of Commonwealth resources, which is defined under the Act as efficient, effective, economical¹²³ and ethical use that is not inconsistent with the policies of the Commonwealth. Effectiveness, efficiency and ethics were defined in the CPGs as follows:

- *Effectiveness* relates to how well outcomes meet objectives. It concerns the immediate characteristics of an agency’s outputs, especially in terms of price, quality and quantity, and the degree to which outputs contribute to specified outcomes ... This entails correctly identifying the need, accurately drafting functional specifications, rigorously assessing responses and negotiating the final contract, and then diligently managing the contract ...
- *Efficiency* relates to the productivity of the resources used to conduct an activity in order to achieve the maximum value for the resources used. In relation to procurement, it includes the selection of a procurement process that is consistent with government policy and is the most appropriate to the procurement objective under the prevailing circumstances ...
- *Ethics* are the moral boundaries or values within which officials work ... Adopting an ethical, transparent approach enables business to be conducted fairly, reasonably and with integrity. A specific aspect of ethical behaviour relevant to procurement is an overarching obligation to treat potential suppliers as equitably as possible.¹²⁴

4.14 As discussed in paragraph 3.6, the CPGs provided that, notwithstanding the exemption from open tendering available under paragraph 2.7 of the CPGs, applying such measures does not diminish the responsibility of agency heads under s44 to promote proper use under the FMA Act. The following section sets out the ANAO’s observations in relation to Defence’s application of these principles to the AIR 8000 Phase 2 acquisition.

¹²³ Economy relates to minimising cost.

¹²⁴ Commonwealth Procurement Guidelines 2008, pp. 13 and 16.

Effectiveness

4.15 The C-27J represents an effective capability solution to AIR 8000 Phase 2, particularly due to its interoperability with the C-17 and C-130J air cargo platforms. The C-295 was unable to achieve a similar level of interoperability mainly due to its inability to transport the standard sized cargo pallet used by Air Force on the C-130J and C-17. As discussed in paragraph 2.35, Defence did not cogently present these key strengths of the US variant C-27J in its advice to government regarding procuring the aircraft.

4.16 Defence advised the ANAO that pre-contract test and evaluation will be given more consideration in future acquisitions. This will facilitate a more complete and confident assessment of all aspects of effectiveness against essential criteria.

Efficiency

4.17 Defence originally approached this acquisition on the basis that a direct source FMS procurement would provide the lowest risk, lowest cost and fastest supply channel. Notwithstanding the arguments put forward for this approach, both the DCIC (in 2006) and government (in 2011) sought reassurance that there was a compelling case for the direct source procurement of the US variant C-27J. Indeed, the then Prime Minister's September 2011 correspondence to the Defence Minister¹²⁵ and the Government's 19 October 2011 announcement¹²⁶ indicated that it wished to consider its options before making a final decision.

4.18 Defence had undertaken some comparative work in the course of AIR 8000 Phase 2 which had led it to form a view that FMS acquisition of the US variant C-27J was the process most likely to deliver its preferred capability in a cost-effective and timely manner. However, the Government's wish to keep open its options, and its desire for reassurance in respect to a direct source procurement, prompted a previously unplanned approach to two commercial suppliers, seeking data to compare with the information that was being sought from the US Government.¹²⁷

¹²⁵ Discussed in paragraph 3.30.

¹²⁶ Discussed in paragraph 3.32.

¹²⁷ Discussed in paragraph 3.35.

4.19 In the event, Defence was successful in completing the sole source process for the US variant C-27J in the short time-frame available between mid-2011, when Defence decided to proceed with an accelerated procurement, and the June 2012 expiry of the relevant US contract that would have resulted in a significant price increase for the aircraft. The FMS procurement also includes a schedule to secure the desired capability solution in a timely way. While these factors contributed to an efficient outcome for Defence, the manner in which Defence built the case for a direct source procurement to government, and dealt with industry in gathering additional information to reassure government about the procurement approach, detracted from the department's performance.

Economy

4.20 The C-27J was preferred by Defence as the C-295 could not meet Defence's capability requirements, including the interoperability available through the use of standard ADF cargo pallets. The US variant C-27J provided Defence with a discounted acquisition cost, and it was appropriate to actively explore that option. Further, there was a limited window of opportunity available to Defence to take advantage of the discounted price, and in the circumstances it was also appropriate to expedite consideration of this option. Calculating likely overall costs is challenging, considering the variation in the quality of the cost data and the low quality of ongoing support cost estimates available. However, it is also necessary to take into account Defence's own estimates of the likely delays and risks associated with selecting the commercial C-27J option, particularly in obtaining and integrating equivalent electronic warfare and associated combat systems as they are found in the US variant, and the fact that Defence would not, under this option, have proceeded to retire the C-130H aircraft early, with a substantial saving. On balance, Defence's judgement that the FMS selection was the more economical of these two capability solution options was reasonable.

