Chief Review Services Chef - Service d'examen

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Reviewed by CRS in accordance with the *Access to Information Act* (AIA). Information UNCLASSIFIED.

## Internal Audit of the Close-In Weapon System (CIWS) Support Contracts

November 2008

7050-38 (CRS)









#### Caveat

This audit is not intended to assess the performance of contractors; rather, it is an internal assessment of processes and practices within the Assistant Deputy Minister (Materiel) (ADM(Mat)) organization.

The values stated regarding the valuation of inventory are dependent on the accuracy of inventory pricing. Previous CRS audits have indicated the inventory prices are not accurate within the CFSS. The inventory values in this report are reported values from the Canadian Forces Supply System and vendor inventory systems and may not represent the actual value of the inventory.

This audit represents a high level of assurance.

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## **Acronyms and Abbreviations**

AAS	Advance Accountable Spares	MRC	Maximum Repair Cost
ADM(Mat)	Assistant Deputy Minister	MRP	Mobile Repair Party
	(Materiel)	NATO	North Atlantic Treaty
ASC	Audit Services Canada		Organisation
CA	Contract Authority	NDQAR	National Defence Quality
CF	Canadian Forces		Assurance Representative
CFSS	Canadian Forces Supply System	ORDALT	Ordnance Alteration
CRPA	Contractor Repair Parts Account	OCI	Office of Collateral Interest
CIS	Contract Issue Spares	OPI	Office of Primary Interest
CIWS	Close-In Weapon Systems	PD	Project Directive
CRS	Chief Review Services	PM	Project Manager
DGMEPM	Director General Maritime	PTI	Phalanx Thermal Imager
	<b>Equipment Project Management</b>	PWGSC	Public Works and Government
DGMSSC	Director General Materiel		Services Canada
	Systems and Supply Chain	RA	Requisition Authority
DIHRS	Defence Integrated Human	RMA	Repairable Materiel Account
	Resource System	R&O	Repair and Overhaul
D Mar P	Director Maritime Procurement	RMP	Risk Management Plan
DMPP	Director Materiel Policy and	RPC	Repair Priority Code
DMGG	Procedures	RSA	Repair Supply Account
DMSS	Director Maritime Ship Support	SM	Supply Manager
DND	Department of National Defence	SNAPS	Selection Notice and Priority
DQA	Director Quality Assurance		Summary
DSCO	Director Supply Chain	SOW	Statement of Work
E A A	Operations	SUP	Standard Unit Price
FAA	Financial Administration Act	TA	Technical Authority
FMAS	Financial Managerial Accounting System	TVM	Time Value of Money
FMF	Fleet Maintenance Facility	TIES	Technical Investigation
FSR	Field Service Representative		Engineer Studies
		US	United States
FY	Fiscal Year Government Furnished	WO	Work Order
GFOS	Overhaul Spares		
HMCS	Her Majesty's Canadian Ship		
HST	Harmonized Sales Tax		
INCO	Inspection and Checkout		
JIT	Just in Time		
Knet	Knowledge Network		
LCMM	Life Cycle Materiel Manager		

## **Synopsis**

As part of an ongoing effort to improve departmental contract management practices, Chief Review Services (CRS) completed an analysis <sup>1</sup> of 15,000 active contracts to identify contracts that may warrant audit attention. The Close-In Weapon Systems (CIWS) support contracts were two of only four contracts identified. Since the combined value of these two contracts represents less than 1 percent of all service contracts, the CIWS support contract management practices are not representative of departmental contracting practices.

The purpose of the two contracts was to purchase upgrade material worth \$65 million for the CIWS and perform the five-year cyclic repair and overhaul (R&O) with a contract value of \$85 million. The audit was initiated sufficiently early to ensure that any issues raised will benefit the remaining two years of the R&O contract as well as the planning and negotiations for the follow-on contract to be awarded in 2010.

Several areas were noted where improvements could be made in the future management of these contracts. For instance, contract managers will now ensure that better supporting documentation is provided to support profit levels and that more oversight is provided over subcontractor transfer prices. Regarding vendor-held inventory, a recent departmental initiative will significantly strengthen material management practices and will further require all Senior Executives to sign an annual attestation as to their materiel accountabilities.

The Department will monitor progress made in implementing the management action plans and will undertake an audit follow-up if warranted.

<sup>&</sup>lt;sup>1</sup> CRS Risk Analysis of Operations and Maintenance Contracts, April 2007.



