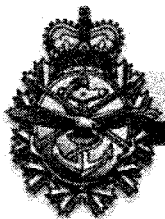


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## DND/CAF Strategic Issue Papers

### Table of Contents

<u>Tab</u>	<u>Title</u>
1.	Strategic Issues Overview
2.	Strategic Defence Policy
3.	National Security and Defence
4.	Funding for National Defence
5.	Arctic Policy
6.	Cyber
7.	Space
8.	Ballistic Missile Defence
9.	Global Engagement and Alliances
10.	Flashpoints
11.	Asia-Pacific
12.	Defence Procurement
13.	CF-18 Replacement Project
14.	Maritime Capabilities
15.	Military Personnel





**DND/CAF STRATEGIC ISSUES OVERVIEW**

The most significant issues currently facing the Department of National Defence (DND) and the Canadian Armed Forces (CAF) span a wide range of subjects reflective of the complexity of the defence program: from broad defence policy questions to the care of and support for military personnel, and from CAF operations and defence engagement overseas to defence investment and materiel acquisition. These issues will demand close consideration by the Government of Canada in the coming months and many will require critical decisions to move forward.

\* \* \*

*Shifts in Geopolitical Trends and the Security Environment*

Significant geopolitical, technological, and economic developments in recent years have altered the context in which the Department and the CAF perform their mandate and strive to meet Canada's evolving defence and security needs. Shifts in the balance of power are changing the global landscape with implications that are not always clear. Traditional spheres of influence are being reshaped and established partnerships challenged. Amid this geopolitical change, the international security environment is as volatile and unpredictable as ever. Regional flashpoints in Africa, the Middle East and Asia continue to threaten global stability. Notably, 2014 witnessed the outbreak of two major conflicts that have mobilized the international community.

unrest in eastern Ukraine.

Second, the Islamic State of Iraq and Syria (ISIS) swept through large parts of Iraq and Syria in 2014. Its expansion was facilitated by a decade of civil wars in Iraq and Syria. In Syria, the civil war has metastasized into a regional conflict involving several state and non-state actors.

The CAF have been engaged in responding to both crises, through efforts to bolster the readiness and responsiveness of NATO, as well as through coalition operations in Iraq and Syria. The CAF

The future of these two missions will be an important





defence policy issue to be considered in the year ahead.

From a defence perspective, changing global dynamics and international security challenges

That said, the shifting geopolitical landscape also calls for the establishment and fostering of partnerships with emerging powers. These new partnerships, require careful balancing of Canada's security, economic and values-based interests. In any case, National Defence employs a broad spectrum of tools in support of its global engagement agenda, including defence cooperation agreements, high-level meetings, joint military exercises, and defence capacity building activities. These efforts enable the execution of the Defence mandate while promoting broader Government national security, foreign policy and trade priorities.

From a broader government perspective, the multi-dimensional nature of today's security environment is challenging the traditional Canadian distinction between national security and defence, and is demanding an ever more comprehensive, whole-of-government approach to security. Against this backdrop, National Defence will have to further adapt, consistent with its mandate and in concert with other national security partners, to meet evolving demands.

This is the case, for example, in the Arctic where National Defence is a leader in meeting whole-of-government objectives. As activity and geopolitical interest in the Arctic grow, the demand for CAF resources will increase, particularly with respect to presence in the region, safety and security operations, surveillance and control, and support to whole-of-government priorities. From an international perspective, Canada has always strongly believed that the Arctic requires collaboration, not confrontation, and should remain a region of peace.

Asia is another region demanding a consistent and focused whole-of-government approach. It is at the core of changing global dynamics as it sees its economic, geopolitical and military weight grow steadily. The United States' Asia-Pacific Strategy, announced in 2012 and formalized as the "Asia-Pacific Rebalance", testifies to the significance of Asia.



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**SECRET (CEO)**

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### *Technological Change and Emerging Domains*

As a backdrop to these geopolitical shifts, scientific and technological innovation continues unabated, posing opportunities and challenges for defence and security establishments. Specifically, space and cyberspace have become central to the economic prosperity and everyday life of developed states. Modern armed forces also rely on space and cyber capabilities to more efficiently operate crucial military platforms, including for surveillance, communications and search and rescue.

and threats in both domains have been growing in plurality and sophistication.

Moreover, environmental factors, such as magnetic storms, can also disrupt commercial or military services, and with over 22,000 trackable objects in space, there is also an increasing risk of collision between satellites and other orbiting debris. On the cyber side, Government, critical infrastructure and private sector systems have been and continue to be targeted by cyber espionage and disruptive actions,

National Defence has enhanced its cyber and space programs in recent years.

Technological innovation when it comes to its role as an enabler for the proliferation of weapons of mass destruction.

As a result, the strategic importance of ballistic missile defence (BMD) has increased in recent years.



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In accordance with its 2005 decision, Canada does not participate in the US BMD system for the defence of North America. Canada, however, has been involved in discussions on the development of the NATO BMD system for the protection of NATO *European* territory, populations, and forces.

### *Defence Affordability*

Adding to this complex environment, economic uncertainty continues as developed countries struggle with debt and demographics, while emerging economies work to overcome systemic deficiencies, including corruption and inadequate regulatory regimes. The global financial crisis that erupted in 2008 had severe consequences for western economies, forcing many governments to cut their defence expenditures, and reducing appetite for international engagement.

In Canada, the defence budget represents the Government's largest discretionary spending among federal departments. The current National Defence budget is \$19.5 billion. Defence funding has grown in nominal terms in recent years, in part due to an increase in the automatic annual growth of the Defence budget (referred to as the 'Defence Escalator') and through the 'Accrual Envelope' (funds earmarked in the fiscal framework for the amortized cost of major new equipment capabilities). During the same timeframe, however, Defence faced a series of budget-balancing initiatives, including funding reductions of approximately \$2.1 billion.

### *Strategic Direction*

These geopolitical, technological and economic shifts significantly impact National Defence. Indeed, since the last defence policy statement was released in 2008, the strategic context has shifted considerably.



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## *Equipping the CAF, Managing its Personnel*

As highlighted in the Government's platform, the CAF's maritime capabilities will also require urgent attention.

The replacement of the CF-18s and renewal of the RCN's capabilities are the most prominent undertakings of Canada's largest military recapitalization effort since the Korean War. While the majority of acquisitions are less complex and move through the procurement process without any issue, these latter initiatives illustrate some of the challenges of defence procurement for the Government of Canada.

National Defence, in partnership with all members of the defence procurement system, is addressing these challenges through a number of initiatives, including the Defence Procurement Strategy, the National Shipbuilding Procurement Strategy and internal measures, including Defence Renewal. While these initiatives are still in early phases of implementation, several upcoming reviews will help determine whether they are having a positive impact on the procurement process and will contribute to addressing the commitment to further improving defence acquisition.

