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## Risk Analysis of Goods Contracts

April 2007

7050-9-4-6 (CRS)



Canada 

## CAVEAT

This risk assessment was conducted as a special project and was not included in the annual Chief Review Services Work Plan. The analysis conclusions do not have the weight of an audit or a formal evaluation. While sufficient to enable the development of recommendations for consideration by management, the assessments provided and conclusions rendered are not based on the rigorous inquiry or evidence required of an audit or program evaluation. Accordingly, they are not represented as such.

It should also be noted that the analysis is not intended to assess the performance of contractors; rather, it is an internal review of processes and practices within the DND/CF. Contractors have not been interviewed or otherwise asked to provide comment or feedback.



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## LIST OF ACRONYMS

ABE	Automated Buyer Environment	DGMSSC	Director General Materiel Systems and Supply Chain
ADM(IM)	Assistant Deputy Minister (Information Management)	DG Proc Svcs	Director General Procurement Services
ADM(Mat)	Assistant Deputy Minister (Materiel)	DMG Compt	Director Materiel Group Comptrollership
ADM(S&T)	Assistant Deputy Minister (Science and Technology)	DMGPI	Director Materiel Group Program Integrity
ADP	Automated data processing	DMPP	Director Military Program Planning
ASC	Audit Services Canada	DND	Department of National Defence
CMP	Chief Military Personnel	FAA	<i>Financial Administration Act</i>
Compt CMP	Comptroller Chief Military Personnel	FDS	Flight Deck Simulator
CRS	Chief Review Services	FMAS	Financial Managerial Accounting System
DCPS	Director Common Procurement and Supply	IT	Information technology
DGAEPM	Director General Aerospace Equipment Program Management	OCIEP	Office of Critical Infrastructure Protection and Emergency Preparedness
DGEPS	Director General Equipment Program Services	PWGSC	Public Works and Government Services Canada
DGLEPM	Director General Land Equipment Program Management	QAR	Quality assurance representative
DGMEPM	Director General Maritime Equipment Program Management	SOW	Statement of Work
		TA	Technical authority



## RESULTS IN BRIEF

Chief Review Services (CRS) performed a risk analysis of contracts for goods to determine if the Department of National Defence (DND) is managing high-value contracts in a manner that reduces financial risk. A previous CRS report focused on 38 selected service contracts<sup>1</sup> with a value of \$6.2 billion. This CRS report focuses on the identification of higher-risk goods contracts.

With the use of automated filters and criteria, the risk analysis was able to determine from over 12,000 active contracts 38 higher-risk goods contracts (total value \$2.2 billion) that are managed by National Defence Headquarters (NDHQ) staff. Managers of these contracts completed risk assessments that applied 16 risk criteria and allowed CRS to determine which contracts warrant further review. The analyses also led to systemic contract management observations that should be addressed.

### Findings and Recommendations

**High-Risk Goods Contracts.** A ..... contract for the provision of the .....  
..... was identified as warranting a  
comprehensive audit. Two lower-value contracts also merit a review due to cost escalation  
and/or management weaknesses: .....  
.....

CRS will conduct a comprehensive audit of the ..... contract. It is recommended that appropriate Level 1  
management review teams examine the contract management of the .....contracts  
as well as those associated with follow-on contract work.

**Segregation of Duties.** From a sample of 76 contracts, 29 contracts worth \$2.49 billion had the same person authorize contract work to be done and approve the receipt of deliverables. In recent years the downsizing of contract management staff at NDHQ and the increased amount of contracted weapon system support has made the segregation of duties a more challenging requirement. This raises concern regarding controls to ensure payments are only made for work authorized in the scope of the contract.

#### Overall Assessment

The analysis of 380 goods contracts determined that only three contracts had high-risk attributes that merited further audit or review.

Management within NDHQ of high-value contracts could be strengthened with

- Segregation of work authorization and approval of contract deliverables; and
- Verification of deliverables by people with the right skills and authorization, and performed with complete and proper supporting documentation.

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21(1)(a)(b)  
of the AIA  
Advice, etc.

<sup>1</sup> Chief Review Services, *Risk Analysis of DND Service Contracts*, January 2005.



It is recommended that appropriate Level 1 managers ensure that segregation of duties with respect to contract work authorization/approval is in place for the 29 contracts specified in [Annexes G, H, and I](#) and any follow-on obligations.

**Verification of Deliverables.** For 17 contracts worth \$837 million, there is an overreliance on quality assurance representatives (QAR) and vendor reports/meetings to verify the receipt of deliverables. This verification process does not satisfy the payment certification requirements of the *Financial Administration Act* (FAA).

It is recommended that the FAA Section 34 verification procedures be reviewed for 17 contracts specified in [Annexes G, H, and I](#) and any follow-on obligations.

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**Note:** For a more detailed list of CRS recommendations and management response, please refer to [Annex A](#)—Management Action Plan.