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#### Results in Brief

To identify contracts that exhibited high-risk attributes, CRS conducted a risk analysis<sup>2</sup> on 15,000 active contracts with a cumulative value of \$22 billion. The results indicated that the Navy CIWS support contracts were two of the four higher-risk contracts warranting audit attention.

As the value of the two contracts was less than 1 percent of all service contracts, the findings and results from this audit are not representative of all Department of National Defence (DND)/Canadian Forces (CF) contracting practices.

The two seven-year CIWS support contracts consisted of a \$44-million³ R&O contract and a \$53-million material contract. The purpose of these contracts was to procure upgrade material, spare parts and perform the five-year overhaul cycle on 24 CIWS mounts. These two contracts were awarded in June 2003 and April 2004, respectively, and subsequently amended to a combined value of \$148 million to exercise overhaul options and the procurement of spare parts.

#### **Overall Assessment**

- Assurance cannot be provided that adequate risk management and control frameworks were in place to effectively manage the CIWS support contracts.
- The contract did not require the provision of sufficient supporting data in order to ......

 Because payment holdbacks were not used, there was no incentive for the vendor to deliver on time,

Improvements in R&O component and material management are necessary to realize economies and safeguard assets.

## **Findings and Recommendations**

#### **Certification of Payments**

Contract provisions for additional supporting documentation to allow better oversight by DND
contract managers could have reduced costs by \$5.4 million of which
Because the material contract did not specify the progress claim supporting
documentation, there was insufficient detail in subcontract invoices for DND to ensure that intercompany transfer fees between affiliated firms
It is recommended that consideration be given to deferring payments

<sup>&</sup>lt;sup>3</sup> All numbers in this report exclude taxes.



<sup>&</sup>lt;sup>2</sup> CRS Risk Analysis of Operations and Maintenance Contracts, April 2007.

#### **Material Management**

A recent ADM(Mat) initiative will require all Senior Executives to sign an annual attestation for material accountability. The purpose of this initiative, to be fully implemented by December 2009, is to ensure stocktaking is completed as required, and that due diligence is enforced regarding the management of inventory.

#### **R&O Component Management**

Improved DND management of R&O component repair priorities, appropriate maximum repair costs (MRC) and use of in-house resources could defer \$1.3 million of repairs and reduce annual component R&O costs by \$405,000.

It is recommended that the CIWS component R&O efficiency be improved by the appropriate assignment of repair priority codes (RPC), MRCs and optimization of DND maintenance resources.

#### **Vendor Reports**

Measures need to be taken to ensure all
Key contract management information necessary to provide effective oversight of the
work was not defined in the R&O contract.

For the follow-on contract, it is recommended that essential contract management information requirements be identified in specific report formats and that the delivery and quality of key reports be linked to payments.

#### **Basis of Payment**

Reviewed by CRS in accordance with the Access to Information Act (AIA). Information UNCLASSIFIED.

Internal Audit: CIWS Support Contracts	Final – November 2008
It is recommended that the follow-on contract take into consideration	
Risk Management	
A formal DND risk management plan (RMP) for the CIWS support contract did not exist, nor did DND require the vendor to use risk management best practices. Some of the issues identified in this report might have been mitigated with appropriate risk management.	
For the follow-on contract, it is recommended that a DND RMP be developed to develop a comprehensive RMP.	oped and the vendor be
Note: For a more detailed list of CRS recommendations and management	nt response please refer

to Annex A—Management Action Plan.

#### Introduction

#### **Background**

In 2007, CRS conducted a risk analysis to identify higher-risk contracts. Only four contracts exhibited higher-risk attributes warranting a comprehensive audit, two of which were CIWS support contracts. These two contracts—one for material and the other for R&O—provide life cycle support to CIWS mounts (see Figure 1) on three Canadian Navy fleets and the fleet schools.

- Material Contract. A seven-year material contract worth \$53 million was awarded in April 2002 to provide ordnance alteration (ORDALT) kits to upgrade the CIWS mounts. The contract amount was subsequently amended to \$65 million to buy spare parts.
- **R&O Contract.** A seven-year R&O contract worth \$44 million was awarded in June 2003 to perform the five-year overhaul cycle for each CIWS mount and install the ORDALT kits. In September 2004, the R&O contract was increased to \$83 million to exercise two options for upgrade of an additional 16 CIWS mounts. The contracted services also included configuration management and CIWS component R&O.

**Figure 1. The Close-In Weapon System (CIWS).** The CIWS is an anti-missile system mounted on a surface combat ship.

The CIWS support contracts were flagged for audit due to the following risk indicators:

- The relatively high value of the contracts;
- Cost escalation of 30 percent for the material contract;
- A sole-sourced contract award process;
- A time and materiel basis of payment for the R&O contract.

