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Mission Transition (MT)—Materiel Deployed in Afghanistan

March 2011

7053-74 (CRS)









Caveat

Some of the analysis of this report relies on prices recorded in the Canadian Forces Supply System (CFSS). Previous Chief Review Services (CRS) audits have highlighted inaccuracies in this pricing. As a result no assertion is made as to the accuracy of the reported values, and caution must be exercised in using these results for management decision making without further confirmation.

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Acronyms and Abbreviations

ADM(Fin CS) Assistant Deputy Minister (Finance and Corporate Services)

ADM(Mat) Assistant Deputy Minister (Materiel)

BY\$ Budget Year Dollar CF Canadian Forces

CANOSCOM Canadian Operational Support Command

CDS Chief of the Defence Staff

CEFCOM Canadian Expeditionary Force Command

CFSM Canadian Forces Supply Manual
CFSS Canadian Forces Supply System

CLS Chief of the Land Staff
CM Centrally Managed
C Prog Chief of Program

CRS Chief Review Services

DDSM Director Defence Strategy Management

DGLEPM Director General Land Equipment Program Management

DGMSSC Director General Materiel Systems and Supply Chain

DMPP Director Materiel Policy and Procedures

DND Department of National Defence

DOS SJS Director of Staff, Strategic Joint Staff

DPE Director Plans Expeditionary

DRDC Defence Research and Development Canada

FY Fiscal Year

GLOC Ground Lines of Communication

IRM Integrated Risk Management

IS Re-identify Stock Code

KAF Kandahar Airfield LM Locally Managed

MIDD Materiel and Infrastructure Distribution Directive

MMIB Mission Materiel and Infrastructure Board

MT Mission Transition (previously Mission Termination)

MT—Materiel Deployed in Afghanistan

Final – March 2011

MTTF Mission Transition Task Force

NATO North Atlantic Treaty Organization

NDHQ National Defence Headquarters

NSN NATO Stock Number

Op Operational

OPI Office of Primary Interest

R&O Repair and Overhaul

RFID Radio Frequency Identification RSAT Rotation Staff Assistance Team

SCA Supply Customer Accounts

SOH Stock on Hand

TFA Task Force Afghanistan

VCDS Vice Chief of the Defence Staff

Synopsis

The Canadian commitment to deployed operations in Afghanistan will end on 31 December 2011. While some of the Canadian Forces (CF) Task Force Afghanistan (TFA) materiel will be disposed of in theatre, most will need to be redeployed to Canada where it will be reconstituted for use in future deployed operations.

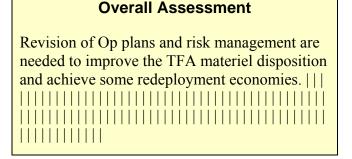
Given the \$1.39-billion recorded value of TFA materiel and the logistic complexity of this mission transition (MT), it was deemed appropriate to initiate an internal audit to provide early input into the MT planning phase. The audit objective was to determine whether governance, risk management and control processes have been adequately considered in the MT planning for TFA materiel.

Although MT planning was proactive with the promulgation of a comprehensive operational (Op) plan one year before the cease of operations, there was some specific direction lacking on 10 percent of the line items in theatre. With respect to redeployment plans, there were significant opportunities to reduce anticipated movement costs. As well, stocktaking plans could be more risk-based with a need to update write-off approval thresholds to reflect historical escalation.

¹ Equipment reconstitution is the refurbishment to the same serviceable condition when originally deployed to TFA.

Results in Brief

The Canadian commitment to deployed operations in Afghanistan will end on 31 December 2011. Given the \$1.39-billion recorded value of TFA materiel and the logistic complexity of this MT, it was deemed appropriate for CRS to initiate an internal audit to provide early input into the MT planning phase.



Throughout the conduct of the audit, the CRS team worked closely with the Canadian Expeditionary Force Command (CEFCOM) and Canadian Operational Support Command (CANOSCOM) operational planning staff to provide early input to Op plans and cost estimates.² A CRS management letter, dated 5 November 2010, highlighted opportunities to reduce anticipated redeployment costs and issues related to future force readiness. In response, an action plan was provided by the Vice Chief of the Defence Staff (VCDS) on 24 November 2010 which has resulted in significant reductions in the redeployment estimates.

Findings and Recommendations

Governance and Planning

Improvements to the MT Op Plan annex "Materiel and Infrastructure Distribution Directive (MIDD)" are needed to provide specific direction for the disposition of TFA materiel. Although most TFA stock on hand (SOH) is centrally managed (CM) by National Defence Headquarters (NDHQ) supply managers, a cost benefit analysis of returning these items had not been done for inventory in theatre worth \$403 million. Due to limited procurement budgets, supply managers have no incentive to dispose of materiel in theatre in cases where returning inventory may not be cost-effective. As well, at the time of the audit, no disposition guidance had been promulgated for materiel worth over \$64 million.