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## INTRODUCTION

### Background

In 2003, the Deputy Minister directed CRS to undertake an analysis to determine which DND contracts could be considered higher risk than others and to identify those that warranted future comprehensive audit work. At that time, DND had 12,000 active contracts for goods and services with obligations of almost \$10 billion. CRS developed a methodology to distinguish active contracts that exhibited higher-risk attributes.<sup>2</sup> A previous CRS report applied this methodology on selected service contracts.<sup>3</sup> Although the focus of this report is on selected goods contracts, systemic contract issues identified in this analysis were also observed in those service contracts reported on in 2005.

### Objective

To determine those high-risk goods contracts that warrant further audit or review and ensure management practices are effectively reducing risk exposure.

### Scope

- 380 DND contracts for goods, each greater than \$1 million in value and amounting to \$4.1 billion in total tendered by PWGSC.

### Methodology

- Application of global filters to determine NDHQ-managed goods contracts (38 contracts listed in [Annexes C and D](#)) amounting to \$2.2 billion—a 67 percent coverage of all 232 active goods contracts managed by NDHQ at the time of the analysis.
- Questionnaires on contract management details of each of the 38 contracts were sent to the appropriate Level 1 contract managers (see [Annexes E and F](#)) to assess 16 risk criteria listed in [Annex B](#).
- Follow-up requests for additional documentation and analysis of the Financial Managerial Accounting System (FMAS).
- Review of 38 service contracts previously examined by CRS in 2005 for similar systemic issues found with goods contracts. Twenty-one of these contracts listed at [Annex G](#) had similar issues to those identified in the risk analysis of goods contracts.

See [Annex B](#) for a more detailed description of the methodology.

<sup>2</sup> *Preliminary Risk Analysis of Contracts*, January 2004.

<sup>3</sup> *Risk Analysis of DND Service Contracts*, January 2005.



## FINDINGS AND RECOMMENDATIONS

### High-Risk Goods Contracts

*Three contracts listed at Table 1 amounting to ..... have demonstrated significant cost escalation and/or inadequate management practices and thus merit further audit or review.*

- The detailed assessment of 38 NDHQ-managed goods contracts concluded that ..... contract warrants comprehensive audit due to the combination of high value and high cost escalation. Despite the relatively small contract value of the contracts, ....., the high-risk score or cost escalation of the ..... contracts warrants further review for proper contract management.
- The risk assessment scores of these three contracts were based on CRS automated criteria and risk assessment templates completed by contract managers. The detailed methodology is outlined at [Annex B](#). The cost escalation compares the original contract value to the current value but does not include exercised option years.

Ser	Contract Number	Vendor Name	Current Value (\$M)	% Cost Esc	Risk Score Max 16	Type of Service/Goods	Contract OPI
1	.....	.....	.....	.....	.....	.....	ADM(Mat)/DGAEPM
2	.....	.....	.....	.....	.....	.....	ADM(Mat)/DGAEPM
3	.....	.....	.....	.....	.....	.....	ADM(Mat)/DG Proc Svcs
Total			.....				

**Table 1. Contracts Selected for Comprehensive Audit or Review.** *These are the sampled contracts that scored highest on either the overall assessment or cost escalation and are not already subject to audit.*

#### Recommendations:

- CRS schedule a comprehensive audit on the ..... contract; and
- ADM(Mat) review the ..... contracts and follow-on obligations.





## Segregation of Duties

*Over one-third of the higher-risk contracts reviewed—29 contracts worth \$2.49 billion—had no segregation of duties between the authorization of the goods and services to be procured and the verification that the goods and services had been delivered.*

- If the technical authority (TA) of a contract authorizes the work to be done, the TA should not also approve the work once completed. These duties should be segregated as a control measure to ensure that payments are made only for goods or services authorized in the scope of the contract.
- As portrayed in Table 2, lack of segregation of duties was apparent for over one-third of the higher-risk contracts reviewed. These 29 contracts are identified with Note 1 in [Annexes G, H, and I](#).<sup>4</sup>
- Although it is acknowledged that the contract management staffs have been reduced in size in recent years and a greater portion of weapons system support has been outsourced, there remains a concern for risk exposure to misuse of funds. Four recent CRS contract management audits have confirmed that even with small TA staffs, it is still possible to segregate duties between the requisition authority and the TA.

Criteria	Results
Number of contracts reviewed	76
Value of contracts reviewed (\$M)	\$8,279
Number of contracts with no segregation of duties	29
Percentage of contracts with no segregation of duties	38%
Value of contracts (\$M) with no segregation of duties	\$2,490
Percentage of total value with no segregation of duties	30%

**Table 2. High-Risk Contracts Lacking Segregation of Duties.**

*Of the contracts reviewed, 38 percent had no segregation of duties.*

### Recommendation:

ADM(Mat) and CMP ensure that segregation of duties with respect to contract work authorization and approval are in place for the 29 contracts indicated by Note 1 at [Annexes G, H, and I](#), and the follow-on contracts.