Equipment, however, is but one part of the National Defence equation. The men and women in uniform are at the heart of the CAF's successes and their important service demands careful and continuous support. Military personnel management touches on virtually every component of military service. This includes recruitment and selection, planning for relocations across Canada and around the world, and offering



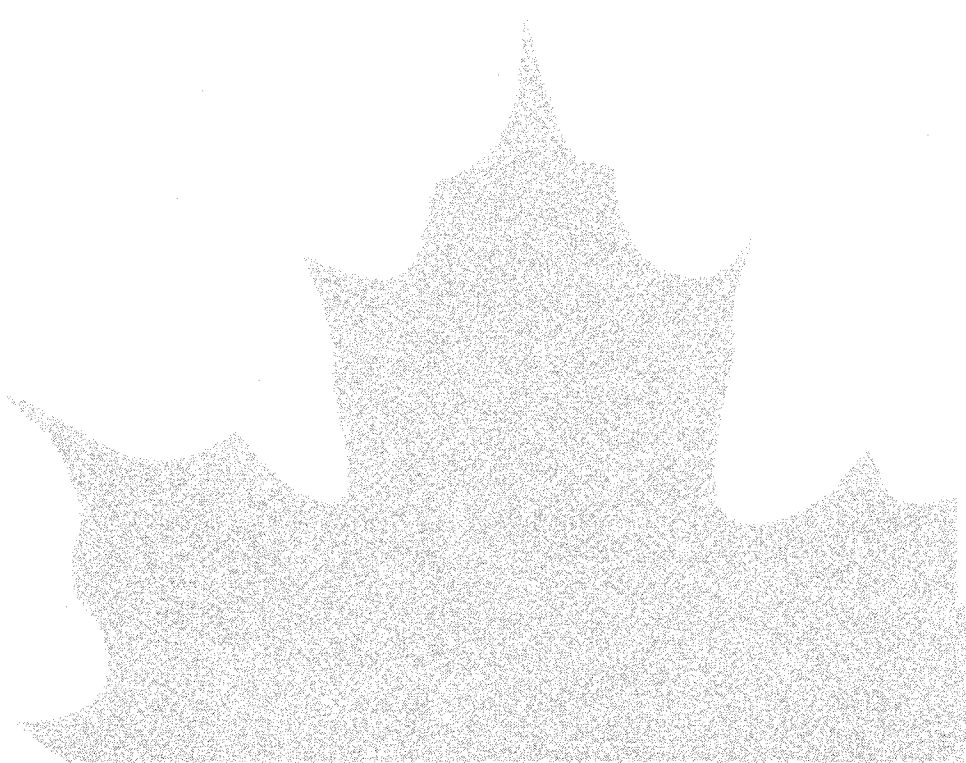
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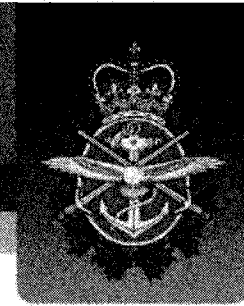
training and education programs that provide the skills required to fulfill the CAF's mandate. The CAF also look after members' physical, psychological, and spiritual well-being, negotiate rates of pay, and provide compensation and benefits that are commensurate to service. They assist, as well, with transition out of the military and access to Veterans' services, a key issue highlighted in the Government's platform. National Defence effectively manages this complex and diverse array of personnel issues, directly supporting the CAF's ability to maintain the readiness it requires to fulfill its roles, missions and tasks. While challenges do arise given the breadth and depth of the subject matter, the CAF remain flexible and ready to respond to ensure that their members are well supported throughout their careers.

\* \* \*

The strategic issues raised and explored above can be expected to garner significant attention in the coming months and years – within National Defence, across government and in the Canadian public – and many will require critical decisions that will affect the future of the Department and the CAF for decades to come.



National Défense  
Defence nationale



# Strategic Defence Policy

Canada

SECRET CEO



# Outline

- **Platform Commitments**
- **The Case for Renewed Defence Policy**
- **Defence in Context**
- **Canadian Armed Forces of Today**
- **Enduring Roles and Capabilities**
- **What's Changed?**
  - Shifts in the Geopolitical Trends and the Security Environment
  - Emerging Domains
  - Affordability
- **The Way Forward**



# Platform Commitments

## ***A New plan to Strengthen the Economy and Create Jobs with Navy Investment (Defence-specific document, 20 Sep 2015)***

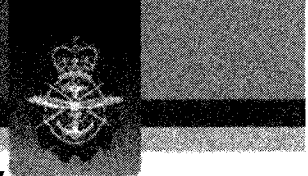
- “The *Canada First* Defence Strategy is underfunded and out of date. We will immediately begin an **open and transparent review process to create a new Defence White Paper...**”
- “A Liberal government will maintain current National Defence spending levels, including current planned increases.”

## ***A New Plan for a Strong Middle Class (Overall platform, 5 Oct 2015)***

- “We will immediately begin an **open and transparent review process of existing defence capabilities**, with the goal of delivering a more effective, better-equipped military. The *Canada First* Defence Strategy... is underfunded and out of date. We will review current programs and capabilities, and lay out a realistic plan to strengthen Canada’s Armed Forces.”
- “We will develop the Canadian Armed Forces into an agile, responsive, and well-equipped military force that can effectively defend Canada and North America; provide support during natural disasters, humanitarian support missions, and peace operations; and offer international deterrence and combat capability.”
- “We will maintain current National Defence spending levels, including current planned increases.”

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# The Case for Renewed Defence Policy

SECRET CEO

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# Defence in Context

*What drives defence policy?*

## ■ **Government of Canada Interests and Objectives**

- Military a unique instrument of national power used to advance national interests and demonstrate leadership in the world
- Defence policy guided by foreign policy priorities and national security objectives
- CAF contribute to Canadian prosperity by promoting global stability, contributing to security of trade routes, and directly supporting Canadian industry through procurement
- CAF must be flexible in response to government direction

## ■ **Canada's Role in the World**

- As a G7 nation, member of NATO and the UN, and close partner of the US, Canada has certain responsibilities and treaty obligations, and is expected to make contributions to global peace and security

## ■ **Geopolitical Trends and the Security Environment**

- Uncertain and evolving security environment requires the CAF to be prepared to respond to a full spectrum of security challenges

## ■ **Fiscal Context**

- Availability of funding enables/constraints CAF activity; objectives must be aligned to resources





# Canadian Armed Forces of Today

- **Modern, multi-role, combat capable force**
  - Employable across the full spectrum of operations
  - Dependent on allies or coalitions for most higher end deployments
- **Able to deploy quickly to crises at home and abroad**
  - Vast Canadian geography requires similar level of mobility for domestic and international operations
- **Interoperable with allies**
  - Trusted, highly valued partner
- **Able to deploy as part of a comprehensive, whole-of-government effort**
- **Engaged in defence diplomacy around the world to support defence objectives and broader whole-of-government priorities**

**Authorized Force Size:**

- **68,000 Regular Force**
- **28,500 Primary Reserve Force**



# Enduring CAF Roles and Capabilities

- **Role 1: Defend Canada**
  - Protection of Canadian sovereignty (daily domestic operations, including presence in the Arctic)
  - Support to civil authorities (e.g., disaster relief, security operations)
  - National Defence Act requires CAF to aid civil power when situation exceeds civil power's ability to address
  - Counter-terrorism
  
- **The CAF must provide continuous all-domain awareness across Canada (surveillance and monitoring)**
  
- **The CAF is poised to deliver a timely and effective response to crises, including aeronautical and maritime search and rescue**
  
- **CAF's domestic activities undertaken in context of broader whole-of-government efforts to ensure safety and security of Canada**

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## Enduring CAF Roles and Capabilities

- **Role 2: Defend North America with United States**
  - Natural extension of the domestic role
  - Importance of NORAD (including treaty obligation to defend North America)
  - Combined Defence Plan, Civil Assistance Plan
- **Through NORAD, the CAF provides aerospace warning and control and maritime warning (eyes and ears) and maintains the ability to respond to airborne threats**
- **Together with the US military, the CAF is also poised to address threats abroad before they reach North America (e.g., capacity building and counter-narcotics operations in the Caribbean; counter-terrorism efforts in the Middle East and Africa)**