It is recommended that the MIDD continue to be updated to improve materiel disposition guidance.

² CRS provided over 80 detailed comments on the MIDD and other Op plan annexes on 18 August 2010 and 1 September 2010 to CANOSCOM and CEFCOM. As well, redeployment cost estimates were first observed upon on 23 August 2010. The principal CEFCOM operational planning officer concurred with the redeployment observations on 18 October 2010.

Mission Transition Cost Estimates

It is recommended that opportunities to reduce anticipated costs be considered prior to the allocation of redeployment funding.

Stocktaking, Supply Accounts Verification

Overall, there have been relatively few discrepancies found in the semi-annual stocktaking of TFA materiel. The Rotation Staff Assistance Team's (RSAT) risk-based approach to stocktaking achieved 92 percent coverage of inventory value by counting only 6 percent of the line items. With more than 37,000 line items in TFA inventory, with quantities greater than 8.0 million in total, a risk-based approach should be used by TFA units to account for inventory and allow more attention to higher-risk materiel. Random sampling of lower value and non-sensitive materiel could also be considered. In a previous audit this approach was agreed to by the Assistant Deputy Minister (Materiel) (ADM(Mat)). (ADM(Mat)).

A more risk-based approach is recommended for efficient stocktaking to provide assurance on the amount of TFA materiel.

Delegation of Authority

Materiel write-off and condemnation thresholds do not reflect the historical cost escalation of materiel. Considering the effect of inflation, thresholds are set at too low a level. This creates inefficiencies as write-offs and condemnations must be elevated up the chain of command needlessly. Although increases to these thresholds may be too late to benefit the TFA MT, CF bases and wings in Canada and future deployed operations will realize some administrative efficiencies.

It is recommended that materiel write-off and condemnation thresholds be increased to reflect cost escalation with due consideration for the complexity of deployed operations.

Note: For a more detailed list of CRS recommendations and management response, please refer to <u>Annex A</u>—Management Action Plan.

³ The RSAT criterion for higher-risk materiel was a unit price of \$6,000.

⁴ CRS Audit of Inventory Management: Stocktaking, Adjustments & Write-offs, October 2008. The December 2009 target date for risk-based stocktaking policy was delayed due to a new inventory system.

Introduction

Background

The withdrawal of the Canadian Task Force from Afghanistan will be the largest logistical mission for the CF since the Korean War. The MT will cease combat operations and redeploy several thousand CF members and materiel worth over \$1.39 billion⁵ from Afghanistan by 31 December 2011.⁶

Efficient execution of such a complex operation relies on detailed planning. The intent of this audit was to provide early input into the MT planning phase, in particular the MT Op Plan that was issued by CEFCOM in July 2010. The MIDD annex to the Op Plan provides the direction on the TFA material for the remaining year of combat operations. the stocktaking/consolidation at Kandahar Airfield (KAF), the redeployment to Canada, and the reconstitution of the materiel for future force generation.

Throughout the conduct of the audit, the CRS team worked closely with CEFCOM and CANOSCOM operational planning staff to provide early input to Op plans and cost estimates. A CRS management letter, dated 5 November 2010, highlighted opportunities to reduce anticipated redeployment costs and issues related to future force readiness. In response, an action plan was provided by the VCDS on 24 November 2010.

Objective

The audit objective was to determine whether governance, risk management and control processes have been adequately considered in the MT planning for TFA materiel.

Scope

The audit scope included the MT planning for TFA materiel, which includes:

- || helicopters and over 1,100 vehicles, including trailers; and
- Over 1,800 sea containers of materiel and tactical infrastructure.

Materiel associated with classified Joint Task Force operations was excluded.

⁵ TFA holdings as recorded in the CFSS and include major combat systems, spares, ammunition, etc.

⁶ The House of Commons motion, 13 March 2008.

⁷ CRS provided over 80 detailed comments on the MIDD and other Op plan annexes on 18 August 2010 and 1 September 2010 to CANOSCOM and CEFCOM. As well, redeployment cost estimates were first observed upon on 23 August 2010. The principal CEFCOM operational planning officer concurred with the redeployment observations on 18 October 2010.

Methodology

- Review of MT-related policies, procedures, Op plans and cost estimates;
- Interviews with key personnel of CEFCOM, CANOSCOM, Director General Land Equipment Program Management (DGLEPM), Chief of the Land Staff (CLS), Director General Materiel Systems and Supply Chain (DGMSSC), Director of Staff, Strategic Joint Staff (DOS SJS), and Chief of Program (C Prog);
- Attendance at the Mission Materiel and Infrastructure Board (MMIB) and TFA Close-out Working Group meetings; and
- Analysis of CFSS holdings, Fleet Management System data, and in-theatre contract spreadsheets.

Criteria

The audit criteria are outlined in Annex B.