<sup>4</sup> This observation pertains to the sample of 38 goods contracts as well as the 38 service contracts worth \$6.15 billion that were reviewed in the CRS report *Risk Analysis of Service Contracts*, January 2005.



## Verification of Deliverables

*A review of 76 contracts found 17 contracts worth \$823 million where the receipt of the deliverables were not verified by the TA. For these contracts, verification of deliverables relied on quality assurance staff and vendor reports or meetings.*

- Under Section 34 of the FAA, goods and services received must agree with contract specifications—a role of the DND TA.<sup>5</sup> As shown in Table 3, for 11 percent of the contract sample, worth \$638 million, a QAR was the only person verifying the receipt of deliverables—a role that is outside the mandate of the Director Quality Assurance. These contracts are identified with Note 2 in [Annexes G, H and I](#).
- For nine contracts worth \$185 million, the verification of deliverables was based solely on vendor reports or meetings on the progress of the work. These contracts are identified with Note 3 in [Annexes G, H and I](#).<sup>6</sup> The TA needs more independent evidence to verify that the goods or services have been delivered.

Criteria	Results
Number of contracts reviewed	76
Value of contracts reviewed (\$M)	\$8,279
Number of contracts QAR verification	8
Percentage of contracts QAR verification	11%
Value of contracts (\$M) QAR verification	\$638
Percentage of total value QAR verification	8%
Number of contracts vendor report verification	9
Percentage of contracts vendor report verification	12%
Value of contracts (\$M) vendor report verification	\$185
Percentage of total value vendor report verification	2%

**Table 3. Verification of Deliverables by QAR or Vendor Reports.** *Deliverables amounting to \$823 million lack the necessary verification prior to payment.*

### Recommendation:

ADM(Mat) and CMP review the FAA Section 34 verification procedures for the 17 contracts indicated by Notes 2 and 3 in [Annexes G, H and I](#), and the follow-on contracts.

<sup>5</sup> *Life Cycle Materiel Manager Manual* Chapter 7, *PWGSC Supply Manual*, Chapter 3 PWGSC/ADM(Mat) Responsibility Matrix.

<sup>6</sup> This observation also pertains to the sample of 38 goods contracts as well as the 38 service contracts worth \$6.15 billion that were reviewed in the CRS report *Risk Analysis of Service Contracts*, January 2005.



## ANNEX A—MANAGEMENT ACTION PLAN

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 21(1)(a)(b)  
 of the AIA  
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Ser	CRS Recommendation	OPI	Management Action	Target Completion Date
1.	<b>High Risk Goods Contracts.</b> ADM(Mat) review the ..... ..... contracts and follow-on obligations.	COS(Mat) DMGPI  DGMSSC/ DMPP	DMGPI, assisted by DMPP, will undertake a review of the ..... ..... contracts, including any follow-on obligations. The review will include: <ul style="list-style-type: none"> <li>• An update of the data collected by CRS;</li> <li>• Identification of risk drivers;</li> <li>• Further assessment to identify root cause(s); and,</li> <li>• Focus on escalation and management practices, as suggested in the CRS report.</li> </ul> Corrective and/or preventative action will be undertaken, as appropriate. A summary of findings and actions taken will be provided to CRS.	Apr 08
2.	<b>Segregation of Duties.</b> ADM(Mat) and CMP ensure that segregation of duties with respect to contract work authorization and approval are in place for the 29 contracts indicated by Note 1 at <a href="#">Annexes G, H, and I</a> , and the follow-on contracts.	ADM(Mat)/ DMG Compt          CMP	Although the FAA does not require segregation of duties between contract work authorization and approval, ADM(Mat) has taken measures to reduce risk by ensuring both procurement staff and technical authorities be involved in the FAA Section 32 and 34 process. The <i>Procurement Administration Manual (PAM)</i> , Chap 1 Table 1.4.D-2, prescribes the procedures and approval thresholds for task authorizations that arise during a contract. A task raised against a contract must be authorized by procurement staff / managers depending on the value of the task and, if greater than \$3 million, by the Director. For Section 34, the Technical Authority ensures the work is completed and meets the requirement, and the procurement authority ensures the invoice is in accordance with the Terms and Conditions of the contract. The procurement authority would then certify and process the invoice for payment, as outlined in Chapter 5 of the PAM. DMPP will ensure organizations responsible for the 29 contracts highlighted by this Risk Analysis are aware of the procedures and that any corrective action needed is taken.  The CMP annual review will include the contract identified by CRS.	Sep 07          Apr 08



ANNEX A

Ser	CRS Recommendation	OPI	Management Action	Target Completion Date
3.	<b>Verification of Deliverables.</b> ADM(Mat) and CMP review the FAA Sect 34 verification procedures for the 17 contracts indicated by Notes 2 and 3 in <a href="#">Annexes G, H and I</a> , and the follow-on contracts.	ADM(Mat)/ DMGMSSC/ DMPP & DQA  CMP	Systemic issues linked to the practice of relying on Quality Assurance Representatives (QAR) and/or vendor reports to verify the receipt of deliverables will be reviewed from a Policy and Procedures perspective. Should the review conclude changes are required, ADM(Mat) will ensure any modifications to the Policies and Procedures are effectively implemented and communicated. A summary of findings and actions taken will be provided to CRS.  The CMP annual review plan will include the contract identified by CRS	Dec 07  Apr 08