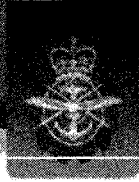
**Most extensive defence relationship in history:**

**More than 80 treaty-level agreements, over 250 MOUs, more than 700 CAF members on exchange in the US, and 145 bilateral fora on defence issues**



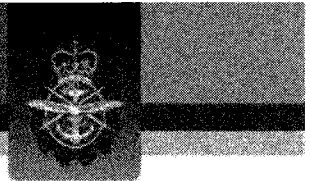
## Enduring CAF Roles and Capabilities

- **Role 3: Contribute to International Peace and Security**
  - North Atlantic Treaty: commits Canada to the collective self-defence of NATO members
  - Opportunity to project Canadian leadership, advance Canadian interests and objectives, and contribute to international stability
  - CAF able to rapidly deploy and seamlessly integrate into coalition environment, including in a leadership role
  
- **The CAF is capable of operating across the full spectrum, from stability to combat operations**
  - NATO Assurance measures
  - Support to development assistance
  - Humanitarian Assistance and Disaster Relief (e.g., Haiti, Philippines)
  - Modern Peace Support Operations (e.g., UN Missions in Africa, Middle East)
  - Capacity building
  - Combat (e.g., NATO operations in Kosovo, Afghanistan, Libya; Iraq/Syria)
  - Counter-Terrorism (domestic and international)
  
- **Potential consequences of inaction (e.g., impact on security and prosperity)**



## What's Changed?

- **Since last policy statement was released (2008), the strategic context has evolved considerably:**
  - Shifts in geopolitical trends and the security environment: Shifting balance of power and challenges to global governance; Conventional threats have evolved while asymmetric threats continue to gain complexity and rise of ISIS in Iraq/Syria)
  - Emerging domains: space and cyber domains priorities and were not addressed in last policy statement
  - Affordability: Impact of economic downturn and deficit reduction efforts; current reference levels create an affordability challenge for Defence

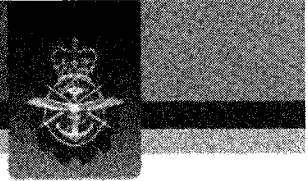


## Shifts in Geopolitical Trends and the Security Environment (1/2)

### ■ Geopolitical Trends

- Shifting balance of global power driven by economics and demographics likely to pose challenges to global governance
- Other allies already shifting focus
- 
- Canada has an interest in engaging emerging powers, shaping evolving global governance; role for defence?

### ■ Traditional Threats



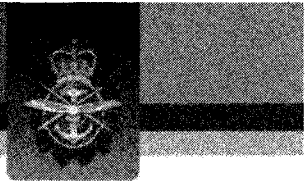
## Shifts in Geopolitical Trends and the Security Environment (2/2)

### ■ Unconventional Challenges

- Terrorism in ungoverned spaces impacts Canadian security; CAF actively engaged in fight against ISIS –
- Evolution of UN “peacekeeping;” and new missions are complex and multidimensional (key focus is protection of civilians)
- Vulnerability of the global commons potential for non-state and state actors to achieve damaging effects with relatively little investment
- Evolution of hybrid warfare and proliferation of advanced technology provide new tactics and capabilities to both state and non-state actors

### ■ Domestic Environment

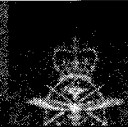
- 
- Increasing severity/frequency of natural disasters requiring CAF response
-



# Emerging Domains

- Canadian allies have made significant strides in developing space and cyber capabilities
- Space and cyberspace have become fundamentally important to Canadian prosperity and society, and for the conduct of military operations
- 
- Last policy statement did not address these domains;
- 
-





# Affordability

- **Last policy statement envisioned 20 years of sustained, predictable investment (from \$18 billion in 2008/2009 to a projected \$30 billion in 2027/2028)**

## 2014 Comparative Defence Spending

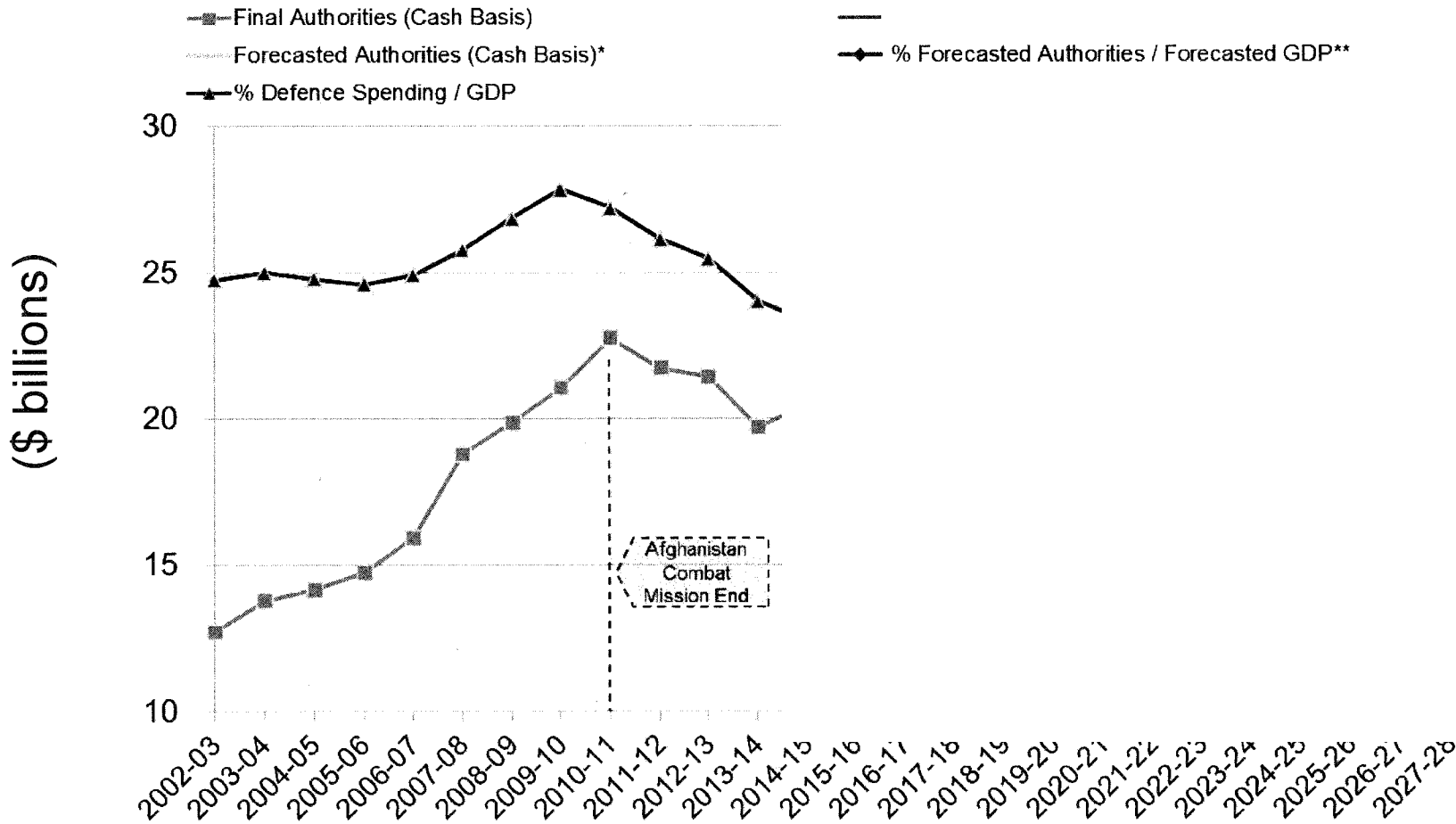
- **Canada:** \$17.5B (1% /GDP)
- **Australia:** \$25.4B (1.8% /GDP)
- **UK:** \$60.4B (2.2% /GDP)
- **China:** \$216.4B (2.06% /GDP)
- **Russia:** \$84.5B (4.5% /GDP)

\*NATO aspirational guideline encourages Allies to maintain defence expenditures at a minimum 2% of GDP. All figures are constant 2011 USD.