Findings and Recommendations

Governance and Planning

More specific and consistent direction is needed to ensure an efficient and economical disposition of TFA materiel.

Accountability

CEFCOM and CANOSCOM established a MMIB in September 2009 with representation from all branches in NDHQ. The MMIB met at least every two months to coordinate MT logistics issues which resulted in the July 2010 MIDD to provide early MT guidance for the disposition and redeployment of centrally and locally managed TFA materiel and infrastructure. The MIDD annex provides direction that has implications for major combat systems, tactical infrastructure, medical resources and readiness for future operations. For the most part, the MIDD will be carried out by the Mission Transition Task Force (MTTF)—the close-out organization in theatre for the last six months of the MT. As the MIDD is intended to be a living document, CRS staff examined the MIDD and made numerous observations⁸ to improve the Op plan.

Information for Decision Making

Good Practices

- MMIB established in September 2009 to provide MT governance;
- Early release of the MT Op Plan in July 2010 with monthly updates;
- Deployment of Liaison and Planning Team to TFA in July 2010; and
- Closure and relocation of the Theatre Support Element, Camp Mirage, in less than 28 days on very short notice.

CM TFA Materiel. More direction regarding the disposition of low-cost CM items is needed. As most CM items will be returned by the air-sea bridge at a cost of \$59.61 per

cubic foot, it may be more cost beneficial to buy new items rather than ship some old items back to Canada. As portrayed in Table 1, serial 3, there are 2,644 CM line items worth \$402.8 million where supply managers have not yet done a cost benefit analysis of returning this inventory to Canada.

⁸ CRS provided over 80 detailed comments on the MIDD and other Op plans annexes on 18 August 2010 and 1 September 2010.

Serial	MIDD Guidance	Line Items	Quantity	Value (\$M)
1	For disposal	3,468	1,246,691	\$17.5
2	For return (CM spares)	24,115	689,136	\$79
3	For return – non-serialized CM	2,644	218,644	\$402.8
4	For return (serialized CM)	4,489	267,175	\$630.8
5	Ammunition to be determined	307	5,452,642	\$47.7
6	Class X (loan items)	2	18	\$135
7	To be issued	475	1,934	\$1.2
8	Total with guidance	35,500	7,876,240	\$1,314
9	Without guidance	843	5,126	\$63.3

Table 1. Disposition Breakdown of TFA Holdings. Further direction is needed for the 3,487 line items listed in the highlighted serials 3 and 9 with a total recorded value of \$466.1 million.

For example, there are 617 line items⁹ with a unit price less than \$50. A cost-benefit analysis will help determine whether it is more economical to dispose of and replace rather than return these items to Canada.

Materiel Disposition Guidance. The purpose of the MIDD is to provide guidance for the disposition of materiel by class or type. It was observed that there is no clear guidance for many of the TFA inventory items recorded in the CFSS. As portrayed in Table 1, serial 9, 843 line items ¹⁰ with a recorded value of \$63.3 million did not have any disposition guidance. ¹¹

Asset Visibility. The Department of National Defence (DND) intends to use bar-coded labels and radio frequency identification (RFID) tags to provide asset visibility for materiel returning to Canada. However, most of the items in theatre do not have bar codes and only 500 RFID tags were available for over 1,800 sea containers. To ensure effective and efficient accounting for assets, priorities should be set according to the materiel type and value.

Milestones. To ensure the MT schedule is not compromised, the MIDD could include more specific milestone dates for the completion of the following:

- The Materiel Optimization Plan to identify dormant, obsolete and surplus materiel to be returned to Canada on re-supply flights prior to July 2011;
- The identification of sensitive materiel that will require direct flight to Canada rather than the air-sea lines of communication;
- The ammunition drawdown from | | | | | | | | days of stock; and
- The last RSAT in the close-out phase.

⁹ A list of these line items (quantity of 122,062, worth \$2.08 million) was provided to DGLEPM staff on 17 December 2010.

¹⁰ A list of these line items was provided to CEFCOM and CANOSCOM staff on 30 November 2010.

¹¹ Annex MM to Op Plan 10-001 – MIDD – Operation ATHENA, September 2010.

Inconsistent Direction

Materiel Authorized for Donation. For deployed operations, the ADM(Mat) Interim Disposal Guidance Annex F¹² highlights the classes of materiel to be considered for donation or gratuitous transfer. The specific application of this new disposal policy is not vet reflected in the MIDD. For example, locally managed spares can be considered for donation, yet the MIDD states that all spares are to be returned to Canada. Direction in the MIDD is needed regarding the status of 3,976 additional line items, with a recorded value of \$19.3 million that could be considered for donation.