## ANNEX B—CRS CONTRACT RISK ANALYSIS METHODOLOGY

The methodology has three main steps:

1. Apply global filters to the total contract population to identify contracts that are within the scope of this review.
2. Apply automated criteria to reduce the sample population to those contracts most exposed to risk.
3. Request contract managers for both quantitative and qualitative data on the contracts remaining in the sample to identify common weaknesses or specific contracts that warrant further audit/review.

### Global Contract Filters

In order to isolate active, higher-risk goods contracts, the global filters summarized in Table 4 were applied to the PWGSC database of all DND contracts. This reduced the total contract population from 12,168 to 232 contracts.

**Active Contracts.** The 12,168 active contracts were determined by the contract expiry date in the PWGSC Automated Buyer Environment (ABE) database.

**Materiality.** Recent problematic contracts that have come to the attention of senior management have ranged in value from \$76 million to over \$400 million. It was decided that a conservative filter would be a \$1-million threshold. This filter eliminates 11,454 contracts (93 percent) but retains 90 percent of the dollar value of the total contract population.

<b>Filters</b> <b>Metrics</b>	<b>Active Contracts</b>	<b>Materiality &gt;\$1M</b>	<b>Goods Contracts</b>	<b>NDHQ Goods Contracts</b>
<b>No. of Contracts</b>	12,168	714	380	232
<b>Value of Contracts</b>	\$9.8B	\$8.8B	\$4.1B	\$3.3B

**Table 4. High-Risk Global Contract Filters.** *Application of these filters to the total contract population reduced the sample size to 232 contracts for goods, with a total value of \$3.3 billion.*

**Goods Contracts.** This is the primary focus of this analysis. Some goods contracts included services such as repair, overhaul, technical investigation, and engineer studies. Moreover, it was necessary to filter out some service contracts such as information technology (IT) maintenance that were classified as goods contracts in the PWGSC database.



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**NDHQ-Managed Goods Contracts.** Contracts that provide goods for DND establishments across the country, but are managed centrally by NDHQ, have proven to be more difficult to manage. This global filter determined those contracts requisitioned by NDHQ.

### Automated Risk-Based Selection Criteria

To determine which of the 232 contracts in the sample had the highest probability of risk, the nine indicators in Table 5 were applied with weighted scores. The scores were assigned to the indicators described below based on historical PWGSC data.

Materiality		Amendments		Tender Process		Commodity		Method of Payment	
Score	Dollar Value	Score	% Increased Value	Score	Process	Score	Type	Score	Method
1.00	>\$100M	1.0	> 30%	0.5	Sole sourced	1.0	R&O, Prof Svcs, IM/IT maint, High-tech weapons, Sensors, or Simulation	1.00	Advanced Payment
0.75	>\$75M	0.0	<=30%	0.0	Competed			0.75	Multiple Payments
0.20	>\$20M							0.50	Progress Milestone
0.10	>\$10M								
0.00	<=\$10M								
Contract Manager		ASC Audits		Vendors		Excess Payment			
Score	Organization	Score	Adequacy of Cost Records	Score	Risk Level	Score	Condition		
1.0	CMP, ADM(IM), ADM(Mat)/DCPS, ADM(S&T) or OCIEP	1.0	> 10% over claim	1.0	High-risk payment pattern	1.0	Payments exceed contract commitment		