- Strategic Review, Deficit Reduction Action Plan resulted in reduced defence spending, cuts to baseline budget; the current National Defence budget is \$19.5 billion
- Defence-specific inflation notably higher than the defence budget escalator, eroding purchasing power; technological advances also introduce increased costs
- - Maintenance of baseline defence capability requires substantial resources (e.g., personnel costs, aging infrastructure)
  - 
  -
- **Government faces significant decisions in managing defence resources to ensure sustainability of defence program, position military to meet future challenges**



# Defence Funding



\* Forecasted Authorities includes

\*\* Forecasted GDP (Budget 2015) is as follows:

**SECRET CEO**



# The Way Forward

- These questions will be addressed in a separate briefing



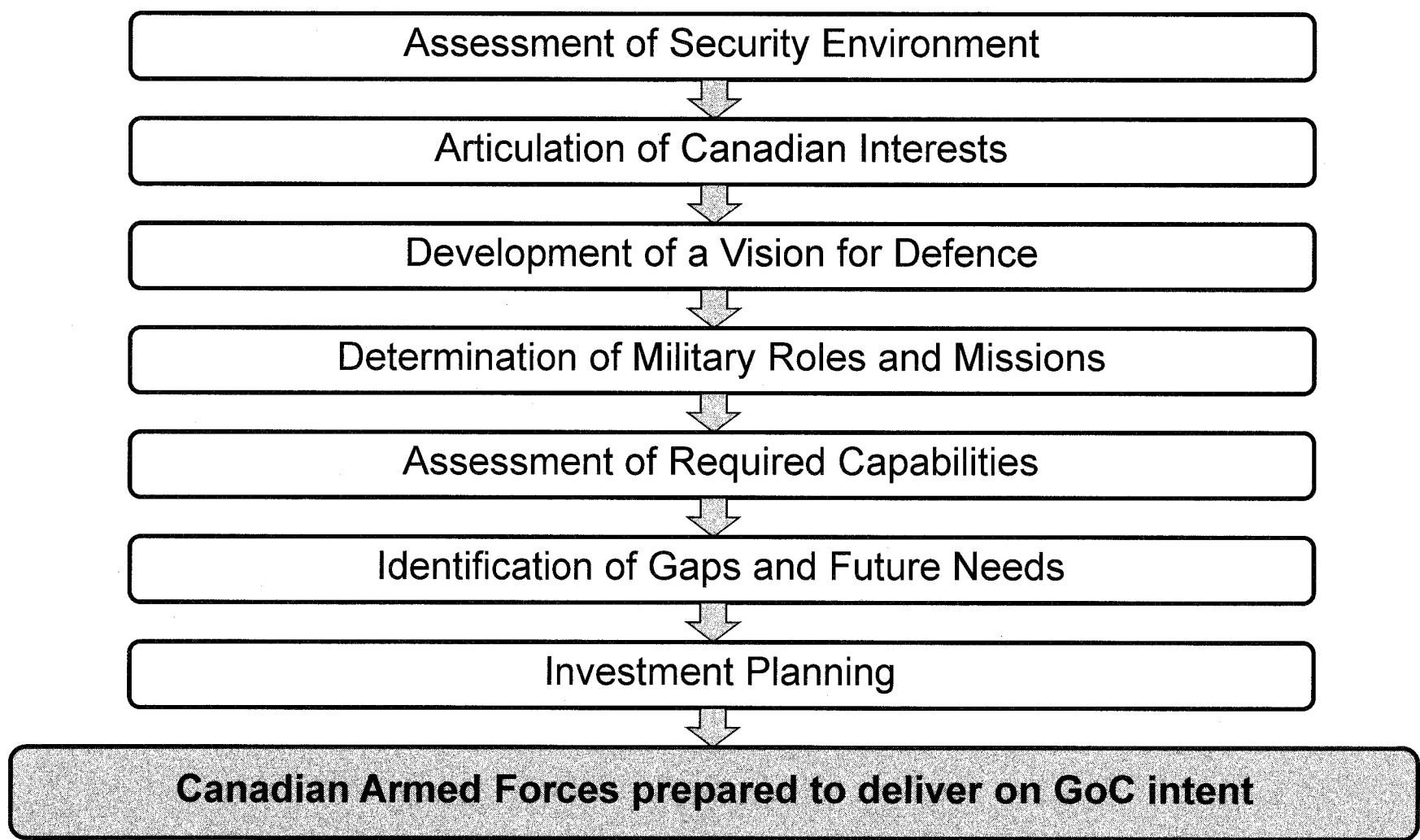
# DISCUSSION

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# Annex A: Defence Policy Development Model





# Annex B: Defence Policy Historical Themes

	1994	2005	2008
<b>VISION</b>	Multi-purpose, combat capable	Professional, flexible, combat capable,	First class, modern military; multi-role, combat capable
<b>ROLES</b>	Protect Canada; Can-US Defence Cooperation; Contribute to Intnt'l Security  <i>Emphasis on multilateralism</i>	Protect Canada; Can-US Defence Cooperation; Contribute to Intnt'l Security  <i>Link between domestic and international stability; emphasis on failing states</i>	Defend Canada; Defend North America with US; Contribute to Intnt'l Peace and Security  <i>Emphasis on Canada</i>
<b>COMMITMENTS</b>	HQ reductions; cuts to planned acquisitions; preference for off the shelf technology; personnel reductions	Force expansion; military transformation; modernization of equipment; new equipment acquisitions; WOG; capacity building and defence diplomacy	Growth in personnel; large scale equipment recapitalization; investments in readiness and infrastructure; leveraging Canadian industry
<b>BUDGET</b>	Budget reduction	Budget growth	Budget growth



## ISSUE PAPER: NATIONAL SECURITY & THE ROLE OF DEFENCE

### HIGHLIGHTS

- The multi-dimensional nature of today's security environment is challenging the traditional Canadian distinction between national security and defence, and is demanding an ever more comprehensive, whole-of-government approach to security. In that context, there are already many examples of how federal departments and agencies, including DND/CAF, are working together in the national security domain, through intelligence and information sharing, operational collaboration, and policy development.
- 
- The Government, in its platform commitments, acknowledged the importance of national security to Canada, committing to, *inter alia*, establish stronger Parliamentary oversight, introduce new legislation, and increase certain operational capabilities, including for urban and maritime search and rescue.
- Against this backdrop, DND/CAF – which has always played an important, albeit circumscribed, role in national security – will have to further adapt, consistent with its mandate and in concert with other national security partners, to meet evolving demands. Looking forward, DND/CAF will continue to build on the whole-of-government expertise that we have developed to date, to support further enhancements to interdepartmental information-sharing, operational collaboration and policy guidance.
- However, to ensure that we are fully leveraging the different strengths and capabilities housed across government, and that we are all addressing the most pressing threats to the security of Canada in a prioritized and deliberate way, the
- 





## CONTEXT

### Why does it Matter?

In Canadian parlance, the term “national security” has traditionally been used to denote domestic security concerns (e.g. domestic terrorism, emergency preparedness, etc.), as distinct from national defence. To some degree, this distinction has informed the organizational boundaries of Public Safety and other domestically-oriented security agencies, as well as the Department of National Defence and the Canadian Armed Forces (DND/CAF). That said, there is no official Government of Canada definition of the term *national security*, nor is there a statutory definition of the national defence mandate. Broadly speaking, this has afforded the government with a critical degree of operational flexibility, and over time, government decisions and operational experiences have led to a better understanding of the Defence role in national security.