#### **Objective**

The objective of this audit was to assess whether adequate governance, risk and management controls were in place to administer the CIWS support contracts.

#### Scope

- The contract award and management of the current CIWS support contracts;
- The project directive (PD) for the follow-on contract to be awarded in fall 2009; and
- Expenditures totaling \$110 million from April 2002 to February 2008.

The audit of prime/subcontractors was out of scope, as this is an ASC role.

#### Methodology

- Data Analysis—Financial Managerial Accounting System (FMAS)/Canadian Forces Supply System (CFSS)/Defence Integrated Human Resource System (DIHRS);
- Site Visits—End-user Her Majesty's Canadian Ship (HMCS) Regina, HMCS Protector, HMCS Calgary, Fleet Maintenance Facility (FMF) Cape Breton, and National Defence Quality Assurance Region Calgary;
- Review of contract documentation and vendor reports;
- A sample of progress claims (48 progress claims and invoices representing \$83 million—75 percent of expenditures to date); and
- Interviews with key staff in Director Maritime Ship Support (DMSS).

#### Criteria

The audit criteria scorecard is at Annex B.

## **Findings and Recommendations**

## **Certification of Payment**

Additional supporting documentation would allow improved oversight managers on	by DND contract	
•		
<b>Subcontractor Invoices.</b> Because the material contract did not require the vendor to provide supporting documentation, progress claims for some upgrade material lacked sufficient supporting documentation to justify the payments. Twenty percent of the payments sampled worth \$14 million were not supported with subcontractor invoices. <sup>4</sup> Moreover, when subcontractor invoices were	Subcontractor invoices did not include cost details to determine the amount of	
provided, they did not include cost details to determine the amount of Accordingly, we were unable to assess whether	•••••	
<b>Time Verification.</b> The R&O contract included a clause that allowed D verification of the vendor's labour charges. Although the majority of contract are related to contractor labour, the time verification clause was 62 percent (\$29.0 million) of the R&O contract expenditures were for la sample invoices for FY 2006/07 determined that	sts incurred in the R&O s not exercised. Nearly bour. A review of	

<sup>&</sup>lt;sup>4</sup> Charges associated with missing subcontract invoices were represented by exchange rate adjustment documents.

<sup>&</sup>lt;sup>5</sup> PWGSC Supply Manual, Chapter 10, Cost and Profit. <a href="http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre10-chapter10-eng.html">http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre10-chapter10-eng.html</a>.

Internal Audit: CIWS Support Contracts	Final – November 2008
Tax A review of all tax charges for the R&O cont The Canadian	
goods and services that are brought into participating provinces on New Brunswick, Nova Scotia, Newfoundland and Labrador. 6	nly, which include
Foreign Exchange Adjustment. According to the material contra adjustments should be calculated using the rate on a set date each	month.
Recommendations	
•	

Request an audit of the CIWS material subcontracts through Public Works and

<sup>&</sup>lt;sup>6</sup> Canada Revenue Agency <a href="http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/gnrl/hst-tvh/brght/menu-eng.html">http://www.cra-arc.gc.ca/tx/bsnss/tpcs/gst-tps/gnrl/hst-tvh/brght/menu-eng.html</a>.



Government Services Canada (PWGSC). (OPI: ADM(Mat))

#### **Material Management**

Improved DND oversight of vendor-held inventory and recommended buys of spare parts is required to ensure that assets are safeguarded and that value for money is realized.

#### **Safeguarding Assets**

**Vendor Stocktakings.** The R&O contract required the vendor to complete a 100-percent stocktaking every two years for all vendor-held DND material. However,

- The FY 2006/07 stocktaking report—four years after contract award—was the only report available for three vendor-managed contract issue spares (CIS) accounts with a recorded value of \$2.4 million.
- No stocktaking had been completed on two other Advance Accountable Spares (AAS) accounts with a reported value of \$411,000.
- No oversight was provided for nearly \$207,000 of government-furnished equipment spares identified in the material contract to maintain the CIWS test equipment.

**Vendor Adjustments.** A review of stock adjustments of DND material from FY 2002/03 to FY 2007/08 determined that more than 54 percent of vendor adjustment transactions were not approved by the National Defence Quality Assurance Representative (NDQAR)—contrary to DND policy. For example,

•	As shown in Annex C, since FY 2002/03 stock adjustments
	were made on the Repairable Materiel Account (RMA) and the Contractor
	Repair Parts Account (CRPA), respectively.