**Table 5. Automated Risk Indicators Scoring for Contracts.** *Total score could range from 0 to 8.5.*



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- **Materiality.** Risks associated with higher-value contracts were assessed to have a greater financial impact. The amended contract value was taken from the PWGSC ABE database.
- **Contract Amendments.** An amendment greater than 30 percent of the contract value was considered significant particularly if the amended value of the contract was greater than the original requisition amount. Excluding option years, the average increase in PWGSC tendered contracts since 2000 has been 17 percent.
- **Tender Process.** Although contracts can still be poorly managed if they were awarded through the competitive process, there is an element of risk if the Department has limited the contract award to a single contractor. On average 23 percent of all contracts tendered by PWGSC are sole-sourced due to exclusive rights, government regulations, extreme urgency, or specific government objectives—43 percent in dollar value.
- **Type of Commodity.** Due to recent contract management concerns by senior managers, certain contracted services and goods such as information system maintenance, medical services, advertising, repair, overhaul, high-technology weapons/sensors, simulation, and fire control/communication systems were scored as higher risk.
- **Method of Payment.** To verify the receipt of goods, the lowest-risk payment type is payment upon delivery—81 percent of all goods contracts. Milestone/progress claims represent 11 percent of contracts and can be more difficult to verify particularly for developmental deliverables. Although only 1 percent of PWGSC tendered contracts employed advance payments, this method is considered the highest risk. However, multiple payments (7.0 percent of DND goods contracts) have been problematic in the past and have been assigned a higher-risk score.
- **Contract Manager.** There are some Level 1 organizations that may be relatively less experienced in managing contracts and have only recently explored contracted services as alternate means of service delivery. Twelve contracts listed at [Annex C](#) were found to include this risk attribute. As well, we rated organizations that initiate common-user contracts as higher risk due to the decentralized nature of contracted services. Higher-risk organizations were considered to be CMP, ADM(IM), ADM(Mat)/DCPS, ADM(S&T) and OCIPPEP.
- **Audit Services Canada Audits.** A database of 131 ASC cost audits was made available to CRS. We were able to identify some vendors that required significant adjustments to claims. Vendors for which ASC commented on the adequacy of cost records were also given a high-risk score—adjustments greater than 10 percent.
- **High-Risk Vendors.** A series of expenditure analysis tests were done to examine the source, frequency, concentration, dispersion, pattern and size of payments/commitments to determine the higher-risk vendors. These 27 computer-assisted audit tests were applied to payments worth \$7.0 billion.





ANNEX B

- **Excess Payment.** The FMAS data analysis identified some contracts where individual commitments were exceeded.

The highest possible risk score was 8.5. Contracts that scored 4.0 or higher were marked as higher risk. This reduced the sample population to 24 contracts for further review. They are listed in [Annex C](#).

## High-Value Goods Contracts

To determine which of the 232 contracts in the sample represented the highest financial risk impact, the contracts were stratified in accordance with the expenditure authority thresholds prescribed by departmental policy (see Table 6). The 17 highlighted contracts were chosen for further review, as they constitute a sample size that is both manageable and represents a substantial percentage (63 percent) of the total value of the population.<sup>7</sup> The expenditure authority thresholds are prescribed as follows:

- Deputy Minister, ADM(IE), ADM(Mat) for miscellaneous requirements or minor construction less than \$5 million;
- Minister of National Defence for equipment less than \$30 million and construction less than \$60 million; and
- Treasury Board approval for equipment greater than \$30 million and construction greater than \$60 million.

Three of these 17 contracts, listed at [Annex D](#), were also in the sample of 24 higher-risk contracts; hence, 14 high-value contracts were added to the sample population for further analysis. The sample of 38 higher-risk/high-value goods contracts had a total value of \$2.2 billion—67 percent coverage of all active goods contracts managed by NDHQ at the time of the analysis.

Range (\$M)	Contracts	Value (\$M)	Percent
\$1M to \$5M	144	\$320	10%
\$5M to \$30M	70	\$877	26%
\$30M to \$60M	5	\$205	6%
\$60M to \$100M	7	\$557	17%
>=\$100M	5	\$1,322	40%
<b>Total</b>	<b>231</b>	<b>\$3,281</b>	<b>100%</b>

**Table 6. Dollar Value of NDHQ-Managed Goods Contracts.** *The 17 contracts that are worth \$30 million or more represent 63 percent of the total value of the active goods contracts managed at NDHQ.*

<sup>7</sup> One entry of the PWGSC database was not a true contract. It was removed, and reduced the filtered population to 231 contracts.





## Risk Assessment Templates

For a rudimentary analysis of the controls pertaining to the 38 contracts in the sample population, the appropriate Level 1 contract managers were asked to complete the two assessment templates presented in [Annexes E](#) and [F](#). The templates provided background information on the contracts and probed for information on 16 risk criteria that, if not met, indicate higher risk:

1. Contract managers workload was reasonable.
2. A competitive process was the basis of the contract award.
3. Less than four contract amendments were necessary.
4. Contract escalation was less than 30 percent—not including option years.
5. The deliverables were within the contract scope of work.
6. The prime contractor performed most of the work.
7. The contracted services or goods were provided to one or two locations.
8. The contracted services or goods were not a new alternate service delivery initiative.
9. Performance incentives related to the base amount of the contract.
10. The contract expenditures were within the ceiling price of the contract.
11. Commitment accounting practices were in place.
12. Terms of payment did not include a cost plus arrangement.
13. There was sufficient supporting documentation to verify the receipt of goods and services.
14. The contract provided for linkage of payments to deliverables.
15. The contract statement of work clearly defined the deliverables.
16. Segregation of duties existed in work authorization and approval processes.

The maximum risk score possible for the risk criteria was 16—one point for each criterion that was not met. The scores for each of the 38 sampled goods contract are presented in [Annexes H](#) and [I](#).



