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## Evaluation of Canadian Armed Forces Operations



November 2017

1258-3-007 (ADM(RS))

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## Acronyms and Abbreviations

AAR	After Action Report
ADM(HR-Civ)	Assistant Deputy Minister (Human Resources – Civilian)
ADM(IM)	Assistant Deputy Minister (Information Management)
ADM(Mat)	Assistant Deputy Minister (Materiel)
ADM(Pol)	Assistant Deputy Minister (Policy)
ADM(RS)	Assistant Deputy Minister (Review Services)
AIS	Automatic Identification System
ATF-I	Air Task Force – Iraq
C2	Command and Control
C2IS	Command and Control Information System
C4ISR	Command, Control, Communications, Computer, Intelligence, Surveillance and Reconnaissance
CA	Canadian Army
CAF	Canadian Armed Forces
Canada COM	Canada Command
CANOSCOM	Canadian Operational Support Command
CCA	Commander Canadian Army
CDS	Chief of the Defence Staff
CEFCOM	Canadian Expeditionary Force Command
CFD	Chief of Force Development
CFINTCOM	Canadian Forces Intelligence Command
CJOC	Canadian Joint Operations Command
CJOC HQ	Canadian Joint Operations Command Headquarters
CMP	Chief of Military Personnel
CMSG	Canadian Material Support Group
Comd CJOC	Commander Canadian Joint Operations Command
CONPLAN	Contingency Plan
COS	Chief of Staff
C Prog	Chief of Programme
CRCAF	Commander Royal Canadian Air Force

CRCN	Commander Royal Canadian Navy
CRS	Chief Review Services
DND	Department of National Defence
DOS SJS	Director of Staff, Senior Joint Staff
DRF	Departmental Results Framework
DRO	Disaster Relief Operation
FSE	Future Security Environment
FTE	Full-time Equivalent
GC	Government of Canada
HO	Humanitarian Operation
HQ	Headquarters
ISR	Intelligence, Surveillance and Reconnaissance
JFACC	Joint Force Air Component Commander
JTF	Joint Task Force
JTF-I	Joint Task Force – Iraq
MOSID	Military Occupational Identification
NATO	North Atlantic Treaty Organization
NDHQ	National Defence Headquarters
NORAD	North American Aerospace Defense Command
NZ	New Zealand
O&M	Operations and Maintenance
OFA	Operations Funding Account
OGD	Other Government Department
Op	Operation
OPCOM	Operational Command
OPCON	Operational Control
OPORD	Operation Order
OPI	Office of Primary Interest
OSH	Operational Support Hub
PAA	Program Alignment Architecture
PMR	Performance Measurement Report

RCAF	Royal Canadian Air Force
RCMP	Royal Canadian Mounted Police
RCN	Royal Canadian Navy
RFA	Request for Assistance
RJTF	Regional Joint Task Force
ROTO	Rotation
SAR	Search and Rescue
SJS	Strategic Joint Staff
TB	Treasury Board
TF	Task Force
TO&E	Task Organization and Establishment
UK	United Kingdom
UN	United Nations
US	United States
VCDS	Vice Chief of the Defence Staff

## Executive Summary

This report presents the results of the evaluation of the Canadian Armed Forces' (CAF) Operations (Op) program conducted by Assistant Deputy Minister (Review Services) (ADM(RS)). This evaluation is a component of the Department of National Defence (DND)/CAF Five-Year Evaluation Plan for fiscal years (FY) 2013/14 to 2017/18 in compliance with the Treasury Board (TB) Policy on Evaluation (2009). This policy was rescinded on July 1, 2016 and replaced by the new Policy on Results. Since the Policy on Results only came into effect on July 1, 2016, this evaluation was carried out in accordance with the former Policy on Evaluation. The evaluation examined the relevance and performance of the CAF Ops program for FYs 2011/12 to 2015/16.

### Program Description

#### Relevance

The evaluation determined that there is an ongoing and future need for the CAF to engage in operations in support of Canada, Canadians and Canadian national interests. This includes the CAF acting as the lead element for international, domestic and continental operations, as well as the requirement to maintain the CAF's ability to prepare for and conduct operations up to full combat. The CAF Ops program is aligned with federal government and departmental roles and responsibilities within the *National Defence Act*. The CAF has made a significant contribution to the federal government and departmental priorities of defending Canada, protecting Canadians at home and abroad and making a highly visible and significant contribution to a safer and more secure world.

#### Performance

The CAF Ops program has consistently met operational requirements when assigned to operations ranging from domestic and continental disaster relief and security operations to international combat missions. That said, the Canadian Joint Operations Command Headquarters |||||, the CAF has always been able to execute its operational tasks.

### Overall Assessment

- There is an ongoing need for the CAF Ops program, which is the raison d'être of the CAF. The program is aligned with the roles, responsibilities and priorities of the federal government and the DND/CAF.
- The CAF has been able to meet its operational requirements, demonstrating its effectiveness across the full spectrum of operations ranging from disaster relief to combat missions.
- The CAF |||||  
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- The program is assessed to be operating in an economical manner and is identifying efficiencies to preserve its ability to deliver on operational requirements.

CAF Ops program expenditures have declined over the period of this evaluation since the close-out of combat and training missions in Afghanistan, with the exception of FY 2015/16. Recent increases in spending have been directed towards international operations such as Op IMPACT (in Iraq and Syria), and Op REASSURANCE (in Central and Eastern Europe). In recent evaluation years, the CAF Ops program has operated as a lean organization with reduced CJOC HQ personnel and financial resources driving governance of CAF operations to become more efficient despite a consistently high operational tempo. The CAF continues to demonstrate efficient and economic use of resources in operations. Notable examples include the use of Maritime Coastal Defence Vessels in support of Op CARRIBE (in the Caribbean) and the use of operational support hubs (OSH) in overseas locations.

Looking ahead, |||





**Note:** Please refer to [Annex A—Management Action Plan](#) for the management responses to the ADM(RS) recommendations.

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## 1.0 Introduction

### 1.1 Context for the Evaluation

This report presents the results of the evaluation of the CAF Ops program that ADM(RS) conducted between December 2015 and December 2016 in compliance with the former TB Policy on Evaluation (2009). As per the TB policy, the evaluation examined the relevance and performance of the program over a five-year period, from FY 2011/12 to FY 2015/16. The report may be used to inform future senior management discussions regarding the command and control (C2), development, generation and sustainment of CAF operations.

There has not been a previous evaluation of CAF operations per se; however, there have been previous evaluations of related programs, as follows:

- Chief Review Services (CRS) Evaluation of Functional Responsibilities in Support of Canadian Forces Transformation, December 2006
- CRS Evaluation of Land Force Readiness and Training, March 2011
- CRS Audit of Unforecasted Operational Requirement Process, September 2012
- CRS Evaluation of DND Contributions to Humanitarian Operations, Disaster Relief Operations, and Non-Combatant Evacuation Operations, October 2013
- CRS Evaluation of Naval Forces, December 2013
- CRS Evaluation of Maritime Air Capabilities, June 2014
- CRS Evaluation of Medical Support to Deployed Operations, November 2014
- CRS Evaluation of the DND/CAF Contribution to the National Search and Rescue (SAR) Program, January 2015
- ADM(RS) Evaluation of Land Readiness, November 2016
- ADM(RS) Evaluation of the Information Systems Lifecycle Program, December 2016

This evaluation was supported by CJOC HQ senior staff.

### 1.2 Program Profile

#### 1.2.1 Program Description

The CAF Ops program, except as noted in sub-section 1.3.1 of this report, covers CAF defence operations and Canadian security and safety operations. These operations were the collective responsibility of the former Canada Command (Canada COM), Canadian Expeditionary Force Command (CEFCOM) and Canadian Operational Support Command (CANOSCOM) until October 2012 when they were amalgamated to become CJOC. The merger of the three commands, combined with the Strategic Review, Defense Renewal Action Plan initiatives, and the Primary Reserve Employment Capacity Study, resulted in the reduction of the three previous HQ staffs by approximately 180 Regular Force, Reserve Force and civilian personnel in CJOC HQ.<sup>13</sup>

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<sup>13</sup> Manning positions for the three OPCOM HQ for October 2011 taken from NDHQ-NCR C2/HQ presentation, October 13, 2011. Manning positions for CJOC HQ taken from CJOC J1 Turnover Presentation, May 27, 2015.

Today, CJOC is responsible for conducting domestic, continental and expeditionary defence operations. It is also responsible for providing operational support to Canadian safety and security operations as captured in its mission statement, “Canadian Joint Operations Command prepares for and conducts operations – to defend Canada, to assist in the defence of North America and, as directed, to promote peace and security abroad.”

As the command responsible for CAF operations, CJOC does the following:<sup>14</sup>

- contributes to the strategic understanding of the operating environment and the formulation of strategic direction; and
- conducts assigned operations, from warning to termination, ensuring that the conduct of operations contributes to the achievement of national strategic goals as directed by the Chief of the Defence Staff (CDS).

CJOC is comprised of forces under full command, operational command (OPCOM) and operational control (OPCON).<sup>15</sup> Its operations are supported by and in turn support numerous federal, interagency, provincial, bilateral and multi-lateral partners. Integral CJOC formations and elements are as follows:

- CJOC HQ located in Ottawa, Ontario;
- The Canadian Forces Integrated Command Centre located in Ottawa;
- 1st Canadian Division HQ in Kingston, which was part of the Canadian Army’s (CA) organization until April 1, 2015, and is designated the deployable high readiness HQ for contingency operations;
- Canadian Forces Joint Operational Support Group in Kingston, which is comprised of the following five units:
  - Canadian Forces Joint Signal Regiment in Kingston
  - 1 Engineer Support Unit in Kingston
  - 3 Canadian Support Unit in Montréal
  - 4 Canadian Forces Movements Control Unit in Kingston
  - Canadian Forces Postal Unit in Kingston
- Canadian Material Support Group, comprising the following:
  - Four Canadian Forces Ammunition Depots in Angus, Ontario; Bedford, Nova Scotia; Dundurn, Saskatchewan; and Rocky Point, British Columbia
  - Two Canadian Forces Supply Depots with 7 Canadian Forces Supply Depot in Edmonton, AB and 25 Canadian Forces Supply Depot in Montréal, QC

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<sup>14</sup> CJOC Concept of Operations.

<sup>15</sup> As per Canadian Forces Joint Publication – 3.0 Operations, full command is the military authority and responsibility of a commander to issue orders to subordinates. OPCOM is the authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces and to retain or delegate operational and/or tactical control as may be deemed necessary. OPCON is the authority delegated to a commander to direct forces assigned to them in order to accomplish specific missions or tasks that are usually limited by function, time or location; to deploy units concerned; and to retain or assign tactical control of those units.

- Canadian Forces Warfare Centre in Ottawa, Ontario; and
- Regional Joint Task Forces (RJTF) that provide C2 of domestic operations across Canada, as follows:
  - Joint Task Force (JTF) North, in Yellowknife, Northwest Territories
  - JTF Pacific, in Esquimalt, British Columbia
  - JTF West, located in Edmonton, Alberta
  - JTF Central, located in Toronto, Ontario
  - JTF East, located in Montréal, Québec
  - JTF Atlantic, located in Halifax, Nova Scotia

Additionally, CJOC has the following responsibilities:

- Maritime and Air Component Commands are assigned OPCOM or OPCON to CJOC. The Maritime Component Commander, located in Halifax, NS and the JFACC, based in Winnipeg, MB, are each responsible for planning, coordinating, allocating, tasking and synchronizing maritime and air assets in support of CJOC;
- CAF aeronautical SAR operations are coordinated by CJOC and maritime SAR, led by the Canadian Coast Guard, are supported by the CAF through the coastal Joint Rescue Coordination Centres that are co-located with the RCN's coastal HQ; and
- CJOC has liaison officers assigned to key other government departments (OGD) and to allied militaries and HQ.

### **1.2.2 Program Objectives**

The program objectives, as articulated in the Program Alignment Architecture (PAA) 2013, are as follows:

- delivering military power in combat, security, stability and surveillance operations in response to armed threats, or potential armed aggression, for the purpose of protecting Canadian sovereignty, upholding Canadian values and defending the interests of the GC; and
- providing defence services and contributions to government programs to support delivery of GC safety and security initiatives and encourage recognition and pride in Canada and the Canadian military.

### **1.2.3 Stakeholders**

The principal stakeholders for CAF Operations are Global Affairs Canada and Public Safety Canada. The CAF/DND elements that may be stakeholders or partners, depending on the circumstances, include the Royal Canadian Air Force (RCAF), Royal Canadian Navy (RCN), CA and Canadian Special Operations Forces Command (CANSOFCOM), all of which may operate together in joint training and operations and receive varying degrees of materiel, personnel and financial support from CJOC. Other key partners include the Assistant Deputy Minister (Material) (ADM(Mat)), CMP, Assistant Deputy Minister (Infrastructure and Environment) and Assistant Deputy Minister (Information Management) (ADM(IM)). Allied forces and coalition partners in operations may also be considered stakeholders.

## 1.3 Evaluation Scope

### 1.3.1 Coverage and Responsibilities

This evaluation covers FYs 2011/12 to 2015/16. The Department's Program Activity Architecture (2009) was substantially revised for FY 2014/15 in a new PAA (2013), with a resultant loss of coherence between program activities and cost capturing under the 2009 Program Activity Architecture and the ability to compare post-FY 2014/15 with previous years' data. However, this evaluation has focused on activities under PAA (2013) as follows:

- PAA: 1.0 Defence Combat and Support Operations (to include the following):
  - 1.1 Domestic and Continental Operations:
    - 1.1.1 Operations to Defend Canada against Armed Threats
    - 1.1.2 Ongoing Defence, Security and Sovereignty of Canada Operations
    - 1.1.4 Ongoing Continental Defence Operations in Cooperation with the United States (US)
  - 1.2 International Combat Operations:
    - 1.2.1 International Operations over Extended Periods
    - 1.2.2 International Crisis and Surge Response Operations
    - 1.2.3 Ongoing Defence Operations through Standing NATO Commitments
  - 1.3 Ongoing Centralized Operations and Operational Enablement:
    - 1.3.1 Overarching Command and Control of Domestic and International Operations
    - 1.3.3 Operational Support Services
- PAA 2.0 Defence Services and Contributions to Government (to include the following):
  - 2.1 Disaster Relief and Human Operations:
    - 2.1.1 Domestic and Continental Assistance and Response Operations
  - 2.2 Defence Services for Canadian Safety and Security:
    - 2.2.1 Counter Terrorism, Terrorism Event Responses and Consequence Management Operations
    - 2.2.2 Assistance to Major Canadian Event Operations
    - 2.2.5. Defence Services to OGDs and Agencies.

The evaluation focused on the pillars of operations (Domestic and Continental Defence Operations, International Combat Operations, Domestic and Continental Assistance and Response Operations and Defence Services for Canadian Safety and Security) that are the responsibility of CJOC. Contributions from other CAF organizations were explored only as they directly impacted the operational pillars.

The evaluation excluded operations conducted by Canadian Forces Special Operations Forces Command, ongoing Defence Intelligence Operations, International Humanitarian Assistance and Disaster Response Operations, Military Diplomacy and Global Engagement, the National SAR

Program, SAR Ops, the Canadian Safety and Security Program and Military Heritage and Outreach.

### 1.3.2 Resources

Costs and personnel attributed to CAF operations in the PAA (2013) are described in Table 2.