Disposal Cost-Benefit Analysis Template. This template ¹³ was developed for TFA to consider economic and operational factors as to whether an item should return to Canada or not. However, some of these factors were found to be inconsistent to the overall direction:

- The template title implies the item is already surplus while the Op plan Decision Matrix (MIDD Appendix 4, Tab A) specifies that a cost benefit analysis is required solely for assets not declared surplus.
- For low-value items with insufficient quantities to fill a sea container, template users would benefit from knowing the redeployment cost per cubic foot rather than the redeployment cost of a complete sea container.
- Full movement cost estimates per sea container have not been included—only one way versus the round trip shipping costs.

General and Technical Stores. With respect to general and technical stores disposition, all unit-held consumables are to be disposed of. However, warehouse-held general and technical stores consumables with a unit price greater than \$1,000 are to be retained. The MIDD should be more consistent in this matter.

Recommendation

Continue to update the MIDD to improve materiel disposition guidance.

OPI: CANOSCOM

 ¹² Interim Disposal Guidance, version 7, 22 October 2010.
 ¹³ MT Op Plan MIDD, Tab B, Appendix 3, July 2010.

Mission Transition Cost Estimates

To mitigate MT operational risks, the funding request was based on the most likely redeployment scenario. The Department should continue to explore opportunities to reduce anticipated redeployment costs.

Cost Validation

- Close-out training costs in Canada should be funded by the Support to Deployed Operations Account;
- Restoration cost of certain helicopter deployment spares could not be fully substantiated;
- Add-on armour kits are needed for future operations but the numbers were reduced to better reflect the actual requirement; and
- In-theatre supply and maintenance cost for the close-out force was based on a higher than current tempo of operations.

Overstated Cost Estimates

The final MT redeployment cost estimate was overstated by ||||||||| for the following reasons: 14

 Vehicle redeployment estimates were based on an average of four vehicles per aircraft.
 Although a detailed list of vehicles was available for reconstitution planning, ¹⁵ a sophisticated Defence Research and Development Canada (DRDC) planning tool

Good Practice

Cost estimates included nine different redeployment options that ranged from ||||

Tevas

¹⁴ CEFCOM, CANOSCOM, and C Prog staff were notified by e-mail on 25 August 2010 and subsequently interviewed. CRS provided early input to the Assistant Deputy Minister (Finance and Corporate Services) (ADM(Fin CS)) cost validation process in July 2010.

¹⁵ DGLEPM had a detailed list of vehicles in July 2010 to determine equipment reconstitution costs. ¹⁶ Use of the DRDC planner included the loss of airlift capacity associated with air temperature. The sequence of vehicle redeployment had not yet been established.

• CF aircraft were earmarked for the redeployment of personnel to Canada. The full costs of CF airlift were included in the estimate as opposed to only incremental costs—a difference of
Opportunities to Reduce Redeployment Costs
Once more detailed information is available for planning, the Department will be able to provide more accurate redeployment figures. The selected redeployment option moves all materiel by air to a staging area for subsequent sea lift to Canada. There are several variables that will influence the initial redeployment cost estimate. Number of Sea Containers. The initial redeployment estimates included 2,559 sea containers to be returned to Canada. Since then, a significant amount of materiel that may be disposed in theatre has been identified. The current CEFCOM planning figure for
sea containers to be returned to Canada is 1,809. This reduction in sea containers could reduce movement costs by as much as
Number of Vehicles. The redeployment estimates included 1,230 vehicles, trailers, mobile support equipment and helicopters to be returned to Canada. Currently, the planning figure is 1,100, which could reduce movement costs by as much as

Use of Re-supply Flights. From October 2010 to December 2011, there are 84 scheduled re-supply flights to and from Canada that were not considered in determining the costs to repatriate materiel to Canada. Making use of these flights to repatriate materiel to Canada could result in additional savings. For example:

¹⁷ All cost estimates included a 20-percent contingency.

¹⁸ A list of the 3,468 line items (Table 1, serial 1) eligible for disposal was provided by CRS to CEFCOM and CANOSCOM staff on 27 September 2010.

¹⁹ Recent planning figures for vehicles and sea containers from VCDS on 24 November 2010 in response to a 5 November 2010 CRS management letter. CEFCOM operations staff concurrence in October 2010.

- The MIDD requires that surplus and dormant stock be returned to Canada before the cease of combat operations in July 2011. Assuming that 50 percent of a re-supply aircraft load is available for the return of materiel, ²⁰ up to 360 sea containers could be moved via return flights to Canada before the mission close-out phase commences in July 2011. ²¹ This could reduce redeployment costs by | | | | | | | | | | | | |

Recommendation

In conjunction with ADM(Fin CS), allocate redeployment funding with consideration of the opportunities to reduce anticipated costs.

OPI: VCDS

²⁰ From July to September 2010, on average up to 63 percent of the load on the 50 returning re-supply flights carried materiel. The remaining 37 percent of space carried vehicles beyond repair and personnel.