## ANNEX C—TOP 24 HIGHER-RISK GOODS CONTRACTS—AUTOMATED RISK CRITERIA

Ser	Contract Number	Vendor Name	PWGSC Value	Goods Description	Score	OPI
1	.....	.....	.....	.....	...	DG Proc Svcs
2	.....	.....	.....	.....	...	DG Proc Svcs
3	.....	.....	.....	.....	...	DGAEPM
4	.....	.....	.....	.....	...	DG Proc Svcs
5	.....	.....	.....	.....	...	DG Proc Svcs
6	.....	.....	.....	.....	...	DG Proc Svcs
7	.....	.....	.....	.....	...	DG Proc Svcs
8	.....	.....	.....	.....	...	DG Proc Svcs
9	.....	.....	.....	.....	...	DG Proc Svcs
10	.....	.....	.....	.....	...	DGAEPM
11	.....	.....	.....	.....	...	DG Proc Svcs
12	.....	.....	.....	.....	...	DGAEPM
13	.....	.....	.....	.....	...	DG Proc Svcs
14	.....	.....	.....	.....	...	DG Proc Svcs
15	.....	.....	.....	.....	...	DGAEPM
16	.....	.....	.....	.....	...	DGLEPM
17	.....	.....	.....	.....	...	DGLEPM
18	.....	.....	.....	.....	...	DGAEPM
19	.....	.....	.....	.....	...	DG Proc Svcs
20	.....	.....	.....	.....	...	DGAEPM
21	.....	.....	.....	.....	...	DG Proc Svcs
22	.....	.....	.....	.....	...	DG Proc Svcs
23	.....	.....	.....	.....	...	DG Proc Svcs
24	.....	.....	.....	.....	...	DG Proc Svcs
<b>Total</b>			<b>\$406,095,077</b>			

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 21(1)(a)(b)  
 of the AIA  
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The maximum total risk score was 8.5. Note: the three highlighted serials are also high-value contracts listed in [Annex D](#).



## ANNEX D—NDHQ-MANAGED GOODS CONTRACTS GREATER THAN \$30 MILLION

Ser	Contract Number	Vendor Name	PWGSC Value	Goods Description	OPI
1	W8475-00AC01/001/BB	McDonnell Douglas Corporation	\$663,280,970	Aircraft Accessories/Components	DGAEPM
2	W8485-01NA22/001/AIM	General Dynamics Canada Ltd.	\$274,948,927	ADP Software	DGAEPM
3	W8476-01DV05/001/QF	Cubic Defence Applications	\$137,867,414	Armament Training Devices	DGLEPM
4	W8476-98JDA1/002/HK	Mercedes-Benz Canada Inc.	\$134,840,301	Trucks and Truck Tractors, Wheeled	DGLEPM
5	W8485-01NA20/001/QF	Thales Systems Canada	\$111,258,925	Radar Equipment, Except Airborne	DGAEPM
6	W8486-01JRAA/001/PR	Logistik Unicorp Inc.	\$96,000,000	Clothing, Special Purpose	DGLEPM
7	W8476-6-XA14/001/UA	General Motors of Canada	\$92,597,933	Track Wheeled Vehicle Components	DGLEPM
8	W8485-9-F126/001/QF	CMC Electronics Inc.	\$88,885,413	Communications Equipment	DGAEPM
9	W8485-0-NA17/002/QF	General Dynamics Canada Ltd.	\$79,878,536	Underwater Sound Equipment	DGAEPM
10	W8475-01AG01/003/GRK	Bundesamt Für Wehrtechnik	\$70,831,324	Aircraft Accessories/Components	DGAEPM
11	W8475-02AE01/001/BB	McDonnell Douglas Corporation	\$65,784,453	Aircraft Accessories/Components	DGAEPM
12	W8475-7-HG01/001/CSH	AgustaWestland International Ltd.	\$63,046,950	Aircraft, Rotary Wing	DGAEPM
13	W8476-01JDB1/001/HK	General Motors Defence	\$49,670,431	Trucks and Truck Tractors, Wheeled	DGLEPM
14	W8475-02BE01/001/AIM	Lockheed Martin Canada Inc.	\$43,312,328	Communication, Detection Equipment	DGAEPM
15	W8476-3-GFNB/001/UA	Thales Optronics Canada	\$42,651,555	Night Vision Equipment	DGLEPM
16	W8475-01AC02/001/UT	Raytheon Canada Ltd.	\$35,074,694	Launchers, Guided Missile	DGAEPM
17	W8475-03BH01/001/AIM	CAE Inc.	\$33,898,700	Armament Training Devices	DGAEPM
<b>Total</b>			<b>\$2,083,828,854</b>		

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## ANNEX E—CONTRACT SUMMARY TEMPLATE

Ser	Contract Information Requested	Management Response
1	Vendor name	
2	Contract number	
3	Nature/category of service provided	
4	Award: competitive/non-competitive	
5	Duration of vendor continuous history providing this specific service to DND	
6	Principal DND officer acting as technical authority	
7	Original contract value/ceiling	
8	Key option provisions: contract extensions available/contract off-ramps	
9	Original contract term/duration	
10	Current contract value/ceiling	
11	Current contract term/duration	
12	Current total expenditures	