	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
<b>1.0, 2.0 CAF Ops (Source: PAA)</b>	\$1,548,353,451	\$1,058,999,026	\$737,077,535	\$512,500,000	\$613,482,780
<b>CAF Ops Expenditure % of Change</b>	N/A	-31.60%	-30.40%	-30.47%	19.70%
<b>Operational Command(s) Expenditures on CAF Ops</b>	\$75,599,532	\$53,816,282	\$172,327,015	\$125,845,702	\$156,386,839
<b>CMP Expenditures on Ops (Regular Force Pay)</b>	\$566,737,550	\$560,308,784	\$318,754,418	\$346,498,964	\$409,529,156
<b>Other Contributions to CAF Ops</b>	\$353,581,180	\$315,230,784	\$245,996,149	\$42,671,537	\$50,483,344
<b>Total CAF Ops Expenditures</b>	\$2,544,271,713	\$1,988,354,876	\$1,474,155,117	\$1,027,516,203	\$1,229,882,119
<b>Total Command<sup>16</sup> Personnel (Regular Force, Reserves, Civilian)</b>	2,887	2,800	2,552	2,626	2,741
<b>Total Command HQ Regular Force Personnel</b>	468	460	433	408	407
<b>Total Command HQ Civilian Personnel</b>	85	75	85	83	78

**Table 2. PAA 1.0 and 2.0 Expenditures under PAA (2013) and Personnel.**<sup>17</sup> This table summarizes the resources used for CAF operations from FY 2010/11 to FY 2015/16.

<sup>16</sup> All personnel data from the Human Resources Management System. Command refers to Canada COM, CEFCOM and CANOSCOM in FY 2011/12 and to CJOC in other years.

<sup>17</sup> Includes elements detailed in Sub-section 1.3 Evaluation Scope.

### 1.3.3 Issues and Questions

In accordance with the Treasury Board Secretariat Directive on Results (2016),<sup>18</sup> the evaluation report addresses the evaluation issues related to relevance and performance. An evaluation matrix listing each of the evaluation questions, with associated indicators and data sources, is provided at [Annex D](#). The methodology used to gather evidence in support of the evaluation questions can be found at [Annex B](#).

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<sup>18</sup> Treasury Board Secretariat. Directive on Results, July 1, 2016. <https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=31306>. Last consulted on July 4, 2016.

## 2.0 Findings and Recommendations

### 2.1 Relevance—Continued Need

#### Is there a continued need for CAF operations?

To determine whether CAF operations continue to address a demonstrable need, the following two key indicators were used:

- evidence of past engagement of CAF operations (total number of operational deployments and cumulative number of personnel deployed, by type of actual operational employment of the CAF over the past five years); and
- requirement for CAF operations in the future security environment (FSE).

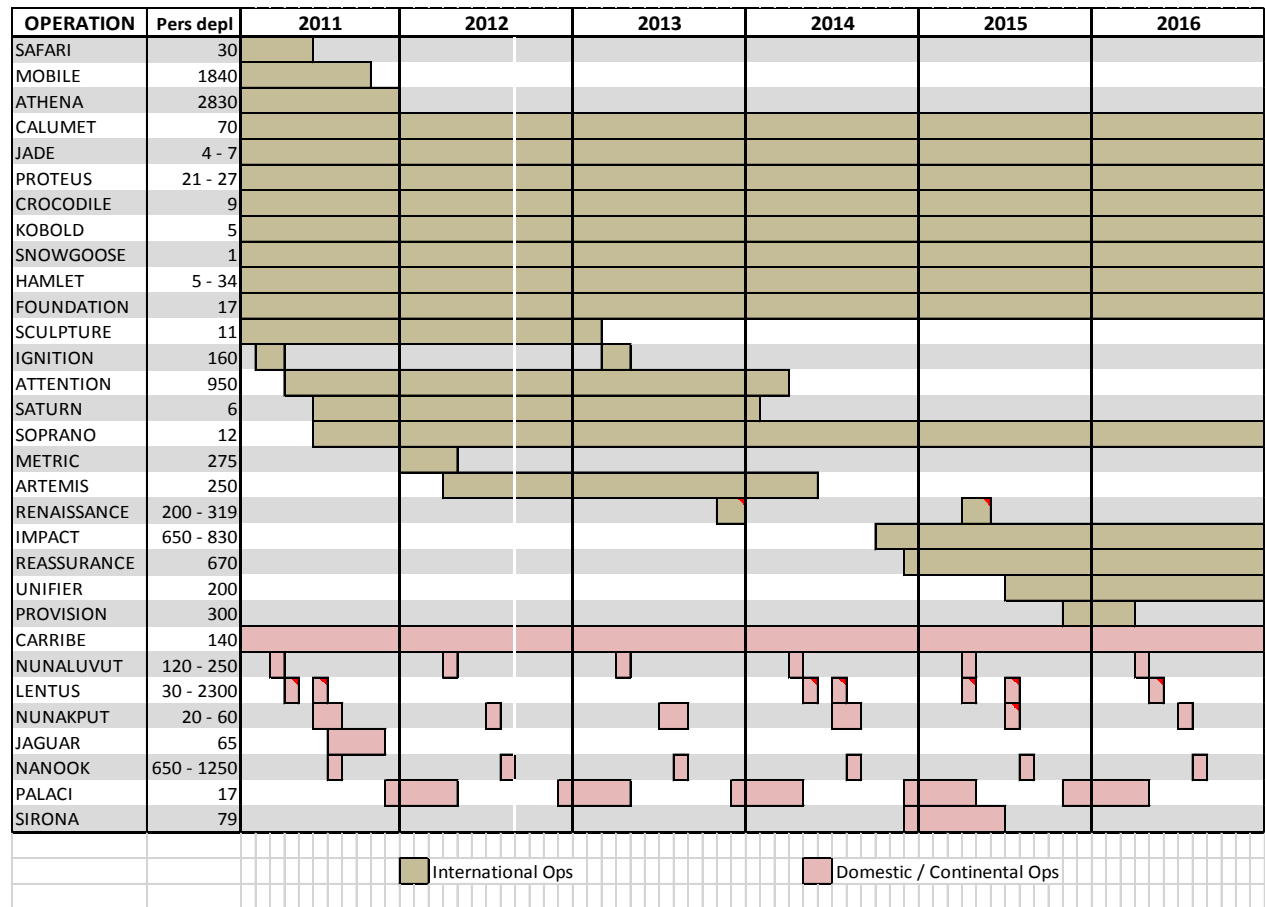
The following key findings are based on evidence from document reviews and key informant interviews with CJOC staff.

**Key Finding 1:** There is an ongoing and future need for CAF operations in support of Canada, Canadians and Canadian national interests.

#### **Indicator: Evidence of past engagement of operations (number and type of actual operational employments of the CAF over the past five years)**

During the evaluation period, the CAF was actively engaged in a wide range of defence and security activities, including domestic, continental and international operations as summarized in Figure 1. Presently, in addition to many long-standing international peace and security operations, the CAF is deployed to Central and Eastern Europe as part of NATO assurance measures (Op REASSURANCE) and the multinational efforts to build the professionalism and capacity of the Ukrainian Armed Forces (Op UNIFIER). The CAF is also actively engaged in Iraq and Syria under Op IMPACT. Domestically, the CAF recently deployed air assets in response to the outbreak of wildfires in and around Fort McMurray, Alberta.





**Figure 1. Principal CAF Operations 2011 to 2016.**<sup>19</sup> This figure presents key CAF operations and the numbers of personnel deployed to those operations between 2011 and 2016.

### Indicator: Requirement for CAF operations in the FSE

Current DND assessments indicate that the FSE will remain characterized by the activities of non-state actors and asymmetric threats of organizations

The complex FSE will challenge CAF capabilities and elements. Working with close allies and coalition partners, the CAF will continue to anticipate and prepare to meet future defence and security challenges.

<sup>19</sup> From DND Current Operations. <http://www.forces.gc.ca/en/operations.page>. Last consulted on October 31, 2016. The column for personnel deployed reflects the number of personnel deployed at any given time to that particular operation. Manning for certain operations, such as Op IMPACT and Op PROTEUS were subject to change over the evaluation period. Op LENTUS numbers are always dependent on the nature and size of the disaster relief mission assigned. Op CARIBBE is not a full-time operation, and the number for personnel deployed is only indicative of the number that may be deployed at any time (e.g., four Maritime Coastal Defence Vessels, with two in the Caribbean and two in the Eastern Pacific).

Interviews with CJOC senior staff underscored and confirmed the relevance of operations for international, domestic and continental operations, as well as the requirement to maintain the CAF's ability to prepare for and conduct operations. Accordingly, there will be an ongoing need for CAF operations.

## 2.2 Relevance—Alignment with Federal Roles and Responsibilities

### Does the CAF Ops program align with federal roles and responsibilities and with those of the DND/CAF?

This section examines the extent to which the generation and delivery of operations by the CAF align with departmental and federal roles and responsibilities. The findings in this section are based on documents reviewed and key informant interviews, including with senior CJOC staff.

The indicators used in the assessment of alignment with federal roles and responsibilities are as follows:

- alignment with government acts, legislation and strategic direction; and
- the extent to which operations undertaken by the CAF are the responsibility of OGDs, other levels of government or the private sector.

**Key Finding 2:** There is alignment between the generation and delivery of CAF operations with departmental and federal roles and responsibilities.

### Indicator: Alignment with government acts, legislation and strategic direction

Defence is a core federal government responsibility as articulated in the *Constitution Act*,<sup>20</sup> which defines and outlines the responsibilities and duties of the federal government, including the DND/CAF. Furthermore, the *National Defence Act*, Article 17, establishes DND and the CAF as separate entities, operating within an integrated National Defence Headquarters (NDHQ), as they pursue their primary responsibility of providing defence for Canada and Canadians. Moreover, the Act assigns the Minister as the authority in charge of all matters relating to defence, including the Land, Naval and Air Services of Canada. The *National Defence Act* and its subordinate documents, including memoranda of understanding and GC policies and directives also permit the CAF to provide support to other federal departments and agencies and provincial authorities. Such support includes assistance to law enforcement agencies and disaster relief operations (DRO).

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<sup>20</sup> 1867 *Constitution Act*, Section 91.



## 2.3 Relevance—Alignment with Government Priorities

### Does the CAF Ops program align with federal government priorities and the Defence Strategic Outcomes?

This section examines the extent to which the CAF Ops program is consistent with federal government priorities and DND strategic objectives. The findings in this section are based on evidence from documents reviewed, which include Federal Budget Plans (2011-2015), Speeches from the Throne, the *Canada First* Defence Strategy and Reports on Plans and Priorities.

The following indicators were used to make this determination:

- alignment with or inclusion of CAF operations in stated government priorities; and
- alignment with or inclusion of CAF operations in DND/CAF priorities or strategic outcomes.

**Key Finding 4:** The generation and delivery of CAF operations is consistent with federal responsibilities.

#### **Indicator: Alignment with or inclusion of CAF operations in stated government priorities**

The 2013 Speech from the Throne pledged the Government to renew Canadian defence priorities. It stipulated, “now and in the future, Canada’s Armed Forces will defend Canada and protect our borders; maintain sovereignty over our Northern lands and waters; fight alongside our allies to defend our interests; and respond to emergencies within Canada and around the world”.<sup>22</sup>

The 2015 Speech from the Throne pledged the Government to launch an open and transparent process to review existing defence capabilities and to invest in building a leaner, more agile and better-equipped military.<sup>23</sup> More recently, the Government pledged to “ensure the CAF is equipped to protect Canadians and contribute to international peace and security, including peacekeeping.”<sup>24</sup>

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<sup>22</sup> Speech from the Throne to Open the Second Session of the Forty First Parliament of Canada (2013). <http://www.lap.parl.gc.ca/ParlInfo/Documents/ThroneSpeech/41-2-e.html>. Last consulted on October 4, 2016.

<sup>23</sup> Speech from the Throne to Open the First Session of the Forty-second Parliament of Canada (2015). <http://speech.gc.ca/en/content/making-real-change-happen>. Last consulted on October 4, 2016.

<sup>24</sup> Budget 2016: Growing the Middle Class. <http://www.budget.gc.ca/2016/docs/plan/budget2016-en.pdf>. Last consulted on October 4, 2016.

## Indicator: Alignment with or inclusion of CAF operations in DND/CAF priorities or strategic outcomes

**Key Finding 5:** CAF operations are aligned with DND/CAF priorities and strategic outcomes.

The document review clearly indicates that the delivery of CAF operations is directly aligned with the DND/CAF priority of “Ensuring Operational Excellence Both at Home and Abroad” and that it is in accordance with the CDS Force Readiness and Posture direction. The CAF Ops program, which deploys combat-ready forces, provides direct support to GC missions and only deploys to operations as directed or authorized by the Government.<sup>25</sup> The program continues to deliver responsive, combat-capable forces that are effective across the spectrum of conflict, from peacekeeping and nation-building to war fighting.<sup>26</sup> Therefore, it is deemed to be a high priority for the DND/CAF.

The CAF Ops program also aligns to the DND/CAF priority of “Reconstituting and Aligning the CAF Post-Afghanistan”.<sup>27</sup> Directed alignment over the evaluation period included disengaging from the Afghanistan combat mission, implementing the training mission and reconstituting personnel and equipment.

Finally, the Report on Plans and Priorities for the Department (FYs 2011/12 to 2013/14) placed specific emphasis on remaining a flexible, agile, affordable and resilient military that is capable of meeting the needs of Canadians. The CAF aligns to this priority through a broad range of operations conducted domestically, continentally and internationally as directed by Government. This includes conducting maritime, land and air surveillance of Canadian territories; providing support to continental, NATO and United Nations (UN)-led missions; and supporting the Government’s reconstruction efforts in Afghanistan.

### 2.4 Performance—Achievement of Expected Outcomes (Effectiveness)

This section presents the assessment of the effectiveness of the CAF Ops program. To make this assessment, the evaluation examined the ability of the program to achieve the following outcomes:<sup>28</sup>

- Immediate Outcomes:
  - The CAF conducts operations (domestic and continental, international combat, ongoing centralized operations and operational enablement, DROs and HOs), and

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<sup>25</sup> *Canada First Defence Strategy* missions were: (1) Conduct daily domestic and continental operations, including in the Arctic and through NORAD; (2) support a major event in Canada, such as the 2010 Olympics; (3) respond to a major terrorist attack; (4) support civilian authorities during a crisis in Canada such as a natural disaster; (5) lead and/or conduct a major international operation for an extended period; and (6) deploy forces in response to crisis elsewhere in the world for shorter periods.

<sup>26</sup> DND Report on Plans and Priorities 2011-12. Government of Canada Outcome Areas. <http://www.tbs-sct.gc.ca/rpp/2011-2012/inst/dnd/dnd02-eng.asp#sec2b-b>. Last consulted on June 14, 2016.

<sup>27</sup> DND. Departmental Performance Report 2012-13.

<sup>28</sup> The immediate outcomes focus on the effective planning and conduct of CAF missions. The intermediate outcome focuses on the achievement of each mission’s operational objectives and effects.



budget and task force (TF) size (e.g., \$2 million and 400 personnel). With clear direction, how quickly the operational planning progresses is also dependent on the size and complexity of the mission, involvement of OGDs, linkages with allied or coalition forces in international operations and the timely exchange of information between those staffs. CJOC maintains extensive liaison with allied operational commands, Canadian OGDs and provincial and regional emergency services authorities to facilitate the exchange of information. However, NDHQ and CJOC staffs have been challenged

Documentary evidence and key informant interviews indicated that CJOC and former CEFCOM staff capacity<sup>30</sup> to plan and execute operations An example of the unrelenting operational tempo is illustrated during the period from fall 2010 to fall 2011, which included the following:

- planning and establishing Op MOBILE, the CAF’s contribution to the NATO mission in Libya, which included a frigate and six CF-18 fighters;
- re-tasking the frigate assigned to coalition counter-terrorism operations in the Arabian Sea to NATO for Op MOBILE;
- planning and executing the mission transition in Afghanistan from a major combat operation in Kandahar to a training mission in Kabul that also included the redeployment of thousands of tons of equipment and materiel back to Canada;
- a new (evolving) peacekeeping mission in the very volatile South Sudan;
- SAR support to the Jamaican Defence Force; and
- contributing six CF-18s to NATO’s air surveillance and interception mission to Iceland (Op IGNITION).