²¹ The audit team provided a list to CEFCOM in June 2010 of items that had no issues for a one-year period. The list represented 24 percent of the SOH in theatre. As the top priority for TFA supply personnel is operational replenishment, there may be insufficient resources to segregate dormant or surplus stock. However, for the most part, returning re-supply flights were being fully utilized at the time of the audit.

Stocktaking, Supply Accounts Verification and Adjustments

Stocktaking is not risk-based and controls over inventory adjustments are not sufficient.

Materiel Distribution Plans

Prior to turning over the TFA materiel for redeployment or disposal, units are expected to complete a 100-percent stocktaking and to investigate discrepancies. Subsequent to an independent verification by a RSAT, units will transfer their supply accounts to the MTTF materiel production lines to be consolidated into a single supply account at KAF in preparation for redeployment. At the time of audit, there were a few instances when returning materiel was not ready in time to be loaded on the CF re-supply flights. Consequently, contracted airlift was not fully utilized. Such delays could cause an extension of the time for which interim staging areas are in place outside of Afghanistan. Accordingly, redeployment costs will increase.

Good Practices

- Stocktaking of TFA materiel at each six-month rotation identified minor discrepancies of less than one percent of the holdings.
- Simulation of the MTTF materiel production line in Canada will improve efficiency during the MT close-out phase.

Stocktaking and Supply Account Verifications

An independent risk-based stocktaking approach has been used by the RSAT to verify TFA inventory. Every six months an RSAT is deployed to provide an independent risk-based confirmation of the status of materiel accountability²² for rotating TFA units. Based on the results of the inventory counts completed by the TFA units and the RSAT team, inventory records appear to be quite accurate.²³

To increase efficiency, the RSAT used a risk-based approach that resulted in coverage of 92 percent of the value by counting only 6 percent of the line items (see Table 2). During combat operations it is difficult for TFA units to conduct a 100-percent verification of accounts with sufficient rigour prior to the relief in place. TFA units should be encouraged to use a risk-based approach for account verifications where more attention is given to higher-risk material while retaining a large coverage of the material value.

²³ RSAT CF152 Review, 27 February to 26 April 2010.

²² RSAT Terms of Reference, J4 Ops CEFCOM, 24 March 2010. RSATs are deployed during the rotation, immediately following the unit supply account verifications.

	Stocktaking Approach			Stocktaking Discrepancies (\$ 000's)		
	Criteria	Coverage in Value	NSNs Counted	Surplus	Deficiency	Absolute
TFA Rotation	• 100% • 37,000 NSNs	\$1.39B	100%	\$4,446	\$3,523	\$7,969
RSAT (risk-based)	Unit price > \$6,000Controlled and mandated items	\$1.29B	6%	\$561	\$2,754	\$3,315
Rotation & RSAT				\$5,007	\$6,277	\$11,284

Table 2. CF152 Report of Write-off. Of the total value of materiel in theatre, the RSAT found less than 0.2 percent additional deficiencies than those reported by the TFA units.

Integrity of Adjustments

Notwithstanding the relatively insignificant discrepancies in Table 2 recorded in CF152 Reports of Write-Off, a large volume of adjustment entries were created to ensure records in the CFSS were consistent with the actual quantities of materiel held. Supply Customer Account (SCA) holdings adjustments were four times their total SOH as portrayed in Table 3. Most adjustments were attributable to ammunition consumption and the installation of inventory on vehicles. However, due to data entry limitations in the CFSS for SCAs, one-third of the adjustments transactions, with a recorded value of \$91.7 million, did not have a reason code to justify the purpose of the adjustment. Furthermore, downward adjustments to "Re-identify Stock Code" ("IS" adjusting entries in Table 3) could not be reconciled to the offsetting upward adjusting entries. The absence of reason codes in the CFSS may entail additional effort for the RSAT and the MTTF to verify adjustments to the holdings.

District M901	# of Transactions	Absolute SOH (000's)	Absolute Value (\$M)	Net Value (\$M)
Total SCAs holding end FY 2009/10		1,706	\$1,082	\$1,082
Adjustment transactions FY 2009/10	16,510	7,132	\$225	-\$51.4
"Blank" adjusting entries FY 2009/10	5,411	1,403	\$91.7	\$81.7
"IS" adjusting entries FY 2009/10	825	7.4	\$8.6	-\$8.6

Table 3. SCAs Adjusting Entries. SCAs holding adjustments were four times their SOH–33 percent had no reason code recorded.

²⁴ The CF Supply Manual, reference 3-3B-002, requires reason codes to be completed as a mandatory field for SCA holding adjustments. However, the surplus transaction screen in the CFSS (MSO 129) does not include the reason code field. This explains why 4,891 upward adjustment transactions worth \$86.7 million had no reason code.

Final – March 2011

Recommendation

Implement a more risk-based stocktaking approach to improve efficiency and provide assurance on the amount of materiel to be repatriated.