• Controls over vendor adjustments did improve in FY 2006/07 as the NDQAR supply technician rather than the vendor started entering the adjustments in the CFSS. However, inappropriate use of reason codes and insufficient supporting documentation were found for adjustments totalling \$205,000.8

**Vendor-Held Inventory Accounts.** DND did not have visibility of inventory with a reported value of \$356,000 even though these AAS items had a North Atlantic Treaty Organisation (NATO) Stock Number assigned to them, and hence should have been recorded in a CRPA. For instance, items in the Lay Away Spares AAS account (\$138,000) and the Gun and Ammo Spares AAS account (\$217,000) should be moved to the CRPA.

<sup>&</sup>lt;sup>9</sup> DND Special Instructions for Repair and Overhaul Contractors, A-LM-184-001/JS-001, Chapter 5, para 7.



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<sup>&</sup>lt;sup>7</sup> DND Special Instructions for Repair and Overhaul Contractors, A-LM-184-001/JS-001, Chapter 6, October 2004.

<sup>&</sup>lt;sup>8</sup> There are 31 different CFSS reason codes for holding adjustments of which only 10 require a CF152 Report of Write-off.

From CRPA usage history, items were identified that had over three years of stock in other DND warehouses with a recorded value of \$2.0 million. Instead of the vendor purchasing this material, DND can avoid markups ....... by making these excess spares available to the vendor.

#### **Value for Money**

**Depot Spares.** In 2002, the vendor recommended that certain spare parts be held at the DND depots for the CIWS upgrade, which DND scrubbed down from \$27.3 million to \$14.9 million. As two-thirds of the suggested spare parts were new inventory, DND contract managers could not verify the vendor-recommended buy quantities because there was no usage history for these parts. Therefore, some of the 174 depot line items that cost \$9.4 million had inventory levels that were found to be surplus to requirements for some items and deficient for others.

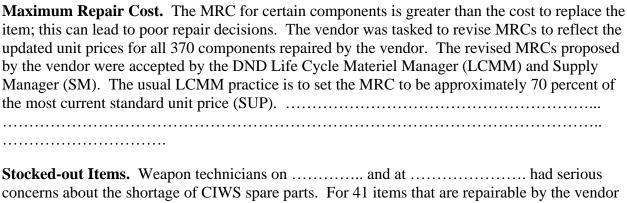
- The usage history showed that 103 line items with a recorded value of \$3.3 million were not issued in FY 2007/08. If no usage of these items continues, the annual carrying cost of \$163,000 for these surplus items will persist.
- Forty issued line items acquired for a total price of \$761,398 also had surplus holdings.

Recommendation.
ensure compliance with vendor-held stocktaking/adjustment policy, and rationalize AAS/CRPA
ensure compliance with vendor-neid stocktaking/adjustment policy, and rationalize AAS/CKI A
holdings. (OPI: ADM(Mat))

#### **R&O Component Management**

Assigning proper DND repairable component RPCs could defer \$1.3 million in repairs. Appropriate MRC settings and using in-house maintenance resources could reduce annual R&O costs by \$405,000.

**Repair Priority Codes Settings.** DND contract managers have assigned high priority RPCs for components that do not need to be repaired right away. For instance, 50 of 370 CIWS components that are automatically sent to the vendor for repair had more than 24 months of stock. In this case, the RPC should be changed to "pending" so that unserviceable components will be sent to the DND supply depot as repairable reserve rather than being repaired by the vendor. The correct setting of the RPC could defer nearly \$1.3 million of component R&O costs over two years.



**DND in-House Repairs.** For some R&O components, there are DND in-house resources that could be used rather than contractor support. Four CIWS components repaired by the vendor were identified that are within the capacity of the FMF to repair. This could reduce R&O component costs by \$60,000 per year.

**Recommendation.** Improve CIWS R&O management by adjusting MRCs, RPCs, CFSS reorder points, and employ in-house resources to reduce R&O component contractor support costs. **(OPI: ADM(Mat))** 

#### **Vendor Reports**

DND did not ensure that the vendor provided complete and relevant reports to support decision making.

**Reporting Obligations.** DMSS contract managers did not ensure that all vendor reporting was compliant with the contract obligations, making it more difficult for DND to manage the contract. The result of a review of the 17 vendor reports listed at Annex D is as follows:

•	
•	Six reports were not retained by DMSS
	and

• The contract did not specify the required content for four reports. Formats for the quarterly logistics management and free-flow R&O reports could have included some key management information necessary for improved decision making.