First and foremost, the CAF have a fundamental responsibility towards the defence of Canada, which is inextricably linked with the concept of national security. Further to that, the CAF work closely with their American counterparts in the defence of the continent. As such, key CAF

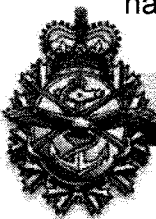
activities associated with national security include conducting daily domestic and continental operations; providing surveillance of Canada’s territory and air and maritime approaches, including in the Arctic; and collecting intelligence and providing assessments on military threats to Canada.

#### ***DND/CAF Contributions to National Security***

- Conduct daily domestic and continental operations;
- Provide surveillance of Canada’s territory and air and maritime approaches, including in the Arctic;
- Collect intelligence and provide assessments on military threats to Canada;
- Contribute to search-and-rescue services in Canada;
- Provide support to major international events in Canada;
- Respond to major terrorist attacks;
- Assist civil authorities in responding to a wide range of other threats, including CBRN incidents; and
- Lead and/or conduct military operations abroad against transnational threats to Canada.

Beyond these “hard defence” roles, however, the CAF also have primary responsibility for aeronautical and maritime search-and-rescue services in Canada, and

going forward, DND/CAF will consider how to best support the Government’s intent to enhance Canadian search-and-rescue services more broadly. The CAF also provide support to major international events in Canada; respond to major terrorist attacks; and assist civil authorities in responding to a wide range of other threats, including chemical, biological, radiological, nuclear and explosives (CBRN-E) incidents. Moreover, CAF support to civilian authorities can extend across the border, through the *Canada-US Civil Assistance Plan*, which facilitates the movement of military members from one nation to support the armed forces of the other nation during a civil emergency (such as





floods, forest fires, or a terrorist attack), once government authorities have agreed upon an appropriate response.

In addition, the Governor in Council or the Minister may authorize the CAF to perform any duty involving public service. In certain circumstances, this could include assistance to law enforcement agencies. Indeed, it is important to note that there are limitations around DND/CAF activities. In general terms, when it comes to the collection of defence intelligence, there must be a clear nexus between the nature and scope of the activity and Cabinet authorized military missions. The same principle would apply where the CAF would want to get involved directly in, and not simply act in support of, matters of national security. In the specific context of assistance to other Canadian government entities, CAF operations must be requested by, and rely upon, the mandate and authority of the supported entity and be subject to the same legal constraints as that of the supported entity.

Beyond the more domestically-oriented activities listed above, there is no doubt that CAF operations abroad against transnational threats also have a profound role in bolstering Canadian security. This is increasingly the case, as today's security threats are often multi-dimensional, diffuse and borderless, while the Canadian population is evermore mobile, networked and open. Similarly, the roles and responsibilities of security agencies in Canada are more frequently converging, with contemporary threats like terrorism, cyber attacks and weapons of mass destruction (WMD) proliferation, transcending our traditional lines of activity. In fact, at least 17 federal departments and agencies have some sort of responsibility for national security today (see **Annex A** for a detailed list).

The current battle against the Islamic State of Iraq and Syria (ISIS) is a case in point. On one hand, this is a battle being fought by military forces over territory in a highly strategic part of the world, but it has generated concurrent concerns around the intent of ISIS and other violent extremist groups to foment radical views and recruit supporters from around the globe, including from within Canada. This issue thus engages DND/CAF, but also intelligence agencies, law enforcement, immigration authorities and other agencies concerned about ISIS' reach and influence within our domestic terrain. As another example, the proliferation of WMD remains very much the purview of traditional agents of statecraft, as recent negotiations in Vienna over the Iranian nuclear program clearly demonstrated. However, combating the pervasive and sophisticated nature of proliferation networks also draws on customs and border officials, intelligence personnel, police officers, immigration authorities, Canadian industry, and others. The risks we face in cyberspace and outerspace – both within Canadian government and across society – further illustrate the cross-cutting nature of security threats today, raising important questions about the roles of various departments and agencies, and the Government itself, in protecting against those threats.

These trends demand a multi-faceted, whole-of-government response to security that also reflect key differences in mandates. DND/CAF and the rest of the national security community have come a long way in recent years to offer such a synchronized





approach, but additional efforts will continue to be needed. Going forward, the Government will undoubtedly be confronted with new challenges, without precedent, where choices will need to be made about where and how to engage. To be well-positioned for these future scenarios, DND/CAF must continue to work with other national security agencies to ensure that our activities are mutually informed and mutually reinforcing, and that – more broadly – we pursue a comprehensive approach to the national security agenda.

Approach to Date

The interdepartmental security community has already found a multitude of ways – both multi-purpose and tailored, bilateral and multilateral – to partner together. These collaborative efforts offer DND/CAF many avenues to inform and contribute to broader national security objectives, and conversely, to take advantage of the resources available elsewhere in government. Broadly speaking, these collaborative efforts can be conceptualized in three categories: (1) information/intelligence sharing and consultation, (2) operational collaboration, and (3) policy coordination.

A range of information/intelligence sharing and consultation mechanisms have been established to help improve communication channels across the national security community. For example, DND/CAF maintains a Security Intelligence Liaison Program (SILP) with police and security intelligence agencies, to provide early warning of potential threats against the security of DND/CAF, and to support the preparation of DND/CAF for potential requests for assistance from other government departments and agencies. As another example, the Marine Security Operations Centres (MSOCs) and the Integrated Terrorism Assessment Centre (ITAC) both employ staff from across the federal government in an effort to develop a more comprehensive security picture for Canada. There are also many examples of more case-driven or thematic consultations that happen at all levels of government. For example, export licensing officials at DFATD regularly consult DND (and other agencies as required), to ensure that any potential security implications are identified and taken into consideration when assessing applications for the export of dual-use, sensitive or military-grade technology. Similar security consultations are taking place in the context of foreign investment reviews, under the *Investment Canada Act*. In addition, a wide array of more senior-level fora have been established in recent years to encourage information sharing, facilitate case management, and ensure ongoing dialogue on key national security themes, such as ADM (Ops), the Deputy Ministers' Intelligence Assessment (DMIA) committee, and the Deputy Ministers' National Security Committee (DMNSC).

Beyond information sharing and consultation, DND/CAF and other federal security agencies are also able to take advantage of each other's operational resources. Indeed, the CAF can be called upon to provide assistance to other federal departments and agencies and/or provincial authorities, typically as

**Security at the Vancouver Olympics**

While the Vancouver 2010 Integrated Security Unit was led by the RCMP, the CAF, for its part, deployed some 4,500 soldiers in support of the Games.





a force of last resort. For instance, in domestic operations, CAF assistance may be requested by civilian authorities to assist in an emergency, such as a CBRN-E incident or a natural disaster, or to support major events, such as the Vancouver Olympics or the G8/G20 meetings.

