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Follow-up on Internal Audit: Airbus
Maintenance Contract

December 2008

7053-64-2 (CRS)



Canada 

Caveat

The result of this work does not constitute an audit of the Airbus Maintenance Contract. Rather, this report was prepared to follow up on the progress in implementing the Management Action Plan that resulted from the March 2007 Airbus audit.

The reported inventory values in this project may not represent the actual value of inventory.



Table of Contents

Acronyms and Abbreviations	i
Introduction	1
Methodology	1
Overall Assessment	1
MAP Implementation Progress	2
Certification of Payments.....	2
Basis of Payment.....	2
Materiel Management.....	3
Financial Management	3
Vendor Schedule Reliability Performance Reporting.....	4
Risk Management.....	5



Acronyms and Abbreviations

8 WOps	8 Wing Operations
ADM(Mat)	Assistant Deputy Minister (Materiel)
AERMS	Audit and Evaluation Recommendation Management System
APU	Auxiliary Power Unit
CRS	Chief Review Services
DAEPMTH	Director Aerospace Equipment Program Management (Transport and Helicopters)
DAP	Director Air Procurement
DGAEPM	Director General Aerospace Equipment Program Management
DMPAP	Director Military Pay and Accounts Processing
DND	Department of National Defence
MAP	Management Action Plan
MOU	Memorandum of Understanding
PWGSC	Public Works and Government Services Canada
RMP	Risk Management Plan
TB	Treasury Board
YFR	Yearly Flying Rate



Introduction

In keeping with the Treasury Board (TB) Policy on Internal Audit¹ which must be fully implemented across government by 1 April 2009, Chief Review Services (CRS) is required to undertake audit follow-ups to assess the implementation status of management action plans (MAP) developed in response to previous CRS audit recommendations.

CRS conducted an audit of the Airbus maintenance contract in March 2007.² The five-year \$95.1-million contract was awarded in August 2002.³ There are five one-year options to extend the contract through to 2012. The contract was amended in July 2008 to exercise the second option year and increase the contract value to \$269.1 million.

Methodology

This follow-up is not another audit of the same issues, but rather it is a review of documentation and evidence to assess progress made in implementing the MAP. The following methods were used:

- Interviewed Director General Aerospace Equipment Program Management (DGAEPM) contract management staff and other National Defence Headquarters staff;
- Examined contract documentation and vendor reports; and
- Analyzed the Audit and Evaluation Recommendation Management System (AERMS).

Overall Assessment

There has been progress in the area of financial management. Additional contract ceiling increases, annual contract cash-flow reinstatement, staffing increases and the establishment of a historical cost baseline to benchmark vendor billings for heavy maintenance were all carried out.

At the time of follow-up there were eight MAPs designated as completed in AERMS, a system that tracks the progress of the MAPs. Upon further examination of these eight MAP items, they were found to be incomplete. The Department of National Defence (DND) is still making the annual payments of approximately \$40 million without having sufficient documentation to support the amounts charged. The annual cost escalation risk of 12.9 percent associated with time and materiel payments is still present for 98 percent of the 600 repairable components. More of these items could be fixed-price repairs.
..... and the risks related to materiel management processes at time of audit still exist today.

¹ *Policy on Internal Audit* <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12340>.

² Internal Audit: Airbus Maintenance Contract.

³ Support Services – A310 Airbus Contract #W8485-0-PH01/001/BF – Amendment 7. Five-year contract with five one-year option years.

MAP Implementation Progress

Certification of Payments

To improve the rigour of the payment certification process, it was recommended that the DND contract managers request additional supporting documentation for progress claims. It was observed that \$81 million of \$103 million payments had insufficient documentation. As well, a risk-based sampling approach was to be approved by Director Military Pay and Accounts Processing (DMPAP) to verify high-risk payments in accordance with the *Financial Administration Act*.

The MAP to improve the rigour of payment certification process by July 2007 has not been implemented. For example, the Department is still making annual payments of nearly \$40 million without adequate supporting documentation to ensure the validity of the amounts being charged. In 2005 DND contract managers requested the vendor to provide adequate supporting documentation to support payment of claims. However, the contractor was willing to supply additional documentation with the claim but at a cost to the Crown. Accordingly, an agreement was made for an informal sampling of supporting documentation at the vendor facility to be done three times per year. However, due to staff turnover and high workload, sampling of supporting documentation at the vendor site has not been done since December 2006 even though nearly \$71 million of payments have been made since then. Director Aerospace Procurement (DAP) staff will formally document their approach for approval by DMPAP by December 2008 and commence the sampling of supporting documentation.

The audit also recommended that the Director Aerospace Equipment Program Management (Transport and Helicopters) (DAEPMTH)

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Basis of Payment

Measures were needed to improve the control of costs. Accordingly, it was recommended that the Department

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There has been limited progress in the MAP to implement fixed prices for high-volume component repairs by August 2007. Of the 600 repairable components, only one item has been changed to fixed price since the audit and there are seven additional candidates that are being considered. DAEPMTH is aiming to introduce fixed prices for the seven candidates by January 2009. Due to staff shortages, a review of all 600 components will likely be done by the vendor. DAEPMTH will determine whether to undertake an independent review or assume the

risk of the vendor doing so by October 2009. As a minimum, an assessment of the vendor's review should be done by DND to ensure that the annual cost escalation of 12.9 percent (excluding annual rate increases) is reduced. Every year the review is delayed potential savings will not be realized.