**Key Information.** Analysis of the vendor reports required in the R&O contract found that key information listed below was not requested to effectively manage the contract. For example:

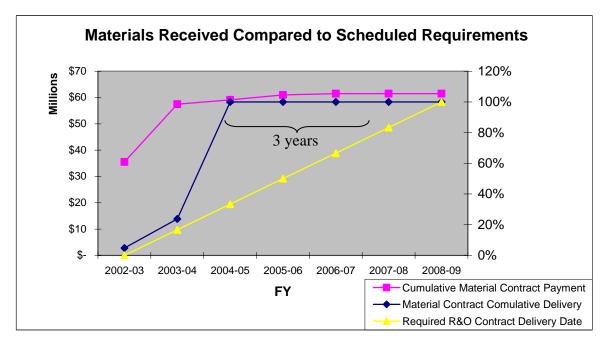
- Although the contract specified a warranty period and warranty rates, there was no requirement for the vendor to maintain a list of warranty claims. This information could reduce the cost of replacing defective material and ensure the use of lower warranty labour rates. To date, there has been no use of the R&O contract's warranty labour rates.
- Schedule comparisons (planned vs. actual) would help assess the vendor performance, predict operational risks and develop work around plans.
- Earned value reporting, a standard project management practice for major tasks, would allow for cost and schedule oversight for the overhaul of each CIWS mount. Each mount overhaul costs \$1.2 million in labour.
- Estimated component repair costs by the vendor would improve DND budget controls and predict future cash flow.

**Recommendation.** In the follow-on contract, develop a specific format for each vendor report, link key reports to payments and improve key contract management information requirements. **(OPI: ADM(Mat))** 

#### **Basis of Payment**

The bases of payments for the CIWS support contracts did not assure value for money.

**Time Value of Money Loss**. Due to the sole-source limitations in contract negotiation, there was no consideration for TVM loss associated with ORDALT kits and spares procured under the material contract to support the R&O contract. A review of the material contract cash flow and scheduled delivery of ORDALT kits determined that some payments were made too early. Due to the relatively small Canadian Navy order and the need for standard ORDALT kit configuration, the material was ordered well before the scheduled R&O work. As shown in Figure 2, some material was delivered over three years early and had an expired warranty by the time the R&O work was performed. The contract payment schedule resulted in a potential TVM loss of \$3.7 million as well as increased DND financial risk.



**Figure 2. Material Delivery Schedule Compared to Scheduled Requirements.** This chart demonstrates that 90 percent of payments of \$44.5 million were made with only 5 percent deliverables received. Accordingly, 71 percent material was delivered early. Cumulative actual expenditures start at \$35.5 million in FY 2002/03 and increases to \$61 million in 2005/06. The line increases slightly to \$61.5 million in the following fiscal year and then stabilizes at that level for the remaining fiscal years until 2008/09. Material received starts at 5 percent in 2002/03; it subsequently increases to 24 percent in the following fiscal year. A sharp increase to 100 percent occurs in FY 2004/05, where it remains. Material required increases slowly and uniformly in each fiscal year from 0 percent in 2002/03 to 100 percent in 2008/09. The data table below shows the cost breakdown by fiscal year:

<sup>&</sup>lt;sup>10</sup> Bank of Canada Rate 2.87 percent, lowest rate in contract duration.



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FY	Cumulative Material Contract Payment	Material Contract Cumulative Delivery	Required R&O Contract Delivery Date
2002-03	\$35,546,432.42	5%	0%
2003-04	\$57,447,970.43	24%	17%
2004-05	\$59,111,218.05	100%	33%
2005-06	\$61,010,895.64	100%	50%
2006-07	\$61,460,204.25	100%	67%
2007-08	\$61,460,204.25	100%	83%
2008-09	\$61,460,204.25	100%	100%

- Normally, only 50 to 65 percent of start-up payments are made prior to steady state production whereas for the CIWS material contract it was 90 percent.
- At contract award, a milestone payment of \$12.4 million for subcontractor manufacturing resources planning, 25 percent of ORDALT kits value, was made 21 months before steady state production. If payments for the subcontractor planning staff had been done throughout the production planning phase a TVM loss of \$559,000 would have been avoided.
- For the \$14.9 million spare parts procurement, a similar early 25 percent milestone payment was made before the 21 month manufacturing planning phase—a TVM loss of \$151,000.