In the context of international operations, the interdepartmental community has made huge strides in whole-of-government collaboration over the past decade, flowing in particular from the complex demands of the Afghanistan mission. Over the course of that mission, dedicated coordination mechanisms were established at all levels, from Minister- and Deputy Minister-level committees, to working-level task forces, to the Provincial Reconstruction Teams that stood as the face of the whole-of-government effort on the ground. More recently,

Interdepartmental collaboration is also happening in Canada's international capacity-building efforts. For example, CANSOFCOM runs a number of capacity-building programs around the world funded by DFATD's Counter-Terrorism Capacity Building Program, Anti-Crime Capacity Building Program, and Global Partnership Program.

At the strategic level, national policies have been developed on a number of cross-cutting national security issues, to establish a common vision, enumerate core objectives, and delineate the roles of the relevant departments and agencies. For instance, Canada's *Cyber Security Strategy* assigns supporting roles to federal organizations, including DND/CAF, which must protect its own networks, work with federal partners to identify threats and possible responses, and work with allied militaries to develop best practices and policy and legal frameworks for military aspects of cyber security. Similarly, Canada's *Counter-Terrorism Strategy* acknowledges that "working through partnerships is central to the success of the strategy," and explicitly identifies the DND/CAF role in the detection of and response to terrorist threats. For DND/CAF's part, the *Canada First Defence Strategy* acknowledges the critical role of the CAF in ensuring the security of Canadian citizens and exercising Canadian sovereignty through domestic and continental operations, while also recognizing that the CAF's efforts in tackling threats abroad are an equally important contribution to the protection of Canada.

## CONSIDERATIONS

The above examples illustrate the collaborative nature of national security today, and





the critical role of Defence within that. Through past experience and with a network of coordination mechanisms in place, DND has become deeply integrated into the national security architecture in such a way that reflects the different organizational mandates across government, while at the same time allowing for an effective and flexible response to current security threats.

That said, today's multidimensional threat environment continues to test and stretch the Canadian national security architecture. For one, it is causing the lines of activity of various departments and agencies to more closely converge, posing new questions about which security lever to use in a given scenario. In other words, as security

challenges increasingly defy organizational boundaries, and as departments and agencies work to match their capabilities to address these threats, security activities across government will become increasingly intertwined. For example, new threat disruption authorities were recently granted to CSIS in the *Anti-Terrorism Act*. The RCMP also has threat disruption authorities in the context of federal law enforcement, and the CAF have the potential to disrupt certain activities, consistent with the defence mandate, which could have national security application. While acknowledging the Government's intent to introduce new legislation that would refine some of the elements of the *Anti-Terrorism Act*, the example still serves to represent the current challenge of selecting the most appropriate and effective tool to address the security threat at hand.

**Excerpt from the *Anti-Terrorism Act* (2015)**

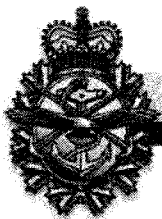
12.1 (1) If there are reasonable grounds to believe that a particular activity constitutes a threat to the security of Canada, the Service [CSIS] may take measures, within or outside Canada, to reduce the threat.

(2) The measures shall be reasonable and proportional in the circumstances, having regard to the nature of the threat, the nature of the measures and the reasonable availability of other means to reduce the threat.

(3) The Service shall not take measures to reduce a threat to the security of Canada if those measures will contravene a right or freedom guaranteed by the Canadian Charter of Rights and Freedoms or will be contrary to other Canadian law, unless the Service is authorized to take them by a warrant issued under section 21.1

(4) For greater certainty, nothing in subsection (1) confers on the Service any law enforcement power.

Furthermore, increased levels of activity in the emerging security domains, such as





More broadly, the cross-cutting nature of today's security threats clearly implicates provincial and municipal levels of government, private industry, academia, and other stakeholders. For example,

As another example, the interests of Canadian industry – to export goods abroad or to attract foreign investment in Canada – can sometimes run counter to national security concerns.

example, national security concerns regarding  
Canadian marketplace

in the

Indeed, the efforts listed in this paper are largely independently-driven and responsive efforts to address coordination shortfalls in individual issue areas. However, the horizontal linkages across these themes are equally important (e.g. the nexus between terrorism and proliferation), as is the inevitable competition for attention and resources between the different items on the national security agenda.

**NEXT STEPS**

Looking forward, further enhancements to interdepartmental information-sharing, operational collaboration and policy guidance can potentially resolve some of the more specific challenges faced by the national security community.





s.15(1)

s.21(1)(a)

s.21(1)(b)

SECRET CEO

The corollary of such increased collaboration in national security is the need for corresponding enhancements to the external review mechanisms in Canada, to ensure continued accountability around the government's most sensitive national security activities, namely those that might impinge on the fundamental rights and freedoms of Canadians. Potential for enhanced review of national security activities has been discussed since the Arar Inquiry in 2006 and, more recently, in the context of the sharing of information under Security of Canada Information Sharing Act (SCISA). The Government has also committed to establishing a mechanism for stronger Parliamentary oversight of the departments and agencies with national security responsibilities. Defence will remain engaged to ensure that any such initiatives reflect the Government's intent, while also accommodating the unique considerations that are associated with military activities and accountability frameworks.

The *Security of Canada Information Sharing Act* creates a clear authority for Government institutions to share national security-relevant information with designated Canadian Government institutions that have national security responsibilities, in the context of an activity that undermines the security of Canada.

This authority is not without limit, however. Information can only be shared with designated Canadian Government institutions when it is relevant to their national security responsibilities, and only with those officials within the institution who require the information to carry out their duties. Moreover, the Government may disclose information in accordance with the provisions of the Act provided that no other Act or regulation prohibits or restricts the disclosure of the information. Finally, nothing in the Act limits or affects any authority to disclose information under another Act of Parliament or a provincial Act, at common law or under the royal prerogative.



SECRET CEO





Canada's previous and only national security policy, issued in 2004, was organized around six main elements: intelligence, emergency planning and management, transportation security, border security, and international security.

**US - National Security Strategy (2015)**

- provides the framework for the US *Quadrennial Defence Review*
- addresses a broad spectrum of issues from strengthening the military, to advancing energy security, to promoting universal values

**UK - National Security Strategy (2010)**

- released in tandem with the *Strategic Defence and Security Review*
- articulates a clear prioritization of security risks, based on their likelihood and their potential impact
- identifies international terrorism, cyber attack, international military crises, and major accidents or natural hazards as the highest priority risks

**France - White Paper on Defence and National Security (2013)**

- combines guidance on defence and national security into one document
- identifies priority threats as: aggression by another state against the national territory; terrorist attacks; cyber attacks; attacks on French scientific and technical potential; organized crime; major domestic crises arising from natural, health, technological, industrial and/or accidental risks; and attacks on French nationals abroad
- identifies a number of strategies for maximizing the use of limited resources – including by leveraging alliances, supporting industrial capacity, and pursuing an efficient armed forces model

**Australia - Strong and Secure: A Strategy for Australia's National Security (2013)**

- issued by previous government, but still a relevant example of a comprehensive approach to security issues
- identified espionage and foreign interference, instability abroad, malicious cyber activity, WMD proliferation, organized crime, state-based conflict or coercion, and terrorism/violent extremism, as the most pressing security concerns