ANNEX E

Ser	Contract Information Requested	Management Response
13	Current total expenditures and commitments	
14	Current forecast total expenditures	
15	Advance payments made/required: details	
16	Percentage of completion of work and percentage of contract ceiling utilized	
17	Number of substantive contract amendments	
18	Key risks facing contract: schedule/cost/performance/other	
19	Key risk mitigation strategies: schedule/cost/performance/other	
20	Key internal management reports capturing information on the contract	
21	Other systems/measures that will provide early warning of problems	



## ANNEX F—DETAILED CONTRACT MANAGEMENT RISK ASSESSMENT

Detailed Contract Management Risk Assessment Template	
Contract Number _____ Vendor Name _____ Technical Authority ( <u>Name, Appointment, Ph #</u> )	
General	Management Response
G1. Within your directorate, how many contract managers/technical authorities are there, and how many contracts are active?	
G2. What are the five most common goods and services for which your organization contracts? (e.g., IT/IM maintenance, repair and overhaul, medical services)	
G3. What overall reporting and early-warning strategies are employed to monitor contracts?	
Specific Contract Questions	Management Response
S1. Does the Statement of Work (SOW) define the deliverables? Please provide a copy of the SOW, or an abbreviated version if the SOW is lengthy.	
S2. Who authorizes the requirement of services or goods within the contract? Who verifies that the services and goods have been rendered? What evidence is provided to the technical authority to determine if goods or services have been received in accordance with the contract? What supporting documentation does the Section 34 signing authority have that the goods and services were received (e.g., packing slips, timesheets, etc.)? Did the technical authority sign all such supporting documents? Please provide an example of supporting documentation.	



ANNEX F

Detailed Contract Management Risk Assessment Template	
Contract Number _____ Vendor Name _____ Technical Authority (Name, Appointment, Ph #) _____	
Specific Contract Questions	Management Response
S3. Who is signing for Section 34 of the FAA to certify that performance and price is in accordance with contract? Please provide name, organization and phone number.	
S4. What was the original contract period and contract value? How many option years were provided for in the contract? What is the current cumulative value of contract amendments and the length of time that the contract has been extended? Please summarize the contract value/date of the contract award and each amendment.	
S5. What are the terms of payment for the contract (e.g., firm price, a unit cost or a target price)? Are payments calculated by cost to contractor, plus a mark-up? Are advance payments made? Please attach the request for authority to make such payments. Any specific mark-up provisions for work by subcontractors?	
S6. Are terms of payment linked to deliverables (reasonableness of work performed compared to statement of work/deliverables in contract)?	
S7. Are there performance incentives/penalties/holdbacks in the contract? Please specify or attach copies of the relative terms of the contract.	
S8. Were the services in this contract recently (within the last three years) performed by DND?	



ANNEX F

Detailed Contract Management Risk Assessment Template	
Contract Number _____ Vendor Name _____ Technical Authority (Name, Appointment, Ph #) _____	
Specific Contract Questions	Management Response
S9. Was this contract sole-sourced? What is the substantiation for sole sourcing? Was an ACAN posted? If so, was the ACAN ever challenged by other potential suppliers? Please provide the documents pertaining to the challenge and our response.	
S10. Are there subcontractors associated with this contract? If so, how many and what portion of the work is being performed by them vis-à-vis the prime contractor?	
S11. Are the services of this contract provided to several DND locations across Canada? How many cost centres (approximate, if necessary) are charged for the use of the goods or services of this contract? Please provide a list of the cost centres.	
S12. How are the expenditures against the contract tracked? FMAS commitments, MASIS, separate spreadsheet, etc.? Please provide a list of the FMAS commitment numbers and a copy of any other expenditure-tracking tools.	





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## ANNEX G—SERVICE CONTRACTS FOUND TO BE HIGHER RISK

Ser	Contract Number	Vendor Name	Current Contract Value \$M	Type of Service	OPI	Notes
1	.....	.....	...	.....	ADM(Mat)/DGMEPM	1
2	.....	.....	...	.....	ADM(Mat)/DGMEPM	1
3	.....	.....	...	.....	ADM(Mat)/DGAEPM	2
4	.....	.....	...	.....	ADM(Mat)/DGAEPM	1
5	.....	.....	...	.....	ADM(Mat)/DGMEPM	2
6	.....	.....	...	.....	ADM(Mat)/DGEPS	1, 3
7	.....	.....	...	.....	ADM(Mat)/DGMEPM	1, 3
8	.....	.....	...	.....	ADM(Mat)/DGLEPM	3
9	.....	.....	...	.....	ADM(Mat)/DGMEPM	3
10	.....	.....	...	.....	ADM(Mat)/DGMEPM	2
11	.....	.....	...	.....	ADM(Mat)/DGLEPM	3
12	.....	.....	...	.....	ADM(Mat)/DG Proc Svcs	1
13	.....	.....	...	.....	ADM(Mat)/DG Proc Svcs	1
14	.....	.....	...	.....	CMP	1, 3
15	.....	.....	...	.....	ADM(Mat)/DGLEPM	1
16	.....	.....	...	.....	ADM(Mat)/DGAEPM	1
17	.....	.....	...	.....	ADM(Mat)/DGAEPM	2
18	.....	.....	...	.....	ADM(Mat)/DGMEPM	1
19	.....	.....	...	.....	ADM(Mat)/DGAEPM	1
20	.....	.....	...	.....	ADM(Mat)/DGAEPM	2
21	.....	.....	...	.....	ADM(Mat)/DGMEPM	3
<b>Total</b>			<b>\$1,714</b>			

The full list of 38 contracts sampled was reported in *Risk Analysis of Service Contracts*.