• Nearly 70 percent of ORDALT kits were to be delivered well before the R&O scheduled

	requirements—a further loss of \$3.0 million in TVM.
•	

**R&O** Contract Learning Curve. Learning curve efficiency gains for new work in the R&O contract was not fully recognized. Learning curve models project at least a 20 percent efficiency gain every time production doubles but the contract allowed for only a 1.0 percent efficiency gain.

- Although an efficiency gain of 1 percent was expected, the second batch of CIWS overhauls saw an increase in labour costs of 5.5 percent (excluding rate increases).
- For the new recurring work worth \$7.7 million, learning curve efficiency gains for the three batches of overhauls could have reduced costs by \$2.8 million.

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#### **Holdbacks**

To avoid overpayment and to act as an incentive for the contractor to complete the job, holdbacks are mandatory for contracts with progress payments. 12

• At the time of audit three mounts were behind schedule, one over 11 months late
• A 10-percent holdback should have been applied to each mount overhaul to mitigate the risk of late delivery. As well, the decision not to include a holdback contract clause resulted in a TVM loss of nearly \$406,000. A similar TVM loss could be avoided in the follow-on contract with the use of holdbacks.
<b>Value Engineering Clause.</b> This clause encourages the vendor to suggest cost saving measures for recurring work with a known cost baseline. Although it is typical for Army and Air Force R&O contracts to include a value engineering contract clause to act as an incentive for the vendor to reduce costs, this provision did not exist in the Navy CIWS R&O contract.
Spares Procurement. Since the Canadian Navy
was the first to acquire the CIWS Block 1 B upgrade spares it was difficult to determine the quantity and the price for some of the spare parts.  However, it was
observed that:
<ul> <li>there were no individual item prices in the contract, although pricing information for 46 percent of the line items existed at the time of negotiation in 2002;</li> <li></li></ul>
Recommendation.
(OPI: ADM(Mat))
<sup>12</sup> PWGSC Supply Manual, Chapter 6 -6E.599 <a href="http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre06-chapter06-eng.html">http://www.tpsgc-pwgsc.gc.ca/app-acq/ga-sm/chapitre06-chapter06-eng.html</a> .  TVM loss of \$16,900 per mount for 24 mounts because holdbacks were not used.
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#### **Risk Management**

Risk management was not fully exercised by DND or requested from the vendor.

**Risk Management Planning.** Continuous risk management is prescribed as a best practice for all business activities<sup>15</sup> in DND. However, at the time of the CIWS contract award, a formal RMP was not required. Although the PD for the follow-on CIWS contract includes a brief risk assessment, it is not supported by a formal RMP. For example, a DND RMP should include:

- Five risk thresholds with specific criteria for each threshold;
- A risk ranking method based on the impact and probability of each risk;
- Quantification of risk impact on cost and schedule determined by mitigation cost option analysis; and
- Mitigation strategies that include contingency plans and triggers.

**Other Internal and External Risk.** Although the current and follow-on contract PD included a risk assessment, there were other internal or external risks to the Crown that were not identified. For example, some risks experienced under the current contract were as follows:

•		
•		and
•	Inaccurate forecast of CIWS upgrade inventory requirements.	

<b>Vendor Risk Management</b> . The vendor risk management reports were not requested by the
DMSS contract management team. These vendor reports would have assisted in managing the
CIWS contract risk.

- Risk impact threshold and criteria,
- Risk ranking methodology,
- Risk quantification techniques, and
- Reporting frequency.

**Recommendation.** Develop a DND RMP and require the vendor to improve the management and the reporting of risk in the follow-on contract. **(OPI: ADM(Mat))** 

<sup>&</sup>lt;sup>15</sup> Continuous Risk Management, ADM(Mat) Knet website.



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## **Annex A—Management Action Plan**

#### **CRS** Recommendation

1. Certification of Payment

• .....

#### **Management Action**

**OPI:** ADM(Mat)/DGMEPM/D Mar P **Target Completion Date:** February 2009

#### **CRS** Recommendation

• Request an audit of the CIWS materiel subcontracts through PWGSC.

#### **Management Action**

A formal request will be sent to PWGSC for an audit on CWIS materiel subcontracts.

**OPI:** DGMEPM/D Mar P **Target Completion Date:** December 2008

#### **CRS** Recommendation

2. **Materiel Management.** ensure compliance with vendor-held stocktaking/adjustment policy, and rationalize AAS/CRPA holdings.

#### **Management Action**

During the National Inventory Control Point procurement of spares, the requirement to add credit clauses for surplus spares will be included.