In March 2011, CEFCOM HQ sought staff augmentation from CANOSCOM and Canada COM. The latter was too busy at that time with its own domestic and continental operations activities to support CEFCOM.<sup>31</sup>

Since 2010, the planning and command of operations has become more challenging as a result of the following factors:

- In October 2012, the three separate OPCOM HQ, CEFCOM, Canada COM and CANOSCOM were amalgamated to become CJOC as part of the DND/CAF effort to reduce NDHQ and other Ottawa HQ staffs. Staff reductions were further driven by the Federal Deficit Reduction Action Plan, which saw a reduction of civilian personnel in the Public Service, and the Primary Reserve Employment Capacity Study, which led to a

<sup>30</sup> Staff capacity here refers to having the required number of personnel with the required training and experience to perform assigned tasks in the time required to meet operational requirements.

<sup>31</sup> CEFCOM email to Canada COM, March 2, 2011, stated that CEFCOM sought two Canadian Forces Staff College-qualified operational planners stating, “as we surge for all the ongoing planning for Libya and the rest of emerging issues in Africa and Middle East while not compromising Op ATHENA, MTTF [Mission Transition Task Force] and Op ATTENTION, which are really demanding all by themselves.” Canada COM did not have the capacity to supply the planners at that time because of its own limited staff and domestic and continental operations activities.

reduction in the number of full-time (Class B) Reservists that could be employed in support of the Regular Force. As can be seen in Table 3, the three HQ went from a total of 797 manning positions in October 2011 to a total of 608 positions in CJOC HQ in May 2015.

- The reduction in staff positions were further exacerbated by the number of positions that have not been manned. CJOC data for Table 3 also reported positions in the HQ manned in May 2015 were 407 of 455 (89 percent) Regular Force, 27 of 33 (82 percent) Reserve Force and 83 of 120 (69 percent) civilians. The Regular Force shortages ||| that had personnel shortages.
- Additional tasks assigned to CJOC, particularly, responsibility for the CAF Joint Readiness and Training program and joint capability development, provision of operational support to CAF operations, and provision of material warehousing and distribution support across the CAF.<sup>32</sup>
- New operational demands, including |||
- While the CAF is no longer conducting a large combat operation in Afghanistan, the number of medium-sized missions, such as those in Iraq, Poland and the Ukraine, has increased during the period, with an increased demand on CJOC staff to support the missions and exercise effective C2 over them.

HQ Positions	Canada COM	CEFCOM	CANOSCOM	Total Manning of Three OPCOM HQ in October 2011	Total CJOC HQ Manning in May 2015	% change of combined (OPCOM HQs and CJOC HQ)
Regular Force	118	188	236	542	455	-16%
Reserve Force (permanent positions)	15	40	25	80	33	-59%
Civilian	30	46	99	175	120	-31%
<b>Total</b>	163	274	360	797	608	-24%

**Table 3. Reduction in Operational HQs Manning Positions.**<sup>33</sup> This table lists the number of personnel positions per operational HQ in October 2011 and their reduction following amalgamation into CJOC in May 2015.

<sup>32</sup> CJOC Presentation, “United in Purpose.” February 2016.

<sup>33</sup> Manning positions for the three OPCOM HQ for October 2011, taken from NDHQ-NCR C2/HQ presentation, October 13, 2011. Manning positions for CJOC HQ, taken from CJOC J1 Turnover Presentation, May 27, 2015.





**ADM(RS) Recommendation**

2. It is recommended that Comd CJOC work with VCDS, CMP and Assistant Deputy Minister (Human Resources – Civilian) (ADM(HR-Civ)) to address manning priorities and personnel shortages.

**OPI:** Comd CJOC

**OCI:** VCDS, CMP, ADM(HR-Civ)

**Indicator: CAF successfully prepares for operations**

**Key Finding 8:** A lack of coordination on deployment of ATF-I and JTF-I led to a duplication of personnel resources and unnecessary constraints on other Op IMPACT manning requirements.

Mission Task Organizations and Establishments (TO&E) were created during the operational planning cycle of each mission based on the GC direction that established the maximum number of personnel authorized for each operation. Missions were then successfully manned based on those TO&Es; however, there were instances when an evolving mission undermined optimum mission organization, manning and training. Examples included the Mission Transition Task Force in Afghanistan, which closed out the combat mission in Kandahar (Op ATHENA) and transitioned to the training mission in Kabul (Op ATTENTION), the Canadian contribution to the training mission in Afghanistan. The requirements for the Canadian contribution to the training mission in Afghanistan evolved as the focus of the NATO Training Mission – Afghanistan evolved, resulting in Op ATTENTION TF members being regularly reorganized and assigned new responsibilities in different geographic locations after they arrived in theatre.<sup>36</sup> This made it difficult for the CAF to establish the TO&Es and assign personnel to the TFs that were optimally suited and trained for their employment once deployed.

However, another issue was raised during key informant interviews regarding the deployment of the ATF-I and JTF-I HQ to Op IMPACT. A robust ATF-I HQ was rapidly deployed to support the CAF air component of Op IMPACT prior to the deployment of the JTF-I HQ. Key informants opined that a single integrated joint HQ is all that would be required for effective C2 of Op IMPACT, and it would facilitate rationalization and reduction of the separate HQ's staffs in order to free up manning, within the mission's manning cap, for other higher priority Op IMPACT manning requirements. This situation has been an issue since early in the operation; however, it is not yet resolved as discussions continue regarding which HQ should be eliminated.

Notwithstanding those and other operational challenges, the CAF has, as much as possible, adopted new TO&Es, updated training for mission rotations and acquired new equipment/capabilities as operations have evolved.

<sup>36</sup> Op ATTENTION. <http://www.forces.gc.ca/en/operations-abroad-current/op-attention.page>. Last consulted on October 6, 2016. Also, Op ATTENTION, Canadian Contribution to the Training Mission in Afghanistan ROTO [Rotation] 2 Post Operations Report – Phase 5, July 2, 2013.

||||| to support RCN units deployed to NATO and coalition maritime surveillance and counterterrorism operations.<sup>37</sup>

**ADM(RS) Recommendation**

3. It is recommended that Comd CJOC rationalize the current Op IMPACT ATF and JTF HQs and establish the necessary direction to better coordinate future CJOC and JFACC operations planning.

**OPI:** Comd CJOC

**OCI:** JFACC

**Indicator: CAF successfully deploys to operations**

**Key Finding 9:** The CAF has successfully deployed to operations, while overcoming a variety of unique challenges of certain operations.

The CAF employs both military and commercial air assets and commercial sealift to deploy personnel, equipment and materiel to operations. As reflected in a briefing to the COS CJOC, non-forecasted requirements for CAF airlift in many of the major international operations, ||||| pressures on CAF airlift.<sup>38</sup> Airlift shortages have been addressed by using commercial air assets for personnel transport and sealift for equipment and materiel.

The first deployments of a CAF TF to large, complex coalition operations may encounter issues with the initial deployment and setup of operations. It was reported that compressed timelines for deployment of Op UNIFIER, the CAF training mission in the Ukraine, challenged the Theatre Activation Teams. However, set up for the mission was successfully completed in time for the initial deployment of personnel.<sup>39</sup> In other instances, however, as noted in RCAF Corrective and Preventative Action Plan documents,<sup>40</sup> there were many technical and materiel issues to be resolved during the first rotation, ROTO 0, of ATF-I to Op IMPACT.

Follow-on deployments to an established mission are normally conducted with a minimum impact on the continuity of the operations, with a smooth turnover between TF personnel. In one

<sup>37</sup> The RCN unit assigned to the maritime component of Op REASSURANCE, the CAF mission in support of NATO's assurance and deterrence measures promoting security and stability in Central and Eastern Europe, and naval units assigned to Combined Task Force 150, conducting counterterrorism and maritime security operations across the Red Sea, the Gulf of Aden, the Gulf of Oman and the Indian Ocean |||||

<sup>38</sup> CJOC. Briefing note for COS CJOC, CJOC Yearly Flying Rate Pressures FY 2014/15, June 3, 2014.

<sup>39</sup> CJOC. Briefing note for Comd CJOC and 3 Canadian Support Unit, After Action Report Theatre Opening Op UNIFIER, November 12, 2015.

<sup>40</sup> Annex A to Air Task Force Iraq Standard Operating Procedures, dated December 1, 2014.

rare instance, this was effectively undertaken by the crew of HMCS *St. Johns*, who replaced the crew of HMCS *Toronto* that was already deployed to the Persian Gulf for Op ARTEMIS.<sup>41</sup>

**Indicator: CAF successfully supports/ sustains operations**

**Key Finding 10:** The CAF overcame a variety of challenges to successfully support and sustain both domestic and international operations with initiatives such as Operational Support Hubs (OSH).

The CAF has effectively leveraged support from allied and coalition militaries and host nations (countries where the CAF is deployed). However, there have been, and continue to be, instances of foreign visa requirements and customs clearances, in host nations, such as Iraq and South Sudan, that have impeded movement of both personnel and important mission support materiel. |  
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|<sup>42</sup> The CAF continues its efforts to mitigate such issues by enhancing CAF defence attaché representation in the region.

In recent years, the CAF has also improved its ability to support and sustain operations with the establishment of OSHs in several strategic locations. The OSHs primarily support major CAF international operations, such as Op IMPACT, Op UNIFIER and Op ARTEMIS.<sup>43</sup> Currently, there are OSHs established in Germany and Kuwait that are supporting CAF operations. A third OSH has been established in Jamaica, to be activated when required, and there is ongoing planning to establish an OSH in Africa and one in Southeast Asia.

While the CAF has managed to meet operational sustainment requirements, it has been challenged by a shortage of personnel |  
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| has been managed to date and is being addressed by Force Generators with CMP.

As well, as highlighted in key informant interviews, Operations Reports and previous ADM(RS) evaluation and audit reports, the Force Generators (RCN, CA and RCAF) have been challenged at times |  
|  
|  
| to support and sustain operations. In certain cases, the lack of required equipment or systems has given rise to urgent operational requests to procure or lease the required equipment.<sup>44</sup>

<sup>41</sup> Op ARTEMIS HMCS *Toronto* ROTO 3 End of Tour Report, February 10, 2014.

<sup>42</sup> Ibid.

<sup>43</sup> CJOC Directive for the Establishment of Operational Support Hubs, May 2013, Version 1.3.

<sup>44</sup> Examples of urgent operational requests include |  
| and, more recently, equipment to support the |  
| For additional details, see the CRS Audit of Unforecasted Operational Requirements Process, September 2012.



As discussed in the CAF Standing Operations Order for Domestic Operations, in operations such as Op LENTUS and Op SABOT,<sup>47</sup> the CAF and OGDs employ liaison staff in one another’s HQs or deployed elements to relay communications over their own radio or information systems, as necessary, to mitigate these issues.

There is also extensive cooperation and information sharing between Canadian and US defence and security organizations, including NORAD and a similar but less formal collaborative effort for Maritime Domain Awareness. In the latter case, both commercial and military information sources are employed to identify, track and, as necessary, intercept and monitor vessels or contacts of interest that may pose threats to Canadian or US defence and security.

The CAF shares information bilaterally with allied nations,

<sup>48</sup>

In the maritime environment, RCN ships and Sea King helicopters have been provided “mission fit” C4ISR enhancements when deployed to operations such as Op CARIBBE, the US-led counter-narcotics operation, Op REASSURANCE as part of NATO Standing Maritime Group-1 and Op ARTEMIS in support of Coalition Task Force 150 in the Arabian Sea. These mission fits have included equipment to facilitate communications with partner nations, unmanned air vehicles to complement capabilities of the frigate’s Sea King helicopter and link equipment for the Sea King helicopter to enhance its ability to share tactical data with the frigates.

implementing mutually agreeable terms of reference or a final operating protocol. This analysis is also supported by the Office of the Auditor General Report on Information Technology Shared Services (Fall 2015).”

<sup>47</sup> Op SABOT is the CAF support to the Royal Canadian Mounted Police (RCMP) marijuana eradication program.

<sup>48</sup> DND. Annex A to ATF-I Standard Operating Procedures 05, December 13, 2014. Corrective and Preventative Action Plan: ATFI-15-025, dated April 19, 2015, ATFI-15-021, dated April 24, 2015 and ATFI-15-024, dated April 24, 2015.

### ADM(RS) Recommendation

4. It is recommended that the CAF continue to develop a robust, deployable C2IS capability  
||||| to enhance interoperability with OGDs.

**OPI:** ADM(IM)

**OCIs:** VCDS, Chief of Force Development (CFD), Comd CJOC, Commander Royal Canadian Navy (CRCN), Commander Canadian Army (CCA), Commander Royal Canadian Air Force (CRCAF), Canadian Forces Intelligence Command (CFINTCOM), ADM(Mat)

**Indicator: CAF successfully redeploys from operations**

**Key Finding 13:** The CAF has successfully redeployed from operations.

The CAF successfully redeployed<sup>49</sup> personnel and major equipment, including helicopters, tanks, light armoured vehicles, ammunition and a multitude of materiel following the termination of Op ATHENA in Kandahar in 2011 and again on a smaller scale upon termination of Op ATTENTION in Kabul in 2014. These were land-centric operations; however, similar redeployments of CF-18 fighter aircraft were successfully executed upon completion of Op MOBILE, the CAF air operation in Libya, in October 2011 and more recently in the spring 2016 from Op IMPACT, the CAF contribution to the coalition fighting DAESH in Iraq. Forces deployed in Canada on DROs and HOs were redeployed to their units in a phased process when the operational criteria were met or upon completion of operations such as Op NANOOK in Canada's North and Canadian sovereignty patrols.

### 2.4.2 Immediate Outcome – CAF provides defence services for Canadian safety and security (DROs, HOs)

The following indicators were used to assess achievement of this immediate outcome:

- The CAF established liaison with federal, provincial/territorial and local civilian authorities;
- CONPLANs have been established for major emergencies and contingencies;
- The CAF provided timely responses to RFAs; and
- The CAF provided requested military support of OGDs' / civil authorities' operations.

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<sup>49</sup> Operations are conducted in phases including planning, preparation, deployment, employment and redeployment. Redeployment is the return of personnel and equipment from operations to the normal locations of their respective units and bases.

**Indicator: The CAF established liaison with federal, provincial/territorial and local civilian authorities**

**Key Finding 14:** CAF liaison with OGDs and civilian agencies has enhanced CAF responsiveness and effectiveness in domestic operations.

As directed in the CJOC Standing Operations Order for Domestic Operations, the CAF maintains strong relationships and liaison with the full range of federal OGDs and agencies.