OPI: CANOSCOM

Delegation of Authority

Write-off and materiel condemnation thresholds do not reflect historical cost escalation.

The authority to write off²⁵ inventory is delegated to an approving authority within the chain of command responsible for the materiel. Effective delegation thresholds empower decision making and increases organizational efficiency. In spite of the high tempo of supply activity in a theatre of operations, the write-off authorities are the same as for peace-time operations in Canada. A previous CRS audit²⁶ recommended higher write-off thresholds for deployed operations.

Good Practices

- ADM(Mat) disposal cell will be in theatre to authorize and expedite the disposal process.
- Delegated contracting authority is higher for TFA.

Delegation to Write-off Materiel

The current write-off authority thresholds have been in place since at least 1997. Using the DND economic cost escalation model, ²⁷ the equivalent budget year dollar (BY\$) write-off threshold of \$40,000 for a Commanding Officer is \$52,301 as portrayed in Table 4. ²⁸ If the escalated thresholds had been applied to the CF152s Reports of Write-off raised by the RSAT between 27 February and 26 April 2010, the number of stocktaking write-offs that required higher approval could have been reduced by 16 percent.

It is the intention of ADM(Mat) to increase the delegated write-off authority by approximately 500 percent. As the original date of the current write-off thresholds is unknown, a 1972 baseline was used—the last date when delegated procurement authority was established. The historical cost escalation was based on a United States cost-of-living index. A comparison by CRS with the DND historical economic model and the Canadian consumer price index back to 1972 had similar results (see Table 4). Although changes to the write-off thresholds may not be authorized in time for the MT, all units and formations in Canada and future deployed operations should benefit from a more efficient process.

²⁸ Document on Delegation of Authorities for Financial Administration, Annex A, ADM(Fin CS), 1997.

²⁵ DAOD 006-1, Write-Off of Materiel, 26 February 2003.

²⁶ CRS Internal Audit of Support to Deployed Operations, August 2002.

²⁷ Escalation based on historical Defence Service Program rates, except for FY 2010/11 for which a forecasted rate was used; ADM(Fin CS) publications.

Position	1007	on the DND Economic Model from FY 1997/98 to	Escalation Based on the DND Economic Model from 1972 to FY 2010/11 BY\$	
CEFCOM Commander	\$500,000	\$653,758	\$2,556,239	\$2,000,000
CEFCOM Chief of Staff Operations	\$100,000	\$130,752	\$511,248	\$500,000
Contingent Commander	\$100,000	\$130,752	\$511,248	\$500,000
Commanding Officer	\$40,000	\$52,301	\$204,499	\$250,000

Table 4. Current and Escalated Delegation of Authority to Write Off Materiel. Since 1997 current thresholds should have grown by at least 30 percent based on the DND historical escalation rates.

Land Technical Equipment Condemnation for TFA

Similar to write-off delegation, the land technical equipment condemnation authority²⁹ threshold of \$2,000 has also remained static since at least 1989. TFA land technical equipment with a unit price less than \$2,000 has a total recorded value of \$111 million and represents 10 percent of the SOH in theatre. Delays in condemnation authority could result in the repatriation of materiel that is uneconomical to repair.

Condemnation of materiel is a separate process from materiel write-off and does not require a CF152 Report of Write-off. The current policy delegates the authority to condemn land technical equipment to the base, wing or task force maintenance officer in cases when the current replacement value does not exceed \$2,000. Otherwise, the condemnation authority is elevated to the life cycle materiel manager at NDHQ.

To reflect the 64-percent cost escalation since 1989, the threshold should be \$3,287. As the current threshold exists for each CF base and wing in Canada, an escalation adjustment would have efficiency benefits Department-wide.

Recommendation

Increase current delegation of authority for write-off and condemnation thresholds that will align with historical escalation with due consideration for deployed operations. **OPI:** ADM(Mat)

²⁹ C-04-025-002/AG-000 Management Procedures and Guidelines—Condemnation of Land Technical Equipment by Base/Station Land Maintenance Sections and Maintenance Companies, DND, 7 April 1989.

Reconstitution cash flow and misalignment with force structure plans | | | | | | | | | | |

Readiness Planning

	1
Army Reconstitution Cash Flow	
Although reconstitution ³⁰ funds for TFA equipment are sep funding for future high-readiness units, the reconstitution explow	xpenditure approval and cash
 in FY 2010/11 to enable 	over the two subsequent FYs
There are a number of external issues that must be addressed in order to achieve this plan. In particular, there has been a lengthy cost validation and expenditure approval process. • The army was directed in May 2010 not to spend any money on reconstitution until government	Good Practice The TFA Close-Out/ Reconstitution Working Group chaired by C Prog provided a rigorous
 approval was received, which was expected in September or October 2010.³¹ By end February 2011 approval was still outstanding. The proposed army reconstitution cash flow is 	definition of reconstitution to control costs and segregate new requirements for future readiness.
from FY 2011/12 to FY 2013/14. Reconst	titution cash flow for the army

³⁰ Reconstitution funding is the refurbishment cost of equipment that can be associated with usage by TFA. ³¹ National Procurement Oversight Committee, 15 May 2010. CLS requested | | | | | | | | | in reconstitution funds for FY 2010/11.