With respect to engine/APU maintenance, a business case was not done by September 2007 as planned. The MAP was to evaluate alternatives and identify the impact of implementing the power by hour basis of payment for this contract as opposed to the fixed-price repair subcontracts in order to address annual cost escalation of 11 percent. Based on discussions with the vendor, DAEPMTH determined that power by hour would not be beneficial to DND for the Airbus due to the small fleet size. This decision is not aligned with ADM(Mat) In-Service Support Contracting Framework terms of payment guidelines. Therefore, DAEPMTH will provide a high-level business case to CRS by March 2009 to substantiate not adopting power by hour payments.

Materiel Management

To improve oversight of contractor-held DND materiel with a reported value of \$41 million, it was recommended that vendor stocktaking frequency be every two years. As well a contract provision was necessary to gain visibility of vendor adjustments for consistency with *DND Special Instructions for Repair and Overhaul Contractors*.⁴

Minimal progress has been made to address the materiel management risks that existed at time of audit. The contract provision has been delayed due to a vendor change of ownership and the vacant Contracting Authority position in PWGSC. The June 2007 DND contract requisition proposed a two-year cycle count process for 100 percent of items and improvements for inventory adjustments. However, not all Government Furnished Overhaul Spares/Accountable Advance Spares controls laid out in *DND Special Instructions for Repair and Overhaul Contractors* were included in the requisition. DAP will review the contract and *DND Special Instructions for Repair and Overhaul Contractors* to ensure alignment and implement a contract amendment by April 2009.

Financial Management

To assist the Department in cost control and better decision making, it was recommended that financial controls/monitoring mechanisms be improved by validating the total option year costs and reinstating annual cash flow limits into the contract. As well, overstated estimates of incremental costs for an increase in yearly flying rate (YFR) hours needed to be addressed.

⁴ A-LM-184-001/JS-001 *DND Special Instructions for Repair and Overhaul Contractors*.

By year three, the original \$95.1 million five-year contract had to be increased to \$176 million to accommodate unforeseen costs—an increase of 83 percent. Progress in cost control has been made; the remaining five option year estimates were re-evaluated and submitted to TB for approval. In addition, annual cash flow limits were reintroduced into the contract to curb contract escalation. Contract management staff also reviewed incremental YFR costs and advised the Chief of the Air Staff of the \$18.4 million overstatement in the previous assessment.

The 2007 audit also recommended reassessing the staff required to manage the contract, making improvements to cost trend analyses and benchmarking, and developing activity baselines for heavy maintenance level of effort estimates and actual expenditure comparisons.

With respect to staffing, the contract management office has been able to fill its Aerospace Engineer Captain/Lieutenant position since November 2007. A contractor position has also been converted to a DND civilian engineering position. For a third position, a National Procurement – Salary Wage Envelope conversion has been submitted to the Directorate of Aerospace Equipment Business Management for approval.

The high operational tempo and personnel shortage within DAP has prevented DND from completing trend and benchmarking analyses to monitor cost escalation by May 2007. Without these measures, cost escalation could continue to go unchecked. DAP personnel expect to be performing these analyses by March 2010 when staffing is complete.

To determine the reasonableness of forecasts and actual costs, the technical authority has established a cost baseline. Claimed hours and materiel costs for heavy maintenance checks are now compared to historical averages.

Vendor Schedule Reliability Performance Reporting

To ensure the reliability of vendor performance reporting, it was recommended that the definition of scheduled reliability performance be consistent with the contract, and that the vendor’s reliability report be validated by the end user at 8 Wing Operations (8 WOps) in Trenton. DAEPMTH’s MAP was to establish a Memorandum of Understanding (MOU) by April 2007 between 8 WOps and the vendor for validation of aircraft availability reported by the vendor.

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The MOU between the vendor and 8 WOps allows for validation of aircraft availability reported by the vendor. However, 8 WOps has not received the pertinent flight delay information from DAEPMTH. Nor has 8 WOps validated the schedule reliability data. A CRS availability metrics analysis of 8 Wing data found the reliability level did not fall below the 95 percent threshold for two consecutive months. Therefore, the holdback provision could not be exercised. DAEPMTH will ensure 8 WOps validates the vendor availability data starting in February 2009.

Risk Management

To improve the Department's ability to anticipate contract costs/schedule risks, it was recommended that ADM(Mat) develop a Risk Management Plan (RMP) and metrics to identify, rank, quantify and mitigate risks, and require the vendor to report on risks.

Current contract issues, as opposed to potential future risks and mitigation strategies, are discussed at the quarterly Progress Review Meetings with the vendor; no separate vendor report on risk exists. This observation will be addressed by January 2010.

While the Airbus DND contract managers intend to develop a DND RMP, the lack of personnel has hindered progress. DAEPMTH anticipates that an additional position will be staffed by November 2009. At that time, the DND RMP and risk reporting process will be carried out. Best practices are still not in place to manage risk.