In Ottawa, CJOC has permanently established liaison officers assigned to Public Safety Canada and the RCMP.<sup>50</sup> Outside of Ottawa, CJOC's RJTF HQs are responsible for establishing and maintaining relationships with their regional federal, provincial, territorial and local agencies. These include their respective Emergency Management Organizations, emergency services (law enforcement, fire services and health services), Public Safety Regional Offices and Transportation Safety Boards.<sup>51</sup> As well, CJOC conducts an annual conference each spring with federal departments, stakeholders and RJTF staff. This conference reviews the CAF support available to the provinces and territories to assist with floods, fires and other contingencies, as well as the RFA procedures for CAF assistance. Collaboration with OGDs is also a fundamental element of the CAF's annual Op NANOOK, in which the CAF trains to respond to a wide range of contingencies in Canada's North within a whole-of-government framework.<sup>52</sup>

Still, while liaison with the federal departments and agencies is well developed, particularly in Ottawa, it is more challenging for RJTFs to establish and maintain the links for which they are responsible, given the size of their areas of responsibility, such as Alberta to Manitoba, and given the lack of CAF representation in remote regions. That said, as situations develop in their regions, the RJTFs work closely with their provincial, territorial and local authorities to be well positioned to support any RFA that they may receive. Both key informant interviews and AARs for domestic operations indicated that the CAF relationships at all levels of government have contributed to the CAF's preparation and ability to respond rapidly and effectively to the full range of domestic operations.

**Indicator: CONPLANs have been established for major emergencies and contingencies**

**Key Finding 15:** CONPLANs have been established and updated to support a timely CAF response to major contingencies.

The CAF has CONPLANs in place to deal with a variety of scenarios, ranging from disaster relief and humanitarian aid to international counter-terrorism. The CONPLANs provide the basis for rapid CAF operational planning and response to those contingencies. New CONPLANs may be developed, as required, based on the evolving strategic situation and operational environment.

<sup>50</sup> CJOC presentation, "J3 Operations Update," September 2015.

<sup>51</sup> CJOC presentation, "Introduction to CJOC," March 24, 2015.

<sup>52</sup> See Op NANOOK. <http://www.forces.gc.ca/en/operations-canada-north-america-recurring/op-nanook.page>. Last consulted on June 24, 2016.

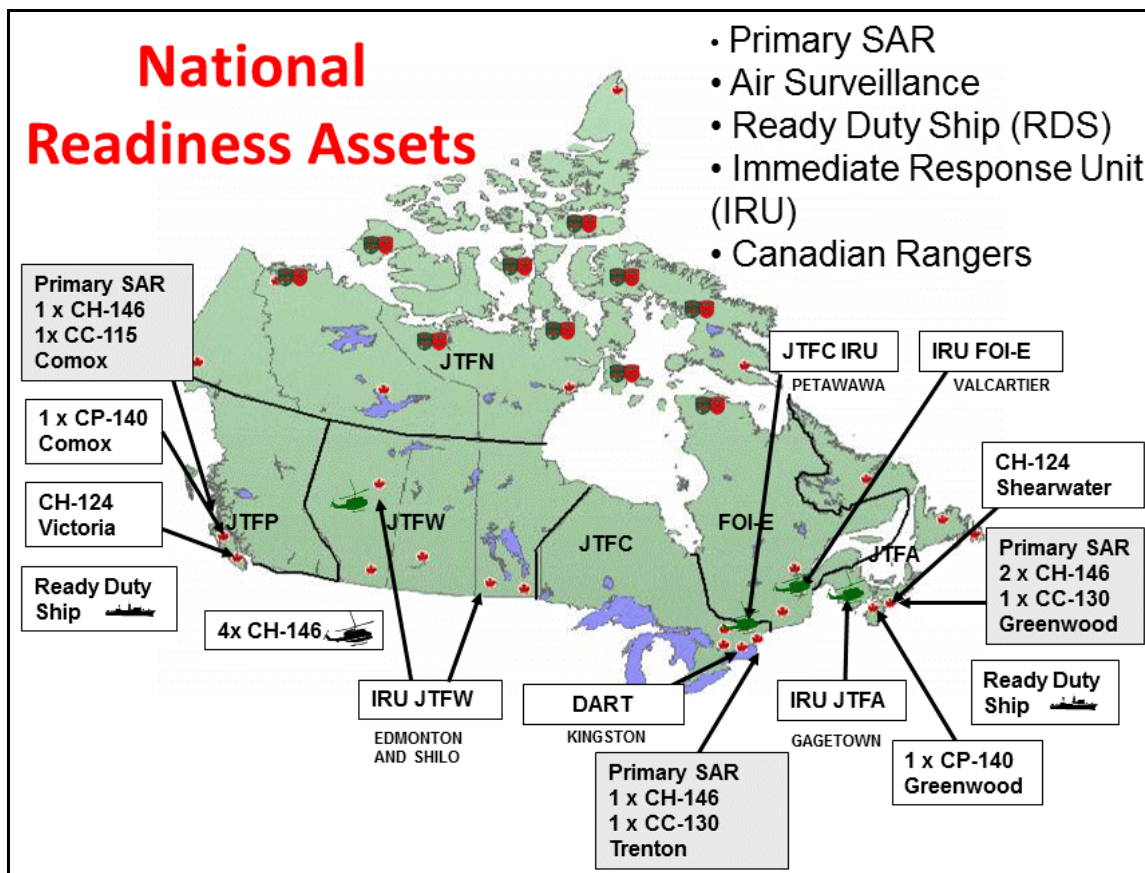


CONPLANs are periodically reviewed and updated to ensure they remain relevant to the ever-changing operating environments. They are updated based on lessons learned and “war gaming” scenarios to identify and address the planning requirements of each of the CONPLAN-supported operations. The CONPLANs are normally reviewed every five years; however, the frequency of updates may be influenced by external agency input, their frequency of use, recent lessons learned or changes to CAF organizations.

**Indicator: The CAF provided timely responses to RFAs**

**Key Finding 16:** The CAF has consistently provided timely responses to RFAs.

As illustrated in Figure 2, the CAF’s timely responses to RFAs has been facilitated by maintaining air, land and maritime assets on short notice to respond to emergencies or developing contingencies ranging from assisting in floods and fires to supporting an OGD to intercept a vessel suspected of illegal activity.



**Figure 2. National Readiness Assets.**<sup>53</sup> This figure demonstrates the CAF elements available across Canada to respond to contingencies.

<sup>53</sup> CJOC Presentation, “Introduction to CJOC,” March 24, 2015. The figure presents the CAF elements available on short notice, on a daily basis, to respond to an operational requirement, ranging from fires and floods to supporting RCMP counter-narcotics operations. The CAF elements portrayed here do not include NORAD assets. The Ready

In the case of land forces, as situations develop in advance of a finalized RFA, the RJTF Commanders are authorized to prepare and pre-position units in anticipation of being “called out” to provide assistance. It was noted in a Post Operation Report for Op LENTUS in 2013 that the JTF West response to the Alberta flood was achieved because it had maintained flood awareness as required in CONPLAN LENTUS through the Alberta Emergency Management Agency and its own Domestic Operations Detachments with the local authorities.<sup>54</sup>

**Indicator: The CAF provided requested military support to OGDs’ / civil authorities’ operations**

**Key Finding 17:** The CAF has supported OGDs and civil authorities to the maximum extent possible with available resources.

The CAF provided the military support requested by OGDs and civil authorities in instances of RFA requests, such as for domestic DROs and HOs or to intercept vessels attempting to smuggle drugs or illegal migrants into Canada. ||| the yearly flying rate, which governs how many hours each fleet of CAF aircraft is available for training and operations, ||| the aviation support the CAF can provide to OGDs. |||<sup>55</sup>

**2.4.3 Intermediate Outcome**

**The CAF achieved its operational objectives and effects in combat and support operations and provision of defence services and contributions to government**

The following indicators were used to assess achievement of the intermediate outcome:

- The CAF successfully exercised sovereignty and control of Canadian territory and air and maritime approaches;
- The CAF provided an effective response to domestic DROs and HOs in collaboration with OGDs;
- The CAF effectively supported federal security operations;
- The CAF effectively conducted ongoing defence operations in cooperation with the US;

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Duty Ship may be a frigate or a Maritime Coastal Defence Vessel. SAR assets include the CH-124 Cormorant helicopters, CC-130 Hercules transport aircraft, CC-115 Buffalo aircraft, and CH-146 Griffon tactical helicopters. Immediate Response Units are Regular Force infantry companies. CP-140 Aurora patrol aircraft are available for aerial surveillance. The Disaster Assistance Relief Team is available for domestic relief operations or deployed operations.

<sup>54</sup> 3rd Canadian Division HQ letter regarding Operation LENTUS, dated September 17, 2013.

<sup>55</sup> Canada COM presentation, “Total Air Resource Management FY 2011/12,” February 22, 2011; CJOC presentation, “LENTUS 14-05 Impact on YFR;” and Annual Total Air Resource Management Apportionment Plans.

- The CAF achieved operational objectives and effects as prescribed in mission objectives when deployed to international operations; and
- The CAF effectively provided defence services and contributions to OGDs and agencies (e.g., Op SABOT, Op PALACI, etc.).

**Key Finding 18:** Performance measures introduced by CJOC in FY 2013/14 to assess the performance of CAF operations are very rudimentary and mostly subjective.

CJOC introduced PMRs with performance measurement criteria/metrics commencing in FY 2013/14 to assess achievement of mission objectives, effects and critical tasks in support of the DND/CAF Performance Measurement Framework / PAA assessments. The template for the reports was developed with input from the J3 (Operations) staff and Deputy Comd CJOC. J3 staff derived each mission's objectives and effects from CDS directives developed by the Strategic Joint Staff (SJS), in addition to using other open source documents.

The PMRs for each CAF operation are currently filled out semi-annually by CJOC J3 staff to assess mission performance against operational objectives and effects.<sup>56</sup> Subjective assessments are made regarding achievement of operational objectives and effects based on a review of mission Post Operations Reports, End of Tour Reports, and/or Situation Reports. Assessments for each objective and effect are made on a scale of 1 to 10 (which are not yet clearly defined), with remarks explaining any failure to achieve the objective or effect. For the purpose of external performance reporting, scoring is either Met (1) or Not met (0) for calculating the percentage of desired objectives or effects achieved. However, achievement of operational effects, objectives and tasks could be more accurately assessed and stand to better inform command decisions if metrics and timelines for PMRs were developed similarly to recent submissions for TB approval of operations and operations-related programs.

#### **ADM(RS) Recommendation**

5. It is recommended that CJOC work with the SJS to develop well-defined operational objectives and effects for each operation that support development of clearly defined PMR criteria during mission planning.

**OPI:** Comd CJOC

**OCI:** Director of Staff, Senior Joint Staff (DOS SJS)

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<sup>56</sup> The NATO Operations Assessment Handbook defines an operational objective as a clearly defined and attainable goal to be achieved. The Capability-Based Planning Manual defines operational effect as the physical, functional or psychological outcome, event or consequence that results from the execution of specific tasks.





**Indicator: The CAF provided an effective response to domestic DROs and HOs in collaboration with OGDs**

**Key Finding 20:** The CAF provided highly responsive and effective support to DROs and HOs.

The CAF has provided highly responsive and effective support to Canadians during natural disasters, including floods, fires and major storms. In FY 2011/12, substantial assistance was provided to provincial emergency organizations in support of flood mitigation, relief efforts and forest fire evacuations through Ops LOTUS, LYRE, LUSTRE and FORGE, the names of DROs prior to the creation of CONPLAN LENTUS.<sup>64</sup> That said, based on Op LENTUS PMRs covering FY 2012/13 to 2015/16, the CAF failed in FY 2013/14 to have sufficient early warning of a potential disaster because of a failure in local situational awareness; however, other operational objectives, effects and tasks were satisfactorily achieved. In FYs 2014/15 and 2015/16, the close cooperation between CJOC, the CAF Force Generators, JTFs, OGDs and agencies was assessed as 7 out of 10. In FY 2015/16, the less than perfect score was attributed to some confusion between the JTFs, CJOC and SJS regarding operational directives.<sup>65</sup>

**Indicator: The CAF effectively supported federal security operations**

**Key Finding 21:** There was no requirement for CAF support to federal security operations during the period of evaluation.

The CAF's Op SABOT has provided effective support to the RCMP's annual marijuana eradication operation throughout the five-year period of the evaluation but was not required to support any major federal security operations during that period. The most recent CAF support to major security operations was to the RCMP-led Integrated Security Units that were responsible for the security of the 2010 Vancouver Olympics (Op PODIUM) in February 2010 and the G8 and G20 Summits in June 2010.<sup>66</sup>

**Indicator: The CAF effectively conducted ongoing defence operations in cooperation with the US**

**Key Finding 22:** The CAF has conducted highly collaborative and effective defence operations with the US.

The CAF has successfully conducted ongoing defence operations with the US through the Tri-Command Framework, signed in September 2009, which outlines how NORAD, the US Northern Command and CJOC cooperate in continental operations. This has been particularly significant in North American air defence with resurgent Russian long-range aviation testing NORAD defences and in collaborative efforts to develop Maritime Domain Awareness.

<sup>64</sup> DND. CF Assistance to Law Enforcement Agencies or Other Military Assistance, April 1, 2006 to July 27, 2012.

<sup>65</sup> CJOC Op LENTUS PMRs for FY 2014/15 and FY 2015/16.

<sup>66</sup> Past Operations. <http://www.forces.gc.ca/en/operations.page>. Last consulted on October 26, 2016.



||||| among the CAF’s smaller missions is Op PROTEUS. It is not part of the UN, but rather supports the Office of the United States Security Coordinator in Jerusalem that is responsible for Palestinian security sector reform as called for in the Roadmap for Peace in the Middle East Peace Process. While progress towards the establishment of a Palestinian state has been slow since the creation of Israel in 1948, Op PROTEUS continues to lay the ground work for it, and the mission’s PMRs reveal it has consistently achieved all of its objectives, effects and critical tasks.

Larger contributions to NATO and coalition operations, such as Ops MOBILE, REASSURANCE, UNIFIER, IMPACT, and CARIBBE, have achieved significant operational objectives and effects based on both PMRs and public DND/CAF reports. |||||

**ADM(RS) Recommendation**

8. It is recommended that the CAF examine minor missions and develop recommendations for GC consideration, as appropriate, |||||

**OPI:** Comd CJOC

**OCIs:** DOS SJS, Assistant Deputy Minister (Policy) (ADM(Pol))

**Indicator:** CAF effectively provided defence services and contributions to OGDs and agencies (e.g., Op SABOT, Op PALACI, etc.)<sup>69</sup>

**Key Finding 24:** The CAF provided effective defence services and contributions to OGDs and agencies.

The CAF has effectively provided the GC and OGDs a full range of military capabilities and defence-specific services in support of operations to enhance the security, safety, stability and/or well-being of Canadians or international populations in peril in accordance with Canadian values and interests of the GC.<sup>70</sup> These have included the following:

- Op PALACI, the annual CAF contribution to Parks Canada’s avalanche control program in Rogers Pass, where the Trans-Canada Highway and the Canadian Pacific Railway cross the Selkirk Mountains in British Columbia. Its objective is to prevent uncontrolled,

<sup>69</sup> As detailed in the DND Departmental Performance Report 2014-15, defence services and contributions to government entail The Defence Services and Contributions to Government Program, which aims to support the delivery of GC safety and security initiatives and encourage recognition and pride in Canada and the Canadian military. This is accomplished through the provision of unique defence services in support of other elements of Government or the Canadian public.