- Notes:** (1) Segregation of duties concern—technical authority authorizes work to be done and approves the completion of work.  
 (2) Verification of deliverables based on DND QARs.  
 (3) Verification of deliverables based on vendor reports or meetings.



## ANNEX H—14 HIGH-VALUE GOODS CONTRACTS—RISK CRITERIA SCORE

Ser	Contract Number	Vendor Name	Current Value (M)	Esc %	Judgement Score Max 16	Type of Goods	Reason Not Selected for Further Audit	Notes
1	.....	.....	.....	.....	.....	.....	Low escalation, OAG audit	1
2	.....	.....	.....	.....	.....	.....	.....	.....
3	.....	.....	.....	.....	.....	.....	No escalation, avg score	
4	.....	.....	.....	.....	.....	.....	Low escalation, low score	2
5	.....	.....	.....	.....	.....	.....	Low escalation, low score	
6	.....	.....	.....	.....	.....	.....	Low escalation, avg score	1
7	.....	.....	.....	.....	.....	.....	Exchange rate increase	
8	.....	.....	.....	.....	.....	.....	OAG audit	1, 3
9	.....	.....	.....	.....	.....	.....	Ongoing CRS audit	
10	.....	.....	.....	.....	.....	.....	Low escalation, low score	
11	.....	.....	.....	.....	.....	.....	Low escalation, low score	
12	.....	.....	.....	.....	.....	.....	No esc, contract expired	2
13	.....	.....	.....	.....	.....	.....	OAG audit	
14	.....	.....	.....	.....	.....	.....	Low escalation, low score	1
Total Contract Value			\$2,553					

Highlighted contract is selected for further audit.

- Notes:** (1) Segregation of duties concern—technical authority authorizes work to be done and approves the completion of work.  
 (2) Verification of deliverables based on DND QARs.  
 (3) Verification of deliverables based on vendor reports or meetings.



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## ANNEX I—24 HIGHER-RISK GOODS CONTRACTS—RISK CRITERIA SCORE

Ser	Contract Number	Vendor Name	Current Value (M)	Esc %	Judgement Score Max 16	Type of Goods	Reason Not Selected for Further Audit	Notes
1	.....	.....	.....	.....	.....	.....	Foreign military sales	
2	.....	.....	.....	.....	.....	.....	Low esc over 3 years	1
3	.....	.....	.....	.....	.....	.....	ASC audit, no esc	1, 3
4	.....	.....	.....	.....	.....	.....	No esc, expired	1
5	.....	.....	.....	.....	.....	.....	No esc, expired	1
6	.....	.....	.....	.....	.....	.....	No esc, low risk score	1
7	.....	.....	.....	.....	.....	.....	No esc, low risk score	1
8	.....	.....	.....	.....	.....	.....	No esc, low risk score	1
9	.....	.....	.....	.....	.....	.....	No esc, low risk score	1
10	.....	.....	.....	.....	.....	.....	No esc, low risk score	1
11	.....	.....	.....	.....	.....	.....	Low esc over 4 years	
12	.....	.....	.....	.....	.....	.....		1
13	.....	.....	.....	.....	.....	.....	No esc, low risk score	
14	.....	.....	.....	.....	.....	.....	No esc, low risk score	
15	.....	.....	.....	.....	.....	.....	No esc, low risk score	
16	.....	.....	.....	.....	.....	.....	No esc, low risk score	2
17	.....	.....	.....	.....	.....	.....	ASC audit planned	
18	.....	.....	.....	.....	.....	.....	Low esc/risk score	
19	.....	.....	.....	.....	.....	.....		
20	.....	.....	.....	.....	.....	.....	Low esc/risk score	
21	.....	.....	.....	.....	.....	.....	Expired call-up	1
22	.....	.....	.....	.....	.....	.....	Low risk score	
23	.....	.....	.....	.....	.....	.....	Expired call-up	1
24	.....	.....	.....	.....	.....	.....	Expired call-up	1
Total			\$457.7					

Two highlighted contracts are selected for further review.

- Notes:** (1) Segregation of duties concern—technical authority authorizes work to be done and approves the completion of work.  
 (2) Verification of deliverables based on DND Quality Assurance Representatives.  
 (3) Verification of deliverables based on vendor reports or meetings.