• Historically, the Support to Deployed Operations Account, designed to reimburse DND for actual costs incurred, has been under-funded by 30 percent or \$1.4 billion over four years. CRS was advised that this shortfall in funding for army equipment maintenance has resulted in | | | | | | | of the vehicles in one of the army formations in Canada to be unserviceable. 32

Force Structure Planning

In February 2010, DOS SJS intended to have C Prog determine the affordability of an
optimum force structure for 2011 onward based on a draft Chief of the Defence Staff
(CDS) directive on CF force structure. ³³ As future readiness planning is an iterative
process, in November 2010 a revised draft CDS force structure was promulgated
The requirement to provide a
breakdown of the C Prog affordability cost estimate for each capability was not specified
by DOS SJS.

The affordability of a high-readiness force structure should include costs of equipment sustainment, and collective training. Should it be necessary to add additional units or subunits to the two Lines of Operations core packages, the detailed costs should be known to determine the affordability. This would enable a flexible approach to force structure planning to build affordable organizations that may be tailored to the operational requirements of a particular scenario.

Recommendation

Ensure that the readiness affordability estimates of a proposed force structure include detailed information to enable more flexible readiness planning.

OPI: DOS SJS

Risk Management

Mission transition plans could be improved by complying with the DND Integrated Risk Management (IRM) guidelines.

The Integrated Risk Management Framework

The Department's IRM guidelines³⁴ include five threshold levels for impact and the probability of occurrence to enable a more specific measure and ranking of risk severity.³⁵

CEFCOM maintains a register of operational risks for the MT. However, it was observed that the assessment and ranking of risks could be improved:

- The Department's five-level threshold of criteria should be used to assess risk impact and probability. Operational and reputation risk threshold criteria are well developed in the DND IRM;
- Only three levels of risk severity were assessed rather than the five levels specified in the DND IRM; and
- The probability of each risk was not considered.

Good Practice

Since September 2009 the MMIB has been meeting at least every two months to identify MT materiel and infrastructure issues.

Further enhancement of the risk register should be considered to quantify cost impact, schedule slippage and operational impact.

Action Items and Risks

The MMIB meets regularly to address MT-related issues that have been recorded in an action items log. Fourteen of the 25 action items³⁶ at the time of the audit could have been treated as longer-term risks and should have been managed in accordance with the IRM guidelines. Examples of these MMIB action items and their associated risk are as follows:

1.	. CF Priority to CF Reconstitution		
	Status: Open		
	CRS Assessment:		

Chief Review Services

³⁴ DND/CF Integrated Risk Management Guidelines, January 2007.

³⁵ The CRS Audit of Chemical, Biological, Radiological and Nuclear (CBRN) Defence Omnibus Project, May 2008 approved more quantitative criteria for the impact and probability threshold levels.

³⁶ MMIB action item log as of 16 November 2010.

	of Non-catalogued Items/Equipment Update us: Open			
	Assessment: Risk that non-catalogued items create significant work for the			
Proc	3. Disposal Authorities/CH-147 Disposal/Write-offs/Declaration of Disposal Process for Non-surplus Status: Open			
CRS risk t	Assessment: Risk that value for money for CH147 assets is not received; hat valuation method used to assess cost-benefit is either too complicated or does not result in value for money.			
Contingenc	y Plans			
infrastructur accordingly.	e MMIB Infrastructure Working Group is examining the issue of permanent e disposal, the risk of unexpected costs should be assessed and managed. The intent is to dispose of all permanent infrastructure "as is." However, the res infrastructure demolition if agreement with a new tenant cannot be			
	e has been little interest in the Canadian-built infrastructure and no formal plans have been developed. MT cost estimates do not include any demolition			
	ch could be as high as			

Recommendation

Improve risk management practices to align with the DND IRM guidelines.

OPI: CANOSCOM/CEFCOM

³⁷ Calculation based on a benchmark of average demolition cost per square foot of infrastructure in Canada (excludes hazardous materiel removal).