<sup>70</sup> Description of PAA program 2.0 Defence Services and Contributions to Government.



naturally occurring avalanches and thus prevent blockage of the essential road and rail links between coastal British Columbia and the rest of Canada;

- Op SABOT, the annual CAF contribution to the RCMP's marijuana eradication program;
- Op PROVISION, the CAF support to the GC initiative to resettle 25,000 Syrian Refugees in Canada by the end of February 2016. Approximately 300 CAF personnel, deployed to Aerial Ports of Embarkation in Lebanon, Turkey and Jordan, combined to support the GC initiative. The CAF also prepared to provide interim lodging for approximately 2,700 refugees at bases and facilities in Ontario and Quebec, with additional spaces available at facilities across Canada, if needed;<sup>71</sup> and
- Op SIRONA, the military component of the Canadian whole-of-government contribution to fighting the Ebola outbreak in West Africa between October 2014 and June 2015. Three mission rotations, totaling 79 CAF healthcare and support staff, were deployed to the UK's Kerry Town Treatment Unit in Kerry Town, Sierra Leone.<sup>72</sup>

Mission objectives and effects in these operations were reported as achieved in PAA performance reports for FYs 2012/13 and 2013/14, post operation reports for missions such as Op SIRONA, and the annual PMRs for ongoing CAF support operations such as Op SABOT and Op PALACI.

## 2.5 Performance—Demonstration of Efficiency and Economy

It is appropriate to introduce any assessment of efficiency and economy of CAF operations by first noting that effectiveness is the priority in operations. We must then recognize the challenges and limitations of assessing efficiency and economy of CAF operations. Some of those factors are enduring, while others have been unique to the period of the evaluation. Together, they have included the following:

- revised organizations, including the transition from three to one OPCOM, and the addition of new subordinate organizations to the OPCOM, which have included 1<sup>st</sup> Canadian Division and 25 Canadian Forces Supply Depot;
- ever-evolving missions, including the duration and nature of each mission, and the funding and manning caps for each mission that are set by the GC and subject to change, as in Op IMPACT;
- difficulties capturing operational costs as a result of the evolving DND/CAF PAA, PAA attributions, and accounting practices;
- the requirement for operations to achieve operational effects that may override considerations of economy and efficiency, particularly when expediency is required;
- International operations, which are a major component of CAF operational expenditures, are entirely at the discretion of the GC. The CG determines whether or not to participate in an allied or coalition operation and then sets the manning and budget limits for such missions. It will also decide which DROs/HOs will be undertaken. This was reflected in the CAF contribution to the fight against Ebola in West Africa and the recent decision not

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<sup>71</sup> Op PROVISION. <http://www.forces.gc.ca/en/operations-abroad/op-provision.page>. Last consulted on October, 31, 2016.

<sup>72</sup> Op SIRONA. <http://www.forces.gc.ca/en/operations-abroad/op-sirona.page>. Last consulted on October 31, 2016.

to send the Disaster Assistance Response Team to Haiti following a devastating hurricane; and

- Domestically, the CAF will normally respond to any contingency, under Op LENTUS, with any resources required and available to support the provincial Emergency Management Organizations. The CAF will also support OGDs' and agencies' RFAs to the extent that CAF personnel and equipment resources are available.

### **Has the CAF used assigned resources for operations efficiently?**

Evaluation of the efficiency and economy for the CAF Ops program was derived using data from Level 1 fund centres and the PAA. The following four key indicators were used to determine whether the CAF Ops program used resources efficiently:

- trends in operations costs over five fiscal years;
- trends in sustainment costs over five fiscal years;
- trends in costs of governance over five fiscal years; and
- use of business information to optimize resource efficiency.

### **Indicator: Trends in operations costs over five fiscal years**

**Key Finding 25:** Costs of CAF operations have been driven primarily by the number and size of international operations undertaken by the CAF.

The annual expenditures on CAF operations (approximately \$513 million in FY 2014/15) constituted the primary financial inputs for this evaluation. The overall budget, including CMP expenditure on operations and other CJOC and Level 1 contributions, were the basis of the evaluation's assessment of the efficiency and economy section.

As seen in Table 4, at the beginning of the evaluation period, in FY 2011/12, total CAF operations expenditures accounted for 7.66 percent of the total DND expenditures. Since that year, there has been a steady decline in CAF operations expenditures until FY 2015/16, when there was an increase in expenditures of 19.49 percent from the previous fiscal year. Over the course of the evaluation period, total CAF operations expenditures decreased by 60 percent from FY 2011/12 to FY 2015/16. As well, the expenditures in support of CAF operations by other organizations dropped significantly following FY 2013/14.

	<b>FY 2011/12</b>	<b>FY 2012/13</b>	<b>FY 2013/14</b>	<b>FY 2014/15</b>	<b>FY 2015/16</b>
<b>* 1.0, 2.0 CAF Operations (Source: PAA)</b>	\$1,548M	\$1,059M	\$737M	\$513M	\$613M
<b>CAF Operations Expenditure % of Change</b>	N/A	-31.60%	-30.40%	-30.39%	19.49%
<b>CJOC Expenditure on CAF Operations<sup>73</sup></b>	\$76M	\$54M	\$172M	\$126M	\$156M
<b>CJOC Expenditure % of Change</b>	N/A	-28.95%	218.51%	-26.74%	23.81%
<b>CMP Expenditure on Operations (CAF Regular Force Pay)</b>	\$567M	\$560M	\$319M	\$346M	\$410M
<b>Total (CJOC + CMP) CAF Operations Expenditures)</b>	\$643M	\$614M	\$491M	\$472M	\$566M
<b>% of Change (CJOC + CMP CAF Operations Expenditures)</b>	N/A	-4.51%	-20.03%	-3.87%	19.92%
<b>Other Organizations' Contributions to CAF Operations<sup>74</sup></b>	\$354M	\$315M	\$246M	\$40M	\$48M
<b>** Deployed Operations Account</b>	\$539M	\$116M	N/A	N/A	N/A
<b>** Domestic Operations Fund Account</b>	\$13M	\$144M	N/A	N/A	N/A
<b>** Operations Funding Account (OFA)</b>	N/A	N/A	\$120M	\$90M	\$116M
<b>1.0, 2.0 CAF Operations (Source: PAA)</b>	\$1,548M	\$1,059M	\$737M	\$513M	\$613M
<b>Total DND Expenditures</b>	\$20,219M	\$19,978M	\$18,764M	\$18,454M	\$18,666M
<b>% of Overall DND Expenditures</b>	7.66%	5.30%	3.93%	2.78%	3.28%

**Table 4. CAF Operations Expenditures.**<sup>75</sup> This table lists the CAF operations expenditures for FYs 2011/12 to 2015/16.

\* Excludes 1.1.3 – Ongoing Defence Operations through NORAD.

\*\* Includes OFA designated expenditures attributed to PAA CAF Operations categories.

CAF operations expenditures, an indicator of CAF operational tempo, have decreased since the peak year in FY 2011/12 with the exception of an increase in FY 2015/16. As seen in Table 5, annual expenditure decreases of approximately 30 percent are noted between FYs 2011/12 and

<sup>73</sup> Includes CJOC, Canada COM, CEFCOM and CANOSCOM.

<sup>74</sup> Other organizations include Assistant Deputy Minister (Finance), ADM(HR-Civ), ADM(Pol), RCAF, RCN, SJS, VCDS and CA.

<sup>75</sup> Assistant Deputy Minister (Finance). SAP Universe Web(i) Tool.

2014/15. The peak period coincides with Op ATHENA and Op ATTENTION (FY 2011/12) with just over \$1.5 billion spent on CAF operations. In the years following, there was a trend demonstrating a decrease in overall expenditures with an average reduction of 30 to 31 percent in spending each fiscal year. This decrease in expenditures can be explained by a number of contributory factors, most notably the close-out of Canada’s combat mission in Afghanistan, Op ATHENA, in December 2011 and an organizational shift towards defence renewal and the development of “a force posture (readiness) to meet future operational challenges” in the following years.<sup>76</sup> Between FY 2011/12 and FY 2012/13, expenditures on Op ATHENA decreased by 86 percent. An increase of overall expenditures of 20 percent is noted in FY 2015/2016 from the previous fiscal year as a result of increased spending directed towards international operations such as Op IMPACT, Op PROVISION, Op RENAISSANCE and Op REASSURANCE. The period also coincides with increased commitments to UN, NATO and NORAD operations, a renewed focus on the Arctic and a greater level of collaboration with partners and allies to “refocus Canada’s combat mission in Iraq and Syria” towards the training of local forces.<sup>77</sup> Ongoing UN missions in FY 2015/16 included Op HAMLET, Op SNOWGOOSE, |||||||||||||||||||||||||||||||||| and Op JADE.

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<sup>76</sup> CDS directive, CF Force Posture and Readiness 2012, December 2011.  
<sup>77</sup> DND. Departmental Performance Report 2015-16.

	<b>FY 2011/12</b>	<b>FY 2012/13</b>	<b>FY 2013/14</b>	<b>FY 2014/15</b>	<b>FY 2015/16</b>
<b>1.0, 2.0 CAF Operations (Source: PAA)</b>	\$1,548M	\$1,059M	\$737M	\$512.5M	\$613.5M
<b>CAF Operations Expenditures % of Change</b>	N/A	-31.59%	-30.41%	-30.46%	19.71%
<b>1.1.2 – Defence, Security and Sovereignty of Canada Operations</b>	\$207M	\$204.7M	\$44M	\$63M	\$88M
<b>1.1.4 – Continental Operations with US</b>	\$92M	\$88M	\$12M	\$27M	\$28M
<b>1.1.1 – Operations to Defend Canada</b>	\$0	\$0	\$0	\$0	\$0
<b>1.2.1 – International Operations – Extended Periods</b>	\$675M	\$306M	\$188M	\$117M	\$173.5M
<b>1.2.2 – International Crisis/Surge Response</b>	\$65M	\$11.8M	\$3M	\$2.5M	\$12M
<b>1.2.3 – Standing NATO Commitments Operations</b>	\$71M	\$77M	\$179.6M	\$33M	\$36M
<b>1.3.1 – C2 Domestic/International Operations</b>	\$300M	\$257M	\$216M	\$205M	\$204M
<b>1.3.3 – Operational Support Services</b>	\$126M	\$107M	\$88M	\$59M	\$61M
<b>2.1.1 – Domestic/Continental Assistance Operations</b>	\$8M	\$7M	\$7M	\$5M	\$5M
<b>2.2.2 – Assistance to Major Canadian Event</b>	\$0.3M	\$0.3M	\$0.1M	\$0.03M	\$0
<b>2.2.1 – Terrorism and Consequence Management Operations</b>	\$0	\$0	\$0	\$0	\$0
<b>2.2.5 – Services to OGDs and Agencies</b>	\$2M	-\$0.7M	-\$3M	-\$0.2M	\$4M

**Table 5. Contributions to CAF Operations Sub-program by PAA in millions of dollars.**<sup>78</sup> This table lists the contributions to CAF operations sub-programs by PAA for FYs 2011/12 to 2015/16.

Note: Totals may not add up due to rounding.

<sup>78</sup> Costs of CAF Operations exclude 1.1.3 – Ongoing Defence Operations through NORAD, 1.3.2 – Ongoing Intelligence Operations, 1.3.4 – Military Diplomacy / Global Engagement, 2.1.2 – International Humanitarian/Disaster Operations, 2.1.3 – Non-Combatant Evaluation Operations, 2.2.3 – National SAR Program, and 2.2.6 – Canadian Safety and Security Program. The negative figures for PAA 2.2.5 Services to OGDs and agencies are a result of OGDs paying/transferring money to DND for their services rendered. The positive figures in the table indicate amounts of money spent by DND.

A brief summary of the trend of reduction of expenditures related to international operations is provided in Table 6.

	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
<b>CAF Expenditures on Domestic Operations</b>	\$14,807,000	\$13,025,000	\$15,491,000	\$17,495,000	\$21,219,000
<b>CAF Expenditures % of Change</b>	N/A	-12.03%	18.93%	12.94%	21.29%
<b>CAF Expenditures on International Operations</b>	\$951,117,000	\$327,982,000	\$230,464,000	\$243,898,000	\$256,939,000
<b>CAF Expenditures % of Change</b>	N/A	-65.52%	-29.73%	5.83%	5.35%

**Table 6. Incremental Costs of Operations.**<sup>79</sup> This table depicts the incremental costs of operations conducted by the CAF in FY 2011/12 to FY 2015/16.

### Domestic Operations

Incremental costs for domestic operations surged 19 percent in FY 2013/14 from the previous fiscal year. This was followed by a 13 percent increase in FY 2014/15 and 21 percent in FY 2015/16. The period of increases coincides with multiple instances of Op LENTUS, the CAF domestic DRP. In FY 2014/15, there was a major increase in these operations with five separate Ops LENTUS.<sup>80</sup> The following year, there were only two Ops LENTUS, 15-02 and 16-01.<sup>81</sup> Overall, CAF expenditures on domestic operations increased in accordance with requirements (FY 2013/14 to FY 2015/16). It is important to note, however, that costs are also much lower as the current internal order<sup>82</sup> group financial structure provides a much more “robust and comprehensive” accounting of operational expenses when compared to internal order groups in

<sup>79</sup> DND Departmental Performance Reports. (1) Incremental DND costs are the additional costs for personnel and equipment that are directly attributable to CAF operations. More specifically, incremental costs include the additional cost to deploy on an operation and to provide ongoing maintenance and support during the operation, as well as any specialized training required for the operation. DND does not include the full capital acquisition cost of major equipment in incremental costs unless procured specifically for the mission with no life expectancy post operation.

<sup>80</sup> FY 2014/15: Op LENTUS 14-01, 14-02, 14-03 in May – Ontario’s James Bay communities (evacuation of 90, 730, 165 people, respectively); Op LENTUS 14-05 in July – Manitoba state of emergency (500 CAF members deployed); Op LENTUS 15-01 in March – Ontario.

<sup>81</sup> FY 2015/16: Op LENTUS 15-02 in July – Saskatchewan; Op LENTUS 16-01 in May – Fort McMurray, Alberta (65 personnel).

<sup>82</sup> An internal order facilitates tracking of expenditures across multiple cost centres and general ledgers. For each mission there is an internal order group, which allows for multiple internal orders to be linked to it. That way the RCAF, RCN, etc. can have an internal order to track their expenditures for a particular operation, and there is a way of summing up each operation’s costs.

previous years. This, combined with low reporting of expenditures, may have also contributed to the lower expenditure figures reported.<sup>83</sup>

## International Operations

While expenditures on domestic operations increased over the evaluation period, spending on international operations saw an overall downward trend over the first three years of the evaluation period, reflecting the CAF's evolving international operations. This can also be attributed in part to major changes made to the PAA and sub-sub activities over the course of the past few years. Incremental costs for international operations decreased 66 percent in FY 2012/13 from the previous fiscal year. This was followed by a 30 percent decrease from FY 2012/13 in FY 2013/14. In FY 2011/12, the CAF began the closeout of Op ATHENA, Canada's expeditionary mission in Afghanistan, which ended on December 1, 2011.<sup>84</sup> This began a process of reconstituting and realigning the CAF post-Afghanistan.<sup>85</sup> The closeout of Op ATHENA was accompanied by the ramping up of Op ATTENTION and Op ARTEMIS in FY 2013/14 that were the most expensive CAF operations that year, by a significant margin as reported in the Departmental Performance Report.<sup>86</sup> The following year, Op REASSURANCE was established to provide "enhanced assurance and deterrence measures" to "promote security and stability in Central and Eastern Europe" alongside other NATO allies and partner nations. As a result, spending on international operations saw an increase in both FY 2014/15 and FY 2015/16 as Canada maintained its commitment to Op REASSURANCE, a reduced commitment to Op ARTEMIS and its commitment to UN missions, such as Op HAMLET, Op SNOWGOOSE, ||| and Op JADE.<sup>87</sup>

### Indicator: Trends in sustainment costs over five fiscal years

**Key Finding 26:** CAF operations and maintenance (O&M) expenditures cannot be accurately assessed due to difficulties transferring operational expenditures from the Department's accounting system to the PAA.