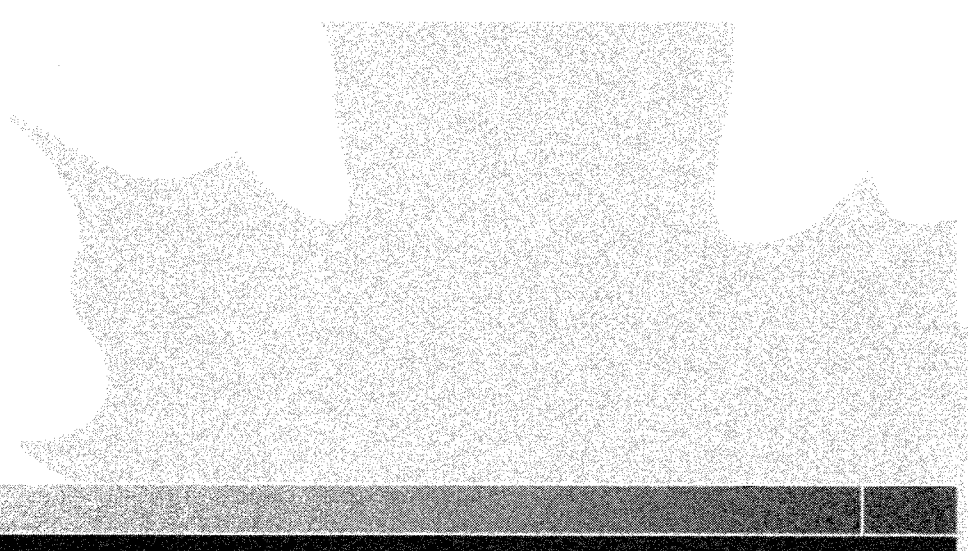
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s.21(1)(a)  
s.21(1)(b)

SECRET CEO

The UK National Security Council, as an example, meets weekly and involves key Ministers, as well as intelligence and military chiefs, to oversee the implementation of the UK *National Security Strategy* and coordinate the priority areas of work.

## CONCLUSION

The national security community has come a long way in its ability to bridge organizational divides in the pursuit of common security goals. However, as the differentiation between national security and defence continues to erode, and the roles and responsibilities of government departments and agencies become increasingly intertwined, Canada's national security architecture will continue to be tested in its ability to offer a truly collaborative response to today's security threats. In the face of these challenges, DND/CAF must remain flexible, agile, and responsive, and continue to build on the whole-of-government expertise that we have developed to date



SECRET CEO





## Annex A – Government of Canada Departments and Agencies' National Security Roles

### **Canada Border Services Agency (CBSA)**

The CBSA provides integrated border services that support national security priorities and facilitate the free flow of people and goods, including food, plants and animals, across the border. CBSA protects the security of Canada by enforcing legislation relating to immigration, customs and strategic export controls. CBSA applies an integrated border strategy, which involves identifying, interdicting and screening known or suspected national security threat not only at Canada's borders, but proactively, well before persons and goods arrive at Canada's borders. Activities that would result in a person being considered a national security risk include: espionage, subversion of a government by force or other means, terrorism, and acts of violence that could endanger the lives and safety of Canadians. Belonging to an organization that engages or is believed to engage in such activities will also result in an individual being considered a risk to national security.

### **Canada Revenue Agency (CRA), Charities Directorate**

The Charities Directorate of the CRA acts as the Government of Canada's centre of expertise on the charities aspect of terrorist financing by preventing, detecting and responding to the exploitation of charitable resources to support terrorism. The Charities Directorate reviews all charitable applications, monitors charities already registered, exchanges information when appropriate with Canada's intelligence and law enforcement agencies and conducts compliance-related activities in support of the *Income Tax Act* and the *Charities Registration (Security Information) Act*. In doing so, the Directorate protects the integrity of the charitable registration system and contributes to a whole-of-government approach to combating terrorist financing.

### **Canadian Food Inspection Agency (CFIA)**

The CFIA plays an important role in the federal government's response in the event of a food safety emergency or a threat to agricultural or forest biosecurity, including bioterrorism or agro-terrorism. The CFIA is dedicated to safeguarding food, animals and plants, which enhances the health and well-being of Canada's people, environment and economy.

### **Canadian Nuclear Safety Commission (CNSC)**

The CNSC regulates the use of nuclear energy and materials to protect health, safety, security and the environment and to implement Canada's international commitments on the peaceful use of nuclear energy; and to disseminate objective scientific, technical and regulatory information to the public. From a national security perspective, the CNSC regulates to protect Canadians against sabotage, terrorism, interference with critical infrastructure and cybersecurity, activities that undermine the security of Canada, as well as measures to control the non-proliferation of nuclear weapons and nuclear explosive devices. Implementation of export and import controls under the CNSC's jurisdiction and responsibility responds directly to risks of proliferation of nuclear weapons and terrorism.





### **Canadian Security Intelligence Service (CSIS)**

CSIS is tasked with investigating threats to the security of Canada. To do so, CSIS collects and analyzes information and security intelligence and reports to and advises the Government of Canada on national security issues and activities that threaten the security of Canada. The *Security of Canada Information Sharing Act* also permits CSIS "to take, within and outside Canada, measures to reduce threats to the security of Canada." Moreover, CSIS conducts security screening for the Government of Canada and for citizenship and immigration purposes.

### **Citizenship and Immigration Canada (CIC)**

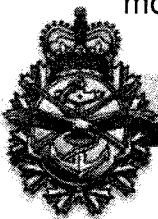
CIC is responsible for managing migration in a way that contributes to Canada's economic, social and cultural development, while protecting the health, safety and security of Canadians. Under the *Immigration and Refugee Protection Act*, CIC works closely with CBSA and Public Safety Canada to ensure that admissibility policies and screening programs effectively manage the security, criminality and health risks associated with admitting foreign nationals to Canada. CIC is also responsible for citizenship grant decisions as well as promoting the rights and responsibilities of Canadian citizenship. CIC works to prevent fraud and safeguard the value to Canadian citizenship, including revoking citizenship in certain cases. CIC is also responsible for the passport program domestically and abroad and safeguards the security, value and integrity of Canadian passports and travel documents, through entitlement reviews and administrative investigations in accordance with the *Canadian Passport Order*. Moreover, CIC ensures that newcomers and citizens participate to their full potential in fostering an integrated society.

### **Communications Security Establishment Canada (CSE)**

Under the *National Defence Act*, CSE is mandated to collect signals intelligence in accordance with the Government of Canada's intelligence priorities. CSE also provides advice, guidance and services to help ensure the protection of the government's electronic information and infrastructures. CSE is also mandated to provide technical and operational assistance to federal law enforcement and security intelligence agencies in the performance of their lawful duties.

### **Department of Finance**

The Department of Finance is responsible for and coordinates activities under Canada's anti-money laundering and anti-terrorist financing regime and has oversight responsibility for the stability of the financial sector, including threats to financial stability deriving from operational risks such as physical and cyber security threats. The Department also develops anti-money laundering and anti-terrorist financing policy, including with respect to the *Proceeds of Crime (Money Laundering) and Terrorist Financing Act* and its regulations. The Minister of Finance is responsible for Financial Transactions and Reports Analysis of Canada (FINTRAC). Finance Canada also leads in a number of international activities and, in particular, the Canadian delegation to the Financial Action Task Force, the international standard-setting body with respect to anti-money laundering and anti-terrorist financing.



### **Department of Foreign Affairs, Trade and Development (DFATD)**

The Department of Foreign Affairs, Trade and Development manages Canada's diplomatic relations with foreign governments and international organizations, engaging and influencing international players to advance Canada's political and economic interests and the values of freedom, democracy, human rights and the rule of law. DFATD delivers consular services and travel information to Canadians. The department supports global peace and stability, addresses international security threats such as terrorism, transnational organized crime, and the proliferation of weapons and materials of mass destruction. DFATD also leads coordinated Canadian responses to crises and natural disasters abroad, including the provision of humanitarian assistance.