Ethical

4.21 As discussed in paragraph 4.13, adopting a transparent approach enables business to be conducted fairly and reasonably. When Defence wrote to the two commercial suppliers (Raytheon for the C-27J and Airbus for the C-295) on 26 October 2011 and informed them that the information requested would be used to inform first pass consideration by government, it could reasonably be implied from the correspondence that the project was in the early stages of development and that a solicitation activity would be conducted in the future when more detailed information would be sought. As discussed in paragraph

3.40, Defence's approach to industry did not fairly communicate the true status of the procurement process, and in that respect did not have proper regard to the CPG's advice that: 'Adopting an ethical, transparent approach enables business to be conducted fairly, reasonably and with integrity.'¹²⁸

4.22 Defence acknowledged that the clarity of communication with the commercial suppliers in this instance could have been improved and has advised that future approaches to industry will be made only through the Defence Materiel Organisation, which is more familiar with the communication needs of commercial entities.¹²⁹

Value for Money

4.23 Paragraph 4.2 of the CPGs observed that value for money is enhanced by encouraging competition; promoting the efficient, effective and ethical use of resources and accountability and transparency in decision making. Paragraph 4.4 of the CPGs further advised that cost is not the only factor in assessing value for money. Other factors to be considered included:

- a. fitness for purpose;
- b. the performance history of each prospective supplier;
- c. the relative risk of each proposal;
- d. the flexibility to adapt to possible change over the lifecycle of the property or service;
- e. financial considerations including all relevant direct and indirect benefits and costs over the procurement lifecycle; and
- f. the evaluation of contract options.

4.24 Defence advised that it based its decision to conduct a direct source acquisition of the US variant C-27J through an FMS contract on the following factors:

- Defence's assessment that the C-295 did not meet several essential requirements, including interoperability requirements with other ADF aircraft logistics systems;

¹²⁸ *Commonwealth Procurement Guidelines* 2008, paragraph 6.18.

¹²⁹ See paragraph 3.39.

- the accelerated process undertaken and the low risk of schedule delays offered by the FMS option allowed Defence to retire the C-130H fleet in 2013, avoiding increasing support costs;
- the aircraft price offered by the US Government could not be matched by a commercial supplier and this price was only available until June 2012;
- the US variant C-27J was the only Military Off The Shelf (MOTS) option available. The use of Commercial Off The Shelf (COTS) and MOTS products has been promoted by Defence in response to a recommendation by the Defence Procurement and Sustainment Review (Mortimer Review) in 2008;
- the commercial C-27J option could not offer substantial benefits over and above those offered by the US variant available under FMS arrangements; and
- the cost to industry of participating in a full tender process was high and Defence assessed (based on previous research and the most recent information received from commercial sources) that the commercial suppliers could not compete with the FMS offer. Conducting a tender would have also taken several months and resulted in the loss of the competitive aircraft price available through FMS.

4.25 In terms of whether the selection of the US variant C-27J as the capability solution for AIR 8000 Phase 2 provided value for money, the ANAO considers that—notwithstanding the limited data available to undertake a robust cost comparison between the three options—the following Defence considerations when taken together provided a reasonable basis to select the US variant C-27J as the value for money option:

- allowed Defence to secure a discounted price for the aircraft, contributing to the value for money of the acquisition;
- not only offered interoperability with the US variant C-27J fleet, but also with Air Force's existing C-17 and C-130J fleets; satisfying the fitness for purpose criterion of paragraph 4.4 of the CPGs;
- provided ballistic protection, electronic warfare protection, and communications systems that enhanced battlefield survivability and interoperability with other ADF platforms and the US, also satisfying the fitness for purpose criterion of paragraph 4.4 of the CPGs;

- removed the risk of Defence having to integrate flight control and electronic warfare systems into the aircraft, decreasing the risk of the acquisition in line with paragraph 4.4 of the CPGs; and
- provided a relatively short timeframe to achieve Initial Operating Capability¹³⁰, allowing Air Force to retire its ageing C-130H fleet of aircraft earlier and achieve savings, contributing to the efficiency of the acquisition.¹³¹

Conclusion

4.26 Based on Defence's April 2012 advice, the Government approved the purchase of 10 US variant C-27J aircraft through an FMS arrangement with the US Government on 16 April 2012. The total contract values are:

- FMS contract with the US – \$882 502 873; and
- intellectual property contract with the aircraft's manufacturer Alenia Aermacchi – \$58 160 025.