As reported by the PAA O&M categories in this section, there has been a steady decline in O&M expenditures throughout the evaluation period (FYs 2011/12 to 2015/16). This may be partly explained by the closure of missions in Afghanistan and an increased focus on smaller international operations and domestic missions. The areas with the most significant reductions in expenditures include transport and telecommunications, professional and special services, rentals and materials and supplies. From FY 2011/12 to FY 2014/15, O&M expenditures for transport and telecommunications dropped by 98.3 percent. During the period FY 2011/12 to FY 2015/16,

<sup>83</sup> CJOC J8 Request for Information.

<sup>84</sup> Op ATHENA. <http://www.forces.gc.ca/en/operations-abroad-past/op-athena.page>. Last consulted on October 4, 2016.

<sup>85</sup> Departmental Directive 2011-2016 (DM and CDS).

<sup>86</sup> DND/CAF Departmental Performance Report, FY 2013/14. <http://www.forces.gc.ca/en/about-reports-pubs-departmental-performance/2014-section-iv-cost-cf-international-operations.page>. Last consulted December 16, 2016.

<sup>87</sup> NATO Op REASSURANCE. <http://www.forces.gc.ca/en/operations-abroad/nato-ee.page>. Last consulted November 24, 2016.

professional and special services saw a reduction of 90.92 percent, and rentals saw a reduction of 99.5 percent in O&M expenditures.

FYs 2011/12 and FY 2012/13 had the highest levels of expenditures over the course of this evaluation period. This was a result of O&M expenditures in support of Op ATHENA and subsequently Op ATTENTION, as well as the Mission Transition Task Force. In FY 2011/12, rentals (\$265.2 million), materials and supplies (\$172.6 million) and professional and special services (\$123.8 million) constituted the greatest O&M expenditures.<sup>88</sup> Following these years, there was a significant decline in overall expenditures for all categories, but especially in the areas just mentioned.<sup>89</sup> An additional 10 percent reduction in the O&M notional allocation that was non-personnel related may also partly explain the continued reduction.

A brief summary of O&M expenditures is provided in Table 7.

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<sup>88</sup> Professional and special services spending during FY 2011/12 was at Canadian Forces Station Alert. Rentals spending: Afghanistan Mission Transition Task Force spent \$155,736,073 in FY 2010/11, and \$4,553,320 in FY 2011/12.

<sup>89</sup> For materials and supplies, 1<sup>st</sup> Canadian Air Division had a significant level of expenditures in FY 2011/12 (\$108 million) followed by a sharp decline of 97.87 percent the following fiscal year (\$2.3 million). During the last two fiscal years (2014/15 and 2015/16), a total of \$4.8 million of expenditures under professional and special services are captured. For FYs 2014/15 and 2015/16, 4<sup>th</sup> Canadian Division had a high proportion of O&M expenditures compared to other fund centres.



	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
01 – Personnel	N/A	N/A	\$177,080	\$88,534	\$91,118
02 – Transport and Telecommunications	\$53,763,996	\$20,338,723	\$2,897,822	\$907,017	N/A
03 – Information	\$196,377	\$77,886	\$23,539	\$35,158	\$47,222
04 – Professional and Special Service	\$123,777,864	\$45,333,365	\$12,734,412	\$11,566,338	\$11,236,693
05 – Rentals	\$265,163,156	\$26,438,327	\$4,258,522	\$1,019,521	\$1,350,751
06 – Purchased Repair and Maintenance	\$2,919,787	\$1,765,474	\$38,453	\$156,814	\$96,651
07 – Materials and Supplies	\$172,574,083	\$117,149,267	\$2,144,188	\$1,948,798	\$2,190,431
09 – Acquisition Machinery and Equipment	\$28,882,260	\$9,725,781	\$3,616,926	\$5,812,501	N/A
12 – Other Subsidies and Payments	\$4,010,423	\$4,134,755	\$10,894	\$11,223	\$7,524
13 – Revenue	-\$419,438	-\$118,633	-\$3,660	-\$8,624	-\$12,699
Not Available in Source System Download	\$45,871,850	\$29,696,009	\$5,794,336	\$6,464,567	N/A
<b>Grand Total</b>	<b>\$696,740,358</b>	<b>\$254,540,954</b>	<b>\$31,692,512</b>	<b>\$28,001,847</b>	<b>\$15,007,691</b>
O&M Expenditures Percentage of Change	N/A	-63.47%	-87.55%	-11.65%	-46.40%

**Table 7. CAF O&M Expenditures.**<sup>90</sup> This table lists the CAF O&M expenditures for FYs 2011/12 to 2015/16.

The evaluation could not establish a correlation between continued reductions of O&M with operational effects (based on PAA data). Key informant interviews revealed reductions to O&M funds have not had a negative effect on operations. Instead, Vote 5 (Capital) and infrastructure costs were identified as key challenges to achieving mission objectives.

The evaluation also broadly examined O&M expenditures by using corporate O&M expenditures for CAF operations and O&M portions of OFA expenditures to determine a percentage of O&M for overall CAF operations expenditures. Three fiscal years were examined. As seen in Table 8, OFA O&M expenditures have remained relatively stable over the three fiscal years as a percentage of overall OFA expenditures. Corporate O&M expenditures and OFA O&M expenditures as a percentage of overall CAF operations expenditures have steadily increased over the same period (from about 22 percent to 55 percent). The caveat is that O&M portions of OFA expenditures are spread across multiple PAA elements, which include areas that are out of scope of this evaluation. It can be concluded in broader terms, however, that O&M expenditures in support of operations have increased.

<sup>90</sup> Assistant Deputy Minister (Finance). SAP Universe Web(i) Tool.

	FY 2013/14	FY 2014/15	FY 2015/16
<b>Total OFA</b>	\$177,315,879	\$196,664,034	\$346,621,567
<b>OFA O&amp;M</b>	\$143,308,694	\$179,048,447	\$306,798,207
<b>O&amp;M Expenditures % of Total OFA Expenditures</b>	80.82%	91.04%	88.51%
<b>Corporate Operating Expenditures (CAF Operations)</b>	\$18,754,523	\$28,001,849	\$27,889,002
<b>Total O&amp;M</b>	\$162,063,217	\$207,050,296	\$334,687,209
<b>1.0, 2.0 CAF Ops (Source: PAA)</b>	\$737,077,535	\$512,500,000	\$613,482,780
<b>O&amp;M Expenditure % of CAF Operations Expenditures</b>	21.98%	40.40%	54.55%

**Table 8. OFA and Corporate O&M Expenditures.**<sup>91</sup> This table lists depicts OFA O&M expenditures and fund centre (corporate) O&M expenditures for FYs 2013/14 to 2015/16.

**Indicator: Trends in governance costs over five years**

**Key Finding 27:** Reduced CJOC HQ manning and financial resources have driven governance of CAF operations to become more efficient.

In order to assess governance, the evaluation examined CJOC’s operating budget in relation to overall CAF operations expenditures. This was conducted in order to determine efficiencies in the management and allocation of overall CAF operations expenditures. Three years of available data was used to assess the ratio of CJOC’s operating budget to total operations expenditures. From FY 2013/14 to FY 2014/15, CJOC’s operating budget decreased by 56 percent, and then marginally increased in FY 2015/16. As a result, the ratio of operating budget to total expenditures decreased from 0.15 in FY 2013/14 to 0.09 for FY 2014/15, and this level was sustained in FY 2015/16. These ratios indicate an increased efficiency from FY 2013/14 to FY 2014/15, which was sustained in FY 2015/16.

	FY 2013/14	FY 2014/15	FY 2015/16
<b>CJOC Operating Budget</b>	\$110,272,867	\$48,221,528	\$53,602,228
<b>1.0, 2.0 CAF Ops (Source: PAA)</b>	\$737,077,535	\$512,506,154	\$613,482,780
<b>Ratio of Operating Budget over Total Expenditures</b>	0.15	0.09	0.09

**Table 9. CAF Operations Governance Expenditures.**<sup>92</sup> This table lists depicts CAF operations governance expenditures for FYs 2013/14 to 2015/16.

The evaluation also examined the OPCOM HQ personnel trends from FY 2011/12 to 2015/16, as seen in Table 10.<sup>93</sup> The HQ personnel have been reduced by 12.81 percent over the evaluation

<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

period, with the most significant reductions occurring between FY 2011/12 and FY 2013/14. Meanwhile, over the period FY 2013/14 to 2015/16, the total number of CJOC personnel, including personnel in CJOC subordinate organizations, increased, largely as a result of new subordinate units being placed under CJOC command. As demonstrated, the total CJOC personnel increased 7.4 percent, while HQ personnel decreased 3.7 percent during this period.

CJOC HQ manning as a percentage of total CJOC manning has simultaneously decreased in recent evaluation years. The ratio was 21.31 percent in FY 2013/14, followed by a decrease to 19.11 percent in FY 2015/16.

	FY 2011/12	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16
<b>Total OPCOM HQ Personnel</b>	601	567	544	538	524
<b>OPCOM HQ Personnel % of Change (year over year)</b>	N/A	-5.66%	-4.06%	-1.10%	-2.60%
<b>Total OPCOM Personnel</b>	2,887	2,800	2,552	2,626	2,741

**Table 10. OPCOM Personnel Figures.**<sup>94</sup> This table depicts the OPCOM personnel figures for FYs 2011/12 to 2015/16.

**Indicator: Use of business information to optimize resource efficiency**

**Key Finding 28:** The CAF Ops program uses a broad range of business information to optimize efficient use of resources.

The evaluation examined the use of performance data and business intelligence to inform business decisions and found that CJOC has developed some promising practices for this purpose and continues to develop this capacity. Key examples include the following:

- Costing at all operational phases, from pre-deployment to redeployment, provides better visibility and oversight into financial requirements of all operational phases;
- Design and application of TO&E identify efficiencies and economies to achieve operational effects in order to meet each mission’s requirements;
- Term Review Process (reported to Director Budget) assesses the status of all input expenditures (personnel, equipment and infrastructure) with respect to on-going mission requirements;
- CJOC has an internal resource mitigation strategy that incorporates the following three components:
  - Formations and units are to develop plans to meet higher priority tasks using resources currently available within their allocations. New pressures or previously

<sup>93</sup> During FYs 2011/12 and 2012/13, until October 2012, there were three separate CAF operational commands, Canada COM, CEFCOM and CANOSCOM, each with its own subordinate units. In October 2012, they were merged to become CJOC, a single operational command.

<sup>94</sup> Human Resources Management System personnel counts for FY 2011/12 to FY 2015/16.

- un-forecasted growth in the demands of existing activities will require appropriate internal reallocation and mitigation,
- Formations and units are to ensure that incremental costs associated with supporting operations are clearly identified and funded using the appropriate central account (e.g., Support to Deployed Operations Account, Deployed Operations Account, Domestic Operations Fund Account, etc.), and
- Formations and units are to continue with the implementation of Integrated Risk Management when planning and executing their tasks in accordance with the guidance provided; and
- Impact assessments are used to assist in the determination of any further allocation requirements that can be supported in-year.

The evaluation found a promising practice through the campaign assessment of Op IMPACT with respect to lessons learned related to resource management and application to future operations. Key informant interviews revealed that this is the first time an assessment of operations will be conducted in a methodical manner and quantified to determine efficiencies.

#### **ADM(RS) Recommendation**

9. It is recommended that the CAF continue to develop a robust Performance Measurement Framework to inform business decisions for both ongoing and future domestic and international operations.

**OPI:** Comd CJOC

**OCIs:** C Prog, ADM(RS)

#### **Has the CAF used assigned resources for operations economically?**

The following indicator was used to determine whether the CAF used resources economically:

- Efficient and economic usage of CAF resources in operations.

#### **Indicator: Efficient and economic use of CAF resources in operations**

**Key Finding 29:** The CAF Operations program has demonstrated efficient and economic use of CAF resources in operations.

Mission-effective efficiencies and outputs need to be balanced with operational risks. An inappropriate balance (i.e., excess efficiencies) may derail effectiveness and impede achievement of operational objectives. It should be noted that all international operations are at the discretion of GC, with start and end dates and GC-prescribed limits in personnel and funding authorized for each mission. Key informant interviews emphasized these limitations drive the CAF to seek continued efficiencies and economies while maximizing mission effectiveness. In contrast,



- Canada’s relative contribution to international peace and security.

**Key Finding 30:** The CAF provides a relatively efficient and economical Ops program in comparison to the militaries of some of Canada’s closest allies.

Data was collected and analyzed using Jane’s sources and NATO data reporting defence expenditures of NATO countries, as referenced below, to assess relative efficiencies and economies for the CAF Ops program compared with key allies in the Five-Eyes community (Canada, US, UK, Australia and NZ), and select NATO countries. Documentary evidence (academia, media and journal articles) was used to assess contributions to major international operations taking into account the size, scope and budget of the operations undertaken by each nation.

**Indicator: Cost per military member / defence expenditures per military personnel**

The CAF is assessed to be more economical than several of its allies based on cost per military member (Regular Force). This is demonstrated in Table 11, employing data for Janes Defence Budgets for 2015, where Canada’s defence spending per Regular Force personnel was compared to the spending of the US, Australia, the UK and NZ. Of the five allies, Canada came in fourth in its cost per regular force member. While the US came first, spending \$428,919 USD per Regular Force member, Canada only spent \$215,559 USD per Regular Force member.

	Canada <sup>96</sup>	US <sup>97</sup>	Australia <sup>98</sup>	UK <sup>99</sup>	NZ <sup>100</sup>
<b>Defence Budget (\$Billion USD)</b>	14.658	615.746	27.445	53.533	2.190
<b>Regular Force Personnel</b>	68,000	1,435,575	79,723	144,120	12,600
<b>Cost per Regular Force (USD)</b>	215,559	428,919	344,254	371,447	173,809
<b>O&amp;M (\$Billion USD)</b>	4.302	269.815	7.533	20.353	0.564
<b>O&amp;M Percentage of Defence Budget</b>	29.35%	43.81%	27.43%	38.02%	25.75%

**Table 11. Benchmarking – Canada, US, Australia, UK and NZ.** This table depicts benchmarking for Canada, US, Australia, UK and NZ.

<sup>96</sup> Guy Eastman. Canada Defence Budget, Janes HIS Defence Budgets. <http://janes.ihs.com/Janes/Display/1327386>. Last consulted on December 15, 2016.

<sup>97</sup> Guy Eastman. United States Defence Budget, Janes HIS Defence Budgets. <https://janes.ihs.com/Janes/Display/1327405>. Last consulted on December 15, 2016.

<sup>98</sup> Craig Caffrey. Australia Defence Budget, Janes HIS Defence Budgets. <https://janes.ihs.com/Janes/Display/1327406>. Last consulted on December 15, 2016.

<sup>99</sup> Fenella McGerty. United Kingdom Defence Budget, Janes HIS Defence Budgets. <https://janes.ihs.com/Janes/Display/1327389>. Last consulted on December 15, 2016.

<sup>100</sup> Craig Caffrey. New Zealand Defence Budget, Janes HIS Defence Budgets. <https://janes.ihs.com/Janes/Display/1327425>. Last consulted on December 15, 2016.

The DND/CAF is assessed to be more economical than several of its allies based on cost per person for all personnel. This is also shown in Table 12, in which defence expenditures per military personnel was compared based on NATO data for 2015. The CAF is assessed to be on a par economically with NATO allies for defence expenditures per military personnel based on similar size and scope (Netherlands, Norway). The US and UK spend considerably more per military personnel.