Annex A—Management Action Plan

Governance and Planning

CRS Recommendation

1. Continue to update the MIDD to improve materiel disposition guidance.

Management Action

Following the initial management letter from CRS in November 2010, several measures have been taken so that the MIDD can better reflect what actions are to be taken for the materiel held in the TFA district. Recently, there have been 12 significant amendments to four of the MIDD appendices. The ADM(Mat) Disposal Directive has been incorporated in the MIDD—the cornerstone of the MT approval processes for materiel and equipment disposal. More specific direction has been given on 6,757 line items of locally managed (LM)/procured materiel, worth \$21.7 million, of which most will be disposed in theatre. A cost benefit analysis will confirm the Environmental Chiefs of Staff's interest for the small percentage of LM that may be returned to Canada. With respect to CM consumable material, CANOSCOM has initiated efforts to obtain the Equipment Project Managers disposition prior to the MTTF entering theatre in order to reduce the volume of MTTF CF 1303s.³⁸

OPI: CANOSCOM **Target Date:** April 2011

Mission Transition Cost Estimates

CRS Recommendation

2. In conjunction with ADM(Fin CS), allocate redeployment funding with consideration of the opportunities to reduce anticipated costs.

Management Action

With more detailed planning information, the estimates have been reduced by 35.6 percent from the original Close-out, Redeployment and Reconstitution cost estimate submitted to the government in December 2010. Most of the cost avoidance has been due to a reduced number of vehicles and sea containers returning to Canada than originally planned, the use of | | | | when possible, greater use of CF airlift, and optimizing the use of resupply flights.

OPI: VCDS/DDSM **Target Date:** Complete

³⁸ A CF 1303 is a certificate to authorize the disposal of assets by the supply manager.

Annex A

Stocktaking, Supply Accounts Verification and Adjustments

CRS Recommendation

3. Implement a more risk-based stocktaking approach to improve efficiency and provide assurance on the amount of materiel to be repatriated.

Management Action

The RSAT will continue with a risk-based approach; however, the challenge resides in the TFA unit accounts verification performed in theatre prior to the RSAT's independent inspection. The high operational tempo combined with the nature of tasks performed in Kandahar cannot be overlooked and will undoubtedly be reflected over the theatre account holdings. Success will reside in a continuous and rigorous supply discipline that shall be applied by all stakeholders.

OPI: CANOSCOM **Target Date:** May 2011

Delegation of Authority

CRS Recommendation

4. Increase current delegation of authority for write-off and condemnation thresholds that will align with historical escalation with due consideration for deployed operations.

Management Action

Increased write-off thresholds in the delegation of authority for financial administration were calculated and forwarded to ADM(Fin CS) for submission to the Departmental Senior Executive for approval in January 2011.

OPI: ADM(Mat)/DMPP **Target Date:** Closed

Annex A

Readiness Planning

CRS Recommendation

5. Ensure that the readiness affordability estimates of a proposed force structure include detailed information to enable more flexible readiness planning.

Management Action

As requested by DOS SJS, detailed costing of the proposed directive "CF Force Posture July 2011" is required as soon as possible.

OPI: DOS SJS/DPE **Target Date:** Ongoing

Risk Management

CRS Recommendation

6. Improve risk management practices to align with the DND IRM guidelines.

Management Action

CEFCOM's register of operational risks for MT will be reviewed to align with the DND IRM Framework. For upcoming MMIBs, the longer-term issues will be treated as risk with the appropriate assessment of impact and probability of each risk by all working group chairs. CH-147 Chinook disposal plans, infrastructure disposal and materiel cataloguing are examples of such issues to be better defined as risks along with mitigation.

OPI: CANOSCOM/CEFCOM

Target Date: April 2011

Annex B—Audit Criteria

Objective

To determine whether adequate governance, risk management and control processes are considered in the planning for the recovery and reconstitution of materiel deployed in Afghanistan.

Criteria Assessment

Level 1 (Satisfactory); Level 2 (Needs Minor Improvement); Level 3 (Needs Moderate Improvement); Level 4 (Needs Significant Improvement); Level 5 (Unsatisfactory).

Governance

1. **Criteria.** Effective governance is in place to ensure roles and responsibilities are clearly defined, decisions are made in a timely manner, approval thresholds are reasonable and risk-based.

Assessment: Level 3— Certain guidance in the MT Op Plan MIDD annex was			
incomplete or inconsistent with the overall plan. The delegation of authorit	ies for		
write-off and for land technical equipment condemnation does not reflect h	istorical		
cost escalation.			

Risk Management

2. **Criteria.** A formal risk management process is in place.

Assessment: Level 3—Longer-term risks were not adequately identified in a risk register and assessed in accordance with the DND IRM guidelines.

Option Analysis

3. **Criteria**. Sufficient options analysis was conducted with supportable cost assumptions for recovery and reconstitution.

Assessment: Level 3—Redeployment implem	nentation should have opportunities to
reduce anticipated costs.	
(briefed).	

Annex B

Safeguarding of Assets

4. **Criteria**. Accountability, visibility and safeguarding of assets are sufficiently risk-based.

Assessment: Level 3—Approaches to stocktaking and adjustments were not sufficiently risk-based to ensure accountability and efficient repatriation of materiel.