4.27 In examining the value for money achieved by this acquisition, the ANAO found that in terms of cost, the procurement process adopted by Defence for AIR 8000 Phase 2—which compared tender quality information from the US Government (in respect to the US variant C-27J) to first pass data from the two commercial suppliers (in respect to the commercial C-27J and C-295), in itself provided a relatively limited basis for comparison between the three options. However, Defence has advised that it also had regard to other cost information on the various aircraft, acquired over the course of Project Air 8000 Phase 2. The comparison of FMS and commercial offers is inherently difficult, and without the benefit of tender quality documentation for the commercial offers, becomes even more so.

4.28 The Australian Government procurement policy framework does not limit the determination of value for money to cost.¹³² FMS acquisitions can offer value for money by making available proven capabilities adopted by the

130 Initial Operating Capability is the minimum number of aircraft, associated equipment, and training provided to personnel to deliver a capability to Air Force.

131 However, the ANAO observed that there remains significant risk to this acquisition in relation to the access to, and cost of through-life support. The reduction and potential cancellation of the US C-27J program also has the potential to negate a number of the advantages of an FMS acquisition.

132 See paragraph 12 for discussion of the other considerations which may inform a value for money assessment.

US. FMS can also reduce risk and provide an opportunity to take advantage of the US's superior purchasing power; the ability to share the costs of upgrades and modifications; and a platform that is interoperable with the US. In this regard the ANAO observed that the US variant C-27J:

- allowed Defence to secure a discounted price for the aircraft, contributing to the value for money of the acquisition;
- not only offered interoperability with the US variant C-27J fleet, but also with Air Force's existing C-17 and C-130J fleets; satisfying the fitness for purpose criterion of paragraph 4.4 of the CPGs;
- provided ballistic protection, electronic warfare protection, and communications systems that enhanced battlefield survivability and interoperability with other ADF platforms and the US, also satisfying the fitness for purpose criterion of paragraph 4.4 of the CPGs;
- removed the risk of Defence having to integrate flight control and electronic warfare systems into the aircraft, decreasing the risk of the acquisition in line with paragraph 4.4 of the CPGs; and
- provided a relatively short timeframe to achieve Initial Operating Capability¹³³, allowing Air Force to retire its ageing C-130H fleet of aircraft earlier and achieve savings, contributing to the efficiency of the acquisition.

4.29 Taken together, these considerations provided a reasonable basis to select the US variant C-27J as the value for money option.



Ian McPhee
Auditor-General

Canberra ACT
15 August 2013

¹³³ Initial Operating Capability is the minimum number of aircraft, associated equipment, and training provided to personnel to deliver a capability to Air Force.

Appendices

Appendix 1: Agency response



Australian Government
Department of Defence

Mr Dennis Richardson
Secretary

General David Hurley, AC, DSC
Chief of the Defence Force

SEC/OUT/2013/212
CDF/OUT/2013/1087

Mr Ian McPhee PSM
Auditor-General for Australia
Australian National Audit Office
GPO Box 707
CANBERRA ACT 2600


Dear Mr McPhee

Proposed Audit Report: AIR 8000 Phase 2 – C-27J Spartan Battlefield Airlifter

Thank you for the opportunity to review and provide comment on the subject report, provided to Defence on 10 July 2013. Defence appreciates the value of the audit process and continually seeks opportunities for improvement. The detailed Defence response is contained at **Annexes A and B** to this letter.

Subsequent to the receipt of this Proposed Audit Report, Defence has confirmed with the ANAO audit team that a number of the Requests For Information have previously been addressed. **Annex A** includes our response to the single outstanding Request For Information. **Annex B** is our formal agency response for inclusion in the audit report summary.

Defence is pleased to note the ANAO concludes that the US variant C-27J was the best value for money option and that this procurement complied with the requirements of the Commonwealth Procurement Guidelines and Financial Management and Accountability Act 1997.

PO Box 7900 Canberra BC ACT 2610 Telephone 02 626 52851 - Facsimile 02 6265 2375

Defending Australia and its National Interests

Should you have any queries, please do not hesitate to contact Mr Geoffrey Brown, Chief Audit Executive, on 02 6266 4210.

Yours sincerely



Dennis Richardson
Secretary

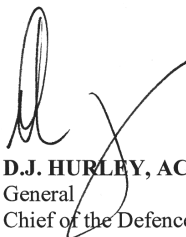
2 AUG 2013

Annexes:

- A. Defence Comments, Editorials and Response to Information Requests
- B. Formal Agency Response to the Proposed Audit Report

For Information:

Chief Capability Development Group
Chief Executive Officer Defence Materiel Organisation
Chief of Air Force
Chief Audit Executive



D.J. HURLEY, AC, DSC
General
Chief of the Defence Force

05 AUG 2013

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