OPI: ADM(Mat); OPI: DGMEPM/DMSS Target Completion Date: February 2010

#### **Management Action**

D Mar P 3-4-3 will notify company of stocktaking requirements and DQA will supervise the stocktaking and make the appropriate stocktaking adjustments.

**OPI:** ADM(Mat); OCI: DGMSSC/DQA **Target Completion Date:** On an ongoing basis.

#### **Management Action**

DQA will perform a review of the continuing effectiveness of the contractor controls through a sample of stocktaking prior to end FY 2008/09.

**OPI:** ADM(Mat) **Target Completion Date:** March 2009

#### **Management Action**

DGMSSC, through DSCO and DQA, is conducting a review of AAS and GFOS with a view to identifying all holdings by end FY 2008/09 and implementing appropriate actions and oversight in FY 2009/10.

**OPI:** ADM(Mat) **Target Completion Date:** March 2010

**ANNEX A** 

#### **CRS** Recommendation

3. **R&O Component Management.** Improve CIWS R&O management by adjusting MRCs, RPCs, CFSS reorder points, and employ in-house resources to reduce R&O component contractor support costs.

#### **Management Action**

The Supply Manager (SM), in collaboration with the Technical Authority (TA), will review the SNAPS yearly and make the appropriate adjustments to the MRCs and review RPCs, as well as CFSS reorder points. The SM/TA will review the CFSS assets to see if there are any excess items that can be used in the R&O facility and employment of in-house resources will be examined for the four R&O components repaired by the vendor.

**OPI:** ADM(Mat)/DGMEPM/DMSS **Target Completion Date:** Yearly review completed by February of each year.

#### **CRS Recommendation**

4. **Vendor Reports.** In the follow-on contract, develop a specific format for each vendor report, link key reports to payments and improve key contract management information requirements.

#### **Management Action**

IAW the appropriate DND standards, a separate Contract Data Requirements List and Data Item Description Statement of Work (SOW) are being developed and will be implemented in the new contract.

OPI: ADM(Mat); OPI: DGMEPM/DMSS Target Completion Date: March 2009

#### **Management Action**

DMPP 4-4-2 in coordination with D Mar P will review the list of reports, validate its requirements, develop templates and will amend the R&O Log SOW if required.

**OPI:** ADM(Mat); OCI: DGMSSC/DMPP **Target Completion Date:** March 2009

CR	S Recommendation
5.	Basis of Payment.
Ma	anagement Action
	ring the negotiations, D Mar P will address the following items:
OP	T: ADM(Mat)/DGMEPM/D Mar P Target Completion Date: February 2009

**ANNEX A** 

#### **CRS** Recommendation

6. **Risk Management.** Develop a DND RMP and require the vendor to improve the management and the reporting of risk in the follow-on contract.

#### **Management Action**

A RMP is under development to support the project and link this to the vendor RMP in order to improve this issue.

**OPI:** ADM(Mat)/DGMEPM/DMSS **Target Completion Date:** September 2009

## Annex B-Audit Criteria

Objective
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1.	Risk	Management
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Criteria
Contracts include provisions designed to minimize risk to the Crown.
Comments
No gradual escalation for dispute resolution. Vendor liability insurance coverage not monitored by CA.
Rating:
Objective
2. Risk Management
Criteria
Risks are recognized, understood, and appropriately managed.
Comments
No RMP, with impact, tolerance thresholds, risk ranking methodology
Rating:
Objective
3. Governance

#### Criteria

Roles and responsibilities of PM, RA, TA, NDQAR, and CA provide effective oversight. The size and training of staff is sufficient.

#### **Comments**

unclear. Staff shortage in NDQAR, RA and TA. Formal risk/project management training shortfall.	
uncical. Stair shortage in 14DQAK, KA and TA. Torniai risk/project management training shortain.	
Rating:	

Controls and risks are balanced and support values and ethics.

Controls in DGMEPM business rules need improvement.

**ANNEX B** 

4. Governance

Criteria
Appropriate monitoring and reporting tools in place to provide timely, accurate, and relevant management information.
Comments
Rating:
Objective
5. Governance
Criteria

#### **Objective**

**Comments** 

6. Management Controls

**Rating:** .....

#### Criteria

Financial management is in accordance with the FAA and Treasury Board Contracting Policy, and DND Regulations.

# Comments Post-verification of missing subcontract invoices. Rating:

**ANNEX B** 

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7. Management Cont	rols
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#### Criteria

Terms of	nrime	contracts flow	down to	sub-contr	actor(s) and	l are certified	hv	prime	contractor
I CIIIIS OI	princ	contracts now	uo wii to	suo comu	actor(s) and	i are cerurica	· U y	princ	community.