	<b>Canada</b>	<b>US</b>	<b>UK</b>	<b>Netherlands</b>	<b>Norway</b>
<b>Defence Expenditures (\$M USD)</b>	15,191	641,253	59,634	8,873	5,815
<b>Defence Expenditures per Capita (USD)</b>	492	1,845	857	592	1316
<b>Defence Expenditures per Military Personnel (USD)</b>	66,000	1,311,000	163,000	41,000	21,000
<b>Distribution of Defence Expenditures (%) – Equipment</b>	13.1	25.4	22.4	15.7	22.5
<b>Distribution of Defence Expenditures (%). – Personnel</b>	47.2	36.6	36.9	53.8	38.7
<b>Distribution of Defence Expenditures (%) – Infrastructure</b>	5.7	1.5	1.6	3.2	5.6
<b>Distribution of Defence Expenditures (%) – Other</b>	34.1	36.5	39.1	27.3	33.2

**Table 12. Benchmarking of Defence Expenditures of NATO Countries (includes Canada, US, UK, Netherlands and Norway) for 2015.**<sup>101</sup> This table depicts Benchmarking of defence expenditures of NATO countries (includes Canada, US, UK, Netherlands and Norway) for 2015.

<sup>101</sup> Defence Expenditures of NATO Countries (2008-2015).  
[http://www.nato.int/nato\\_static\\_fl2014/assets/pdf/pdf\\_2016\\_01/20160129\\_160128-pr-2016-11-eng.pdf](http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_01/20160129_160128-pr-2016-11-eng.pdf). Last consulted on September 19, 2016.

**Indicator: Relative O&M expenditures**

For the purpose of this comparison, the Jane's O&M figures include equipment support, stock consumption, property management, movements (transport), accommodation and utilities, professional fees, fuel, hospitality and entertainment and information technology and communications. The CAF's O&M expenditures are comparable to those of Australia and NZ based on the data available at Table 12. The US and UK militaries' high expenditures reflect their relatively higher operational tempo and the greater size and complexity of their operational equipment fleets.

**Indicator: Distribution of defence expenditures per input resources (equipment, personnel, infrastructure, other)**

The CAF is assessed to be more economical than several of its allies on equipment expenditures. If we assume a standard operational output (i.e., equivalency of similar forces deployed to operations) between the NATO nations listed in Table 12, we can say the CAF is more efficient as it is achieving this output with less investment in land, sea and air fleets. However, it also means the CAF has less depth in equipment for multiple commitments or to replace battle-damaged equipment, etc.

The CAF has one of the highest proportions of personnel and infrastructure expenditures, while our allies have a more balanced allocation of defence resources.

**Indicator: Total number of personnel deployed to operations/missions**

Table 13 provides a snapshot of the level of military engagement undertaken by four of Canada's allies in 2015. A cumulative number of deployed personnel was captured for that year. The purpose of this table was to demonstrate the relative levels of engagement by each country as often looking at deployment numbers alone does not provide a comprehensive picture of contributions. For the purpose of comparison, a ratio of deployed personnel divided by overall forces' personnel for CAF and four allied countries was calculated. The ratio demonstrates that Canada is comparable to several of its allies in its commitments to overseas operations when taking into account the size of its military. As shown, Canada has deployed a proportion of its total forces personnel at a level that is equal to the US. This further demonstrates the efficiencies and economies of CAF operations when compared to our closest allies.



	Canada	US	Australia	UK	NZ
<b>Total Personnel Deployed Internationally</b>	7857	150,560 <sup>102</sup>	2352 <sup>103</sup>	18,860 <sup>104</sup>	175 <sup>105</sup>
<b>Total Number of Forces' Personnel (including Regular Force and Reserves)</b>	100,943 <sup>106</sup>	1,897,294 <sup>107</sup>	57,588 <sup>108</sup>	196,810 <sup>109</sup>	11,480 <sup>110</sup>
<b>Ratio of Personnel Deployed to Operations to Total Personnel</b>	0.08	0.08	0.04	0.09	0.02

**Table 13. Benchmarking – Deployment of Allied Forces in 2015.** This table depicts benchmarking of deployment of allied forces in 2015.

### Indicator: Canada's relative contribution to international peace and security

In 2015, Canada ranked 23 of 28 NATO nations in terms of defence spending.<sup>111</sup> However, despite Canada's smaller economic commitment, it has been praised internationally for its "involvement in more missions around the world than most of its NATO counterparts" and its "commitment to NATO and its allies both politically and militarily."<sup>112</sup> This level of commitment is borne out in Table 13. In 2012, a parliamentary report was published outlining Canada's role in international defence cooperation and NATO.<sup>113</sup> In this report, experts testified to Canada's abilities, specifically speaking to its capacity to support international missions.

<sup>102</sup> Julia Zorthian. "This Graphic Shows Where U.S. Troop Operations Are Stationed Around the World," *Time Magazine*, October 16, 2015. <http://time.com/4075458/afghanistan-drawdown-obama-troops/>. Last consulted on January 16, 2017.

<sup>103</sup> Australian Department of Defence. Global Operations. <http://defence.gov.au/Operations/>. Last consulted on March 3, 2016.

<sup>104</sup> UK Ministry of Defence. "UK Armed Forces Quarterly Personnel Report," United Kingdom National Statistic, April 1, 2015. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/412959/PUBLIC\\_1425293223.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/412959/PUBLIC_1425293223.pdf). Last consulted on March 18, 2016.

<sup>105</sup> New Zealand Defence Force. Overseas Operations, December 13, 2015. <http://www.nzdf.mil.nz/operations/>. Last consulted on December 13, 2015.

<sup>106</sup> DND. Departmental Performance Report, 2014-15.

<sup>107</sup> US Department of Defence. DoD Personnel, Workforce Reports and Publications, December 31, 2015. [https://www.dmdc.osd.mil/appj/dwp/dwp\\_reports.jsp](https://www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp). Last consulted on March 23, 2016.

<sup>108</sup> Australian Department of Defence. Defence Portfolio Budget Statements 2014-15. [http://www.defence.gov.au/budget/15-16/2015-16\\_Defence\\_PBS\\_02\\_Section1.pdf](http://www.defence.gov.au/budget/15-16/2015-16_Defence_PBS_02_Section1.pdf). Last consulted on March 7, 2016.

<sup>109</sup> UK Ministry of Defence. Monthly Service Personnel Statistics, December 2015. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/491518/Monthly\\_service\\_personnel\\_statistics-December\\_2015.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/491518/Monthly_service_personnel_statistics-December_2015.pdf). Last consulted on January 16, 2017.

<sup>110</sup> New Zealand Defence Force. Personnel Composition. <http://www.nzdf.mil.nz/what-we-do/personnel-composition.htm>. Last consulted on April 11, 2016.

<sup>111</sup> Murray Brewster. "Canada ranks 23 out of 28 NATO countries on defence spending," *CBC News*, July 4, 2016. <http://www.cbc.ca/news/politics/canada-defence-spending-1.3664272>. Last consulted on December 16, 2016.

<sup>112</sup> Trevor Schenk. "Outperforming its Allies? Canada and its Commitment to NATO," NATO Association of Canada, June 17, 2015. <http://natoassociation.ca/45241/>. Last consulted on December 16, 2016.

<sup>113</sup> NATO's Strategic Concept and Canada's Role in International Defence Cooperation.

Canada has repeatedly been recognized as a trustworthy ally and international leader in military affairs through its contributions to allied and coalition operations ranging from Afghanistan to Iraq and, in the future, as part of NATO's operations in the Baltic states. Historically, Canada has not only backed missions with hard resources (such as money and troops) has also contributed in other measurable way. This was demonstrated on multiple occasions as “next to the U.S., no country has been given more senior commands so far this century as Canada has, except, perhaps, Britain, which has more than twice as many soldiers, sailors and air personnel.”<sup>114</sup>

Canada's defence contributions are also demonstrated by its active role in various strategic decision-making processes and by its taking the lead in NATO initiatives.<sup>115</sup>

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<sup>114</sup> Matthew Fisher. “Canadians punch above their weight in international military command”, Canada.com, March 28, 2011. <http://o.canada.com/news/canadians-punch-above-their-weight-in-international-military-command>. Last consulted on December 16, 2016.

<sup>115</sup> “NATO's strategic concept and Canada's role in international defence cooperation report of the Standing Committee on National Defence.” Hon. Peter Kent, Chair, Standing Committee on National Defence, 2013.

## Annex A—Management Action Plan

### ADM(RS) Recommendation

1. It is recommended that Comd CJOC work with VCDS and C Prog to review and address CJOC HQ establishment deficiencies.

### Management Action

Military manning demand versus personnel availability, particularly for stressed trades, and civilian hiring continue to be challenges. CJOC has requested the following through the FY 2017/18 Multi-Year Establishment Plan and Business Plan processes:

- military personnel years to support Joint Targeting Spiral 2 and Joint Training Authority tasks; and
- civilian full-time equivalents (FTE) and salary wage envelope to continue the Ammo Apprenticeship program beyond FY 2017/18 when funding is expected to cease by ADM(HR-Civ).

**OPI:** Comd CJOC

**OCIs:** VCDS, CMP, ADM(HR-Civ)

**Target Date:** April 2019

### ADM(RS) Recommendation

2. It is recommended that Comd CJOC work with VCDS, CMP and ADM(HR-Civ) to address manning priorities and personnel shortages.

### Management Action

CJOC will undertake a baseline review of the HQ organization, potentially with the support of CMP/Director General Military Personnel Research and Analysis (request submitted in August 2016) to optimize HQ branch personnel allocations and workforce composition, based on the following:

- Comd CJOC priorities;
- current CJOC mandates;
- existing terms of reference CJOC staff; and
- expected operational tempo.

Workforce composition analysis will explore opportunities for military to civilian personnel conversion as well as Military Occupational Identification (MOSID) conversion. This analysis will be linked into the Defence Human Resources Strategy efforts led by VCDS to identify opportunities where military personnel years may be transitioned to civilian FTEs (and provided the associated FTE credits and salary wage envelope funding). The aim of the military/civilian conversion is to achieve the following:

- maintain personnel continuity in key positions; and

- provide military personnel year offsets for civilian FTEs that could better cover existing HQ military establishment position vacancies.

CJOC will also review positions on the establishment that cannot be filled by the Career Managers due to the health of the MOSIDs and propose to change these MOSIDs to those that will better fit CJOC needs and have a greater probability of being filled. This baseline review will take considerable effort and, on an already stressed HQ to command and sustain operations, will take some time.

**OPI:** Comd CJOC  
**OCIs:** VCDS, CMP, ADM(HR-Civ)  
**Target Date:** April 2020

**ADM(RS) Recommendation**

3. It is recommended that Comd CJOC rationalize the current Op IMPACT ATF and JTF HQs and establish the necessary direction to better coordinate future CJOC and JFACC operations planning.

**Management Action**

The initial duplication of capabilities between JTF-I and ATF-I staffs during the initial Op IMPACT deployment was primarily due to different views on the staff requirements for the mission between CJOC and the RCAF. Comd CJOC

With respect to the intelligence function at the operational level, it is important that the intelligence portion of the TO&E reflect the Commander’s intent and desired effects. The ability to do so implies that the intelligence architecture developed at the operational level must be inherently flexible and capable of supporting the mission as it evolves over time.

Developments in the Op IMPACT area of operations and additional tasks added to the Op IMPACT mandate, including training of allied ground forces missions, a Role 2B Hospital in Erbil, and a Ministerial Liaison Team in Baghdad, subsequently demonstrated that a complete JTF-I staff was necessary in addition to the ATF-I.

While CJOC has now reviewed and rationalized the TO&E of the ATF-I and JTF-I HQs to reduce redundancies and demands on stressed trades, the two HQs will not be amalgamated at this time. The CJOC decision to deploy two HQs recognized the requirement for flexibility and adaptability of deployed C2 capabilities such that, in this instance, as the mission evolved, the JTF-I HQ had the capacity to respond to and command the diverse force elements beyond that of just an ATF-centric mission.

CJOC will continue to review historical examples such as these to inform future staffing decisions of new missions and instances of changing mandates of the existing mission.

**OPI:** Comd CJOC  
**OCI:** JFACC  
**Target Date:** April 2018

### ADM(RS) Recommendation

4. It is recommended that the CAF continue to develop a robust, deployable C2IS capability  
||||| to enhance interoperability with OGDs.

### Management Action

The CAF is undertaking several initiatives to better address the interoperability requirements within CAF, with our allies, and with OGDs.

Currently, the Combined Communications and Electronics Board is actively pursuing interoperable C2IS information exchange services between the Five-Eyes national defence organizations. The information exchange services resulting from that effort have the potential to extend information services to some OGDs, noting that related Memoranda of Understanding, Service Level Agreements and resourcing are not in place and that much work will be required, with Shared Services Canada being an important element in the delivery of services to OGDs.

The Five-Eyes Chief Information Organization Forum is also exploring better ways of aligning their respective Information Management/Information Technology programmes to leverage procurement opportunities related to information and communications technology. The CAF also has regular meetings with NATO partners to discuss C2IS interoperability requirements, and the resulting agreements shape how the Canadian Deployed Mission Network is designed for both domestic and international operations.

Organizationally, in January 2016, the CDS appointed the COS (ADM(IM)) as the CAF J6 with responsibilities over Joint C2IS. The staffs responsible for cyber and C2IS capability development are now being reorganized from CFD to ADM(IM).

**OPI:** ADM(IM)  
**OCIs:** VCDS, CFD  
**Target Date:** July 2017

New governance is also being developed to address the interoperability requirements  
||||| This new governance will permit a more comprehensive examination of Army, Navy and Air Force C2IS procurement and integrate the development and delivery of new capabilities with the departmental Information Management/Information Technology programme where it is advantageous to do so. The Accountabilities, Responsibilities and Authorities related to that new role are currently being developed.

**OPI:** ADM(IM)  
**OCIs:** VCDS, CFD, Comd CJOC, CRCN, CCA, CRCAF, CFINTCOM, ADM(Mat)  
**Target Date:** September 2017

### **ADM(RS) Recommendation**

5. It is recommended that CJOC work with the SJS to develop well defined operational objectives and effects for each operation that support development of clearly defined PMR criteria during mission planning.

### **ADM(RS) Recommendation**

6. It is recommended that CJOC work with stakeholders to develop the required records, measures, metrics and other criteria required to assess achievement of operational objectives and effects and include a PMR in each mission's OPORD annex detailing its PMR requirements.

### **Management Action**

CJOC staff, in consultation with stakeholders, is in the process of creating a new performance measurement and reporting framework for CAF operations in conjunction with Departmental Results Framework (DRF) development. The new DRF, which is to replace the existing PAA and its associated Performance Measurement Framework, is scheduled for implementation in FY 2018/19. The operations-related framework, linked to the DRF, will encompass strategic, program and tactical/TF information and data gathering, analysis and reporting processes to inform and enable planning and performance related decision making at all levels, as well as furnish the operations related information required by Parliament and Canadians.

The concept for the new operations performance measurement framework and methodology, developed during FY 2016/17, will be evolved and refined until implementation in FY 2018/19.

Phase I: The first phase in development will be to review and validate operational objectives, effects and critical tasks for existing operations with appropriate departmental OPIs. In addition, sessions will be used to develop assessment criteria, performance indicators and associated metrics. In particular, performance indicators will be limited to the critical few that truly provide valuable information for decision-making and information-reporting purposes. A combination of quantitative and qualitative performance indicators will be necessary to provide the appropriate depth and breadth of analysis. As opportunities to access relevant data become available, performance measurement indicators will evolve and improve over time, making criteria and indicator development an iterative process.

**OPI:** Comd CJOC

**OCIs:** DOS SJS, CRCN, CCA, CRCAF, CMP, C Prog, ADM(RS)

**Target Date:** September 2018

Phase II: The second phase will be development of the TF reporting process, methodology and associated documentation/templates. TF commander tactical level reporting is planned beginning FY 2019/20.