### **Department of National Defence and the Canadian Armed Forces (DND/CAF)**

The Department of National Defence and the Canadian Armed Forces (DND/CAF) play a core Government role in defending Canada, keeping Canadians safe and secure, and supporting Canada's national security objectives, including through exercising Canada's sovereignty. To this end, the *Canada First* Defence Strategy assigns the CAF three roles: defending Canada, defending North America and contributing to international peace and security. The CAF carry out a number of missions and activities to deliver on these responsibilities, including conducting daily domestic and continental operations; providing surveillance of Canada's territory and air and maritime approaches, including in the Arctic, to detect and address threats to Canadian security as early as possible; collecting intelligence and providing assessments on military threats to Canada; providing support to major international events in Canada; responding to major terrorist attacks; assisting civil authorities in responding to a wide range of other threats, including chemical/biological/radiological/nuclear incidents; leading and/or conducting military operations abroad, including against transnational threats to Canada, and; deploying forces in response to crises anywhere in the world.

### **Financial Transactions and Reports Analysis of Canada (FINTRAC)**

FINTRAC facilitates the detection, prevention and deterrence of money laundering and the financing of terrorist activities, while ensuring the protection of personal information under its control. FINTRAC fulfills this mandate by: receiving financial transaction reports and voluntary information in accordance with the legislation and regulations; ensuring the compliance of reporting entities with the legislation and regulations; producing financial intelligence relevant to investigations and prosecutions of money laundering, terrorist activity financing and threats to the security of Canada; researching and analyzing data from a variety of information sources that shed light on trends and patterns in money laundering and the financing of terrorist activities; maintaining a registry of money services businesses in Canada; and enhancing public awareness and understanding of money laundering and terrorist activity financing.

### **Health Canada**

Health Canada leads the Federal Nuclear Emergency Plan (FNEP) which supports rapid mobilization of federal radiological assessment and other specialized capabilities to manage the potential health risks associated with a radiological or nuclear emergency. This includes serious nuclear emergencies or potential threats in North America that require a multi-departmental or multi-jurisdictional response, such as real





or potential threats involving radiological dispersal devices, radiation exposure devices or other equivalent scenarios. Health Canada also operates Canada's radionuclide laboratory and four radionuclide monitoring stations in support of nuclear non-proliferation activities under the Comprehensive Nuclear Test Ban Treaty.

### **Privy Council Office (PCO)**

The National Security Advisor (NSA) to the Prime Minister is an Associate Secretary in PCO, and is supported by three secretariats: the Security and Intelligence Secretariat, the International Assessment Staff, and the Foreign and Defence Policy Secretariat. The National Security Advisor serves as the principal advisor to the Prime Minister on matters related to domestic and international security, intelligence, defence and foreign affairs. S/he also coordinates the security and intelligence activities of federal departments and agencies, including recommending national security and intelligence priorities to Cabinet and overseeing their implementation.

### **Public Health Agency of Canada (PHAC)**

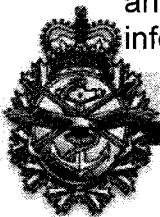
PHAC's national security activities include: surveillance for diseases and events resulting from the use of chemical, biological, radiological, nuclear and explosives (CBRN-E) agents; coordination of public health response through activation of the Health Portfolio Emergency Operations Centre; maintenance of the National Emergency Stockpile System, which contains medical countermeasures against CBRN-E agents and disaster medical supplies for use in mass casualty events; maintenance of Health Emergency Response Teams to provide surge capacity to provinces and territories; development of training and exercises to help prepare first responders and the health sector to respond to terrorism events involving the use of CBRN-E agents; regulating the importation and use of dangerous pathogens to prevent their importation and use by terrorists; and international collaboration with public health partners on issues related to health security.

### **Public Safety Canada**

Public Safety Canada was established to provide coordination across key federal departments and agencies responsible for national security and public safety and is responsible for, among other activities, managing the Passenger Protect Program, making passport decisions related to national security, administering national security immigration cases, such as security certificates, identifying investments by foreign entities that could be injurious to Canada's national security pursuant to the *Investment Canada Act*, listing terrorist entities under the *Criminal Code*, listing state supporters of terrorism under the *Justice for Victims of Terrorism Act*, managing Canada's cyber security strategy, coordinating Canada's critical infrastructure strategy and operating the Government Operations Center (GOC).

### **Royal Canadian Mounted Police (RCMP)**

As Canada's national police service, the RCMP engages in a broad range of activities in support of its national security mandate, including: enforcing federal laws; preventing and investigating crimes related to national security; collecting, analyzing and storing information and intelligence related to national security; sharing information and





intelligence with domestic and foreign agencies; preparing analyses and threat assessments; and protecting vulnerable people, sites and infrastructure.

### **Transport Canada**

Transport Canada is responsible for national transportation policies and programs and pursues a risk-management approach to ensure a safe, secure, and efficient transportation system. The goal is to protect Canadians and the transportation system by developing security measures designed to identify and respond to threats, mitigate risks and vulnerabilities, while supporting the legitimate movement of people and goods, and fostering economic growth in a manner that protects the rights and privacy of Canadians.







## STRATEGIC ISSUE PAPER: FUNDING FOR NATIONAL DEFENCE

### HIGHLIGHTS

- The Department of National Defence (DND) and the Canadian Armed Forces (CAF) anticipate that their existing and planned budgets are
- Despite the fact that DND/CAF has several high profile projects on the horizon to acquire new capabilities, there is also a need to maintain core existing capabilities and to avoid the risk of capability degradation.
- Establishing a sustainable level of funding for DND/CAF will be crucial to maintaining its ability to defend Canadians and their interests in the years to come.

### CONTEXT:

#### The Defence Mandate

The defence of Canada and its national interests is a core federal responsibility. Although successive governments have adjusted the size and configuration of the DND/CAF over time, three fundamental responsibilities have formed the foundation of every National Defence white paper and policy statement since the end of the Second World War: the defence of Canada, the defence of North America in partnership with the United States, and the meaningful contribution to international peace and security through the North Atlantic Treaty Organization (NATO), the United Nations (UN) and other multinational coalitions and partnerships. While some of Canada's international military activity could be considered discretionary, remaining capable and active across all three of these roles remains critical to Canada's ongoing security and influence.

#### **Quick Facts about DND/CAF Funding:**

- 6.6% of total Government spending, and approximately 1% of Canada's total GDP
- Nearly 120,000 total personnel, including Regular and Reserve Force military personnel and DND civilian employees
- \$25 billion in Capital Asset Equipment holdings (depreciated value)
- \$26 billion in real property holdings, including over 20,000 buildings (including 12,000 military housing units); 15,400 works including jetties, runways, training areas and roads; and 2.2 million hectares of land (four times the size of Prince Edward Island)

The most recent strategic policy directive provided to DND/CAF, the 2008 *Canada First Defence Strategy*, expands on this foundational structure by articulating six specific "core missions" for the CAF, ranging from the conduct of daily domestic and continental operations, to responding to a major terrorist attack, to conducting a major international operation for an extended period. At any point in time, the CAF must be prepared to conduct some or all of its six missions simultaneously. Frequently, they are tasked with conducting two or three of these missions at a time, such as conducting daily patrol





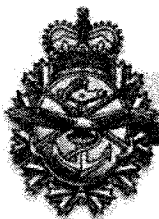