Procured assets and loaned material are safeguarded, accounted for, managed efficiently.

Terms of prime contracts now down to sub-contractor(s) and are certified by prime contractor.
Comments
CA does not hold copies of subcontracts. No visibility of inter-company transfers.
Rating:
Objective  8. Management Controls  Criteria

#### **Comments**

Correct RPC could defer repair costs.	
Rating:	

#### **Objective**

#### 9. Management Controls

#### Criteria

The optimum basis of payment has been chosen for the contracts.

#### **Comments**

Early payment for material prior to receipt and need	No holdback provisions for late deliverables.
Rating:	

**ANNEX B** 

Objective
10. Management Controls
Criteria
The Statements of Work for the contracts meet the stated requirements.
Comments
Rating:
Objective
11. Management Controls
Criteria
Appropriate management oversight exists for the contracts and amendments to monitor value for money.
Comments
No learning curve consideration, value engineering clause, or spares buy-back provision.
Rating:

## **Annex C—Vendor-Held Inventory Stock Adjustments**

RMA	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Total	Average
Inventory Value								
Upward Adjustments								
Downward Adjustments								
Absolute Value								
Adj Value vs Inventory Value								
CRPA	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	Total	Average
Inventory Value								
Upward Adjustments								
Downward Adjustments								
Absolute Value								
Adj Value vs Inventory Value								

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## **Annex D—Vendor Reports**

Vendor Report
Quarterly Logistics Management Report  Comment
No obsolete risk criteria,
Vendor Report
2. As Built Log
Comment
Nil
Status:
Vendor Report
3. System Condition Reports
Comment
Nil
Status:
Vendor Report
4. 50 Hour Test Reports
Comment

**Status:** .....

5. INCO Reports  Comment  Nil  Status:	Vendor Report
Vendor Report 6. Quarterly Status Reports Comment Not retained by DND	5. INCO Reports
Vendor Report  6. Quarterly Status Reports  Comment  Not retained by DND	Comment
Vendor Report  6. Quarterly Status Reports  Comment  Not retained by DND	Nil
6. Quarterly Status Reports  Comment  Not retained by DND	Status:
6. Quarterly Status Reports  Comment  Not retained by DND	Vendor Report
Comment  Not retained by DND	
Vendor Report  7. R&O Parts for Repair Report  Comment  Missing some data – DND quantities, MRC, SNAPS item.  Status:  Vendor Report  8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	
Vendor Report 7. R&O Parts for Repair Report Comment Missing some data – DND quantities, MRC, SNAPS item. Status:  Vendor Report 8. Logistics Free Flow (Components) Report Comment No cost estimates of repair,	Not retained by DND
7. R&O Parts for Repair Report  Comment  Missing some data – DND quantities, MRC, SNAPS item.  Status:  Vendor Report  8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	Status:
7. R&O Parts for Repair Report  Comment  Missing some data – DND quantities, MRC, SNAPS item.  Status:  Vendor Report  8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	Vendor Report
Comment  Missing some data – DND quantities, MRC, SNAPS item.  Status:  Vendor Report  8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	
Vendor Report  8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	
Vendor Report  8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	Missing some data – DND quantities, MRC, SNAPS item.
8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	Status:
8. Logistics Free Flow (Components) Report  Comment  No cost estimates of repair,	Vendor Penort
Comment  No cost estimates of repair,	
No cost estimates of repair,	

Vendor Report
9. TIES Taskings Reports
Comment
Nil
Status:
Vendor Report
10. Exchange rate/milestone payment - form DSS-MAS-9411
Comment
Status:
Vendor Report
11. Stocktaking Reports: RMA, RSA, CRPA, GFOS, AAS
Comment
Only 2007 stocktake summary, no stocktake reports for AAS.
Status:
Vendor Report
2. Semi-annual Progress Review Meetings - Minutes
Comment
Majority of action items do not have milestones.
Status:

Vendor Report
13. FSR/MRP Reports
Comment
Format should identify warranty work.
Status:
Vendor Report
14. Progress Review Meeting
Comment
No schedule comparison or earned value.
Status:
Vendor Report
15. Quarterly Progress Reports - Vendor Proposal
Comment
Contains overall R&O earned value, must be requested by DND.
Status:
Vendor Report
16. R&O Component History Record
Comment
Not requested by DND, avg repair cost for SNAPS items.
Status:

Vendor Report	
17. Vendor Risk Management Report	
Comment	
Status:	