**OPI:** Comd CJOC

**OCIs:** DOS SJS, CRCN, CCA, CRCAF, CMP, C Prog, ADM(RS)

**Target Date:** April 2019



||||| will provide enhanced persistent surveillance capabilities.

Persistent surveillance capabilities will continue to be provided largely by ||||| that will work in conjunction with the whole-of-government ||||| commencing in 2018.

**OPI:** CRCAF  
**OCIs:** CFD, CJOC, Comd CFINTCOM, ADM(IM)  
**Target Date:** June 2018

**ADM(RS) Recommendation**

8. It is recommended that the CAF examine minor missions and develop recommendations for GC consideration, as appropriate, |||||

**Management Action**

CJOC J3 conducts an annual mission review of all CJOC missions, including small missions such as ||||| It is recommended that in the future Comd CJOC share those mission reviews with DOS SJS and ADM(Pol). The GC directs CAF and CJOC to conduct operations. Comd CJOC does not have authority to cease any operations that have been directed by the GC. However, by sharing the CJOC annual mission reviews with DOS SJS and ADM(Pol), Comd CJOC may provide valuable mission assessment data to inform decision making by the GC on the future of CJOC operations.

**OPI:** Comd CJOC  
**OCIs:** DOS SJS, ADM(Pol)  
**Target Date:** April 2017

**ADM(RS) Recommendation**

9. It is recommended that the CAF continue to develop a robust Performance Measurement Framework to inform business decisions for both ongoing and future domestic and international operations.

**Management Action**

The operations-related framework, linked to the new DRF, will encompass strategic, program and tactical/TF information and data gathering, analysis and reporting processes to inform and enable planning and performance related decision-making at all levels, as well as furnish the operations-related information required by Parliament and Canadians.

**OPI:** Comd CJOC  
**OCIs:** DOS SJS, CRCN, CCA, CRCAF, C Prog, ADM(RS)  
**Target Date:** April 2020



**ADM(RS) Recommendation**

10. It is recommended that the CAF examine ||| smaller missions, or their support elements, to achieve greater efficiencies and economies while enhancing operational effectiveness.

**Management Action**

As articulated against Recommendation 8, CJOC J3 conducts an annual mission review of all CJOC missions, including ||| It is recommended that in the future Comd CJOC share those mission reviews with DOS SJS and ADM(Pol). The GC directs CAF and CJOC to conduct operations. Comd CJOC does not have authority to cease any operations that have been directed by the GC, including ||| However, by sharing the CJOC annual mission reviews with DOS SJS and ADM(Pol), Comd CJOC may provide valuable mission assessment data to inform decision making by the GC on the future of CJOC operations.

**OPI:** Comd CJOC

**OCIs:** DOS SJS, ADM(Pol)

**Target Date:** April 2017

## **Annex B—Evaluation Methodology and Limitations**

### **1.0 Methodology**

#### **1.1 Overview of Data Collection Methods**

The evaluation of the CAF Ops program considered multiple lines of evidence to assess the program's relevance and performance. The methodology established a consistent approach in the collection and analysis of data to help ensure the reliability of the evaluation process.

Quantitative and qualitative data collection methods were used and included: document review, financial data review and key informant interviews. Qualitative information was used to establish the program profile and context and to interpret the significance of numerical data assessed. Comparisons of both qualitative and quantitative assessments were used to validate the overall analysis and to develop the evaluation findings and recommendations.

#### **1.2 Details on Data Collection Methods**

##### **1.2.1 Document Review**

A review of program and related departmental documents was conducted in the initial phase of the evaluation to establish a general understanding of the CAF Ops program. This informed the scope of the evaluation and supported the creation of the logic model and evaluation questions. These documents included previous related evaluations and audits, including audits by the Office of the Auditor General, and other strategic documents. A comprehensive document review was subsequently undertaken to collect evidence against indicators for relevance and performance. Reviewed documents included GC policy documents, CAF strategic directives and guidance, including annual Force Posture and Readiness Directives, CAF operational directives, operations and contingency plans, program reports and assessments, business plans, departmental performance reports and CAF post-operations reports.

##### **1.2.2 Financial Data Review**

Financial data was reviewed to assess efficiency and economy of the program (i.e., sustained funding), trends in resource utilization and operational costs associated with the CAF Ops program, financial data from the Defence Resource Management Information System, business plans (CJOC's annual Operations Plans) and the CJOC comptroller's financial reports and departmental financial reports.

##### **1.2.3 Key Informant Interviews**

The team conducted interviews with the Deputy Comd CJOC, as well as the maritime and air component commanders. In addition, CJOC operations and readiness staffs were interviewed to obtain their assessment on whether the CAF Ops program ensured that RCN, CA and RCAF elements were properly trained, equipped and supported, and that they performed effectively in both domestic and international operations.

### 1.2.4 Data Analysis

Data from each of the sources was compiled against indicators for program relevance and performance identified in Annex D. The data was used to analyze the planning and conduct of operations and assess the CAF Ops program achievement of the immediate and intermediate outcomes. Analysis was made of resources consumed against the CAF operations conducted to assess efficiency and economy of the program. Trend analysis of resource usage was also used to assess input and output costs of the CAF Ops program, focusing primarily on personnel, maintenance, infrastructure and training resources and activities. Observed trends in resource utilization were contextualized using qualitative data to understand variances and observed trends.

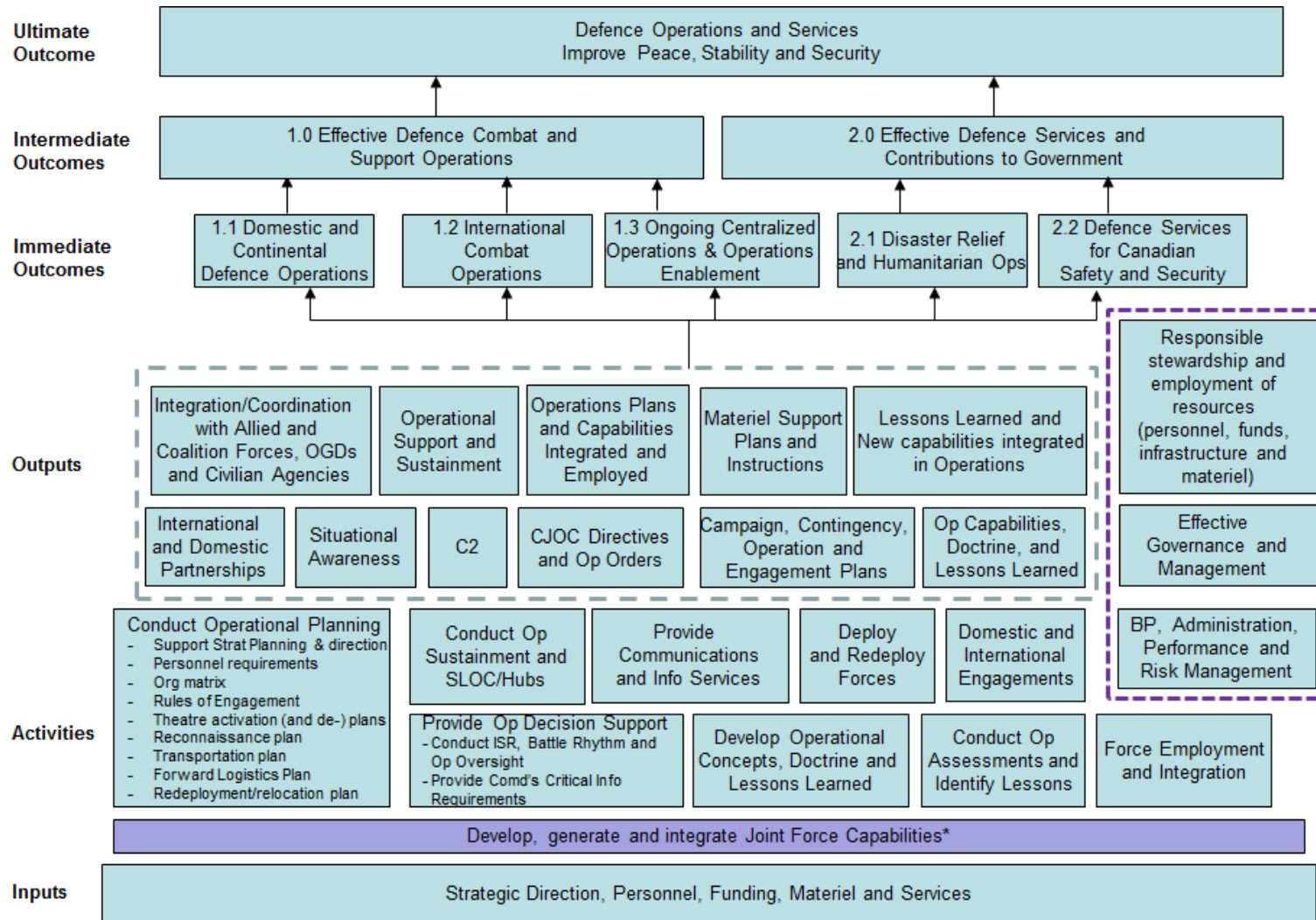
### 2.0 Limitations

With the extremely high operational tempo of the CJOC organization, the Commander preferred that draw against CJOC resources be minimized during the evaluation. This precluded the team from conducting site visits to the component and regional commanders' locations to conduct interviews. It further negated even a telephone interview with the regional (i.e., divisional/Army commanders).

Limitation	Mitigation Strategy
Possibility of interviewees providing biased information	A comparison was made between interview evidence and other sources (e.g., program documentation and financial records) to confirm fidelity of evidence, and these were weighted as appropriate based on the preponderance of other evidence.
Consistent costing data was not available to assess program efficiency and economy due to organizational realignment during the evaluation reporting period.	Trending data was based on periods where organizational alignment was consistent.
Financial data was inconsistently reported on in departmental databases over the evaluation period.	Challenges regarding consistency of financial data attribution were addressed through comparison and validation of financial data outputs with CJOC to ensure accuracy.

**Table B-1. Evaluation Limitations and Mitigation Strategies:** This table lists the limitations of the evaluation and the corresponding mitigation strategies.

### Annex C—Logic Model



\* Covered by a separate Readiness Evaluation.

Figure C-1. Logic Model for CAF Operations. This flowchart shows the relationship between the program’s main activities, outputs and expected outcomes.

### Annex D—Evaluation Matrix

Evaluation Matrix—Relevance				
Evaluation Issues/Questions	Measures/Indicators	Program Data	Document Review	Key Informant Interviews
1.1 Is there a continued need for CAF operations?	1.1.1 Evidence of past engagement of CAF operations	No	Yes	Yes
	1.1.2 Requirement for CAF operations in the FSE	Yes	Yes	yes
1.2 Does the CAF Ops program align with federal roles and responsibilities and those of the DND/CAF?	1.2.1 Alignment with Government acts, legislation and strategic direction	Yes	Yes	Yes
	1.2.2 The extent to which operations undertaken by the CAF are the responsibility of OGDs, other levels of government or the private sector	No	Yes	Yes
1.3 Does the CAF Ops program align with federal government priorities and Defence Strategic Outcomes?	1.3.1 Alignment with or inclusion of CAF operations in stated government priorities	Yes	Yes	No
	1.3.2 Alignment with or inclusion of CAF operations in DND/CAF priorities or strategic outcomes	Yes	Yes	No

**Table D-1. Evaluation Matrix—Relevance.** This table indicates the data collection methods used to assess the evaluation issues/questions for determining the CAF Ops program’s relevance.

<b>Evaluation Matrix—Performance: Achievement of Expected Outcomes (Effectiveness)</b>					
<b>Evaluation Issues/Questions</b>	<b>Measures/Indicators</b>	<b>Program Data</b>	<b>Document Review</b>	<b>Questionnaire</b>	<b>Key Informant Interviews</b>
<b>2.1 Immediate Outcome:</b> The CAF conducts operations (domestic and continental operations, international combat operations, ongoing centralized operations, operations enablement, DROs and HOs)	2.1.1 The CAF successfully plans operations.	No	Yes	Yes	Yes
	2.1.2 The CAF successfully prepares for operations.	No	Yes	Yes	Yes
	2.1.3 The CAF successfully deploys to operations.	No	Yes	Yes	Yes
	2.1.4 The CAF successfully supports/sustains operations.	No	Yes	Yes	Yes
	2.1.5 Operations are supported by C4ISR.	No	Yes	Yes	Yes
	2.1.6 The CAF successfully redeploys from operations.	No	Yes	No	Yes
<b>2.2 Immediate Outcome:</b> The CAF provides defence services for Canadian safety and security (DROs and HOs)	2.2.1 CAF liaison established with federal, provincial/territorial and local civilian authorities	No	Yes	No	Yes
	2.2.2 CONPLANs established for major emergencies and contingencies	No	Yes	Yes	Yes
	2.2.3 The CAF provided timely response to RFAs.	No	Yes	Yes	Yes
	2.2.4 The CAF provided requested military capabilities in support of OGDs' / civil authorities' operations.	No	Yes	No	Yes

<b>2.3 Intermediate Outcome:</b> The CAF achieved its operational objectives and effects in combat and support operations and provision of Defence Services and Contributions to Government	2.3.1 The CAF successfully exercised sovereignty and control of Canadian territory and air and maritime approaches.	No	Yes	Yes	Yes
	2.3.2 The CAF provided an effective response to DROs and HOs in collaboration with OGDs.	No	Yes	No	Yes
	2.3.3 The CAF effectively supported federal security operations.	No	Yes	No	Yes
	2.3.4 The CAF effectively conducted ongoing defence operations in cooperation with the US.	No	Yes	Yes	Yes
	2.3.5 The CAF achieved operational objectives and effects as prescribed in mission directives when deployed to international operations.	No	Yes	Yes	Yes
	2.3.6 The CAF effectively provided defence services and contributions to OGDs and agencies.	No	Yes	No	Yes

**Table D-2. Evaluation Matrix—Performance (Effectiveness).** This table indicates the data collection methods used to assess the evaluation issues/questions for determining the CAF Ops program’s performance in terms of achievement of outcomes (effectiveness).

<b>Evaluation Matrix—Performance: Demonstration of Efficiency and Economy</b>				
<b>Evaluation Issues/Questions</b>	<b>Measures/Indicators</b>	<b>Program Administrative and Financial Data</b>	<b>Document Review / Benchmarking</b>	<b>Key Informant Interviews</b>
3.1 Has the CAF used assigned resources for operations efficiently?	3.1.1 Trends in operations' costs	Yes	Yes	Yes
	3.1.2 Trends in sustainment costs over five fiscal years	Yes	Yes	Yes
	3.1.3 Trends in costs of governance over five fiscal years	Yes	Yes	Yes
	3.1.4 Use of business information to optimize resource efficiency	Yes	Yes	Yes
3.2 Has the CAF used assigned resources for operations economically?	3.2.1 Efficient and economic use of CAF resources in operations	Yes	Yes	Yes
3.3 The relative efficiency and economy of the CAF compared with allied militaries	3.3.1 Cost per military member / defence expenditures per military personnel; 3.3.2 Relative O&M expenditures; 3.3.3 Total number of personnel deployed to operations/missions; 3.3.4 Distribution of defence expenditures per input resources (equipment, personnel, infrastructure, other); 3.3.5 Canada's relative contribution to international peace and security.	Yes	Yes	No

**Table D-3. Evaluation Matrix—Performance (Efficiency and Economy).** This table indicates the data collection methods used to assess the evaluation issues/questions for determining the CAF Ops program's performance in terms of efficiency and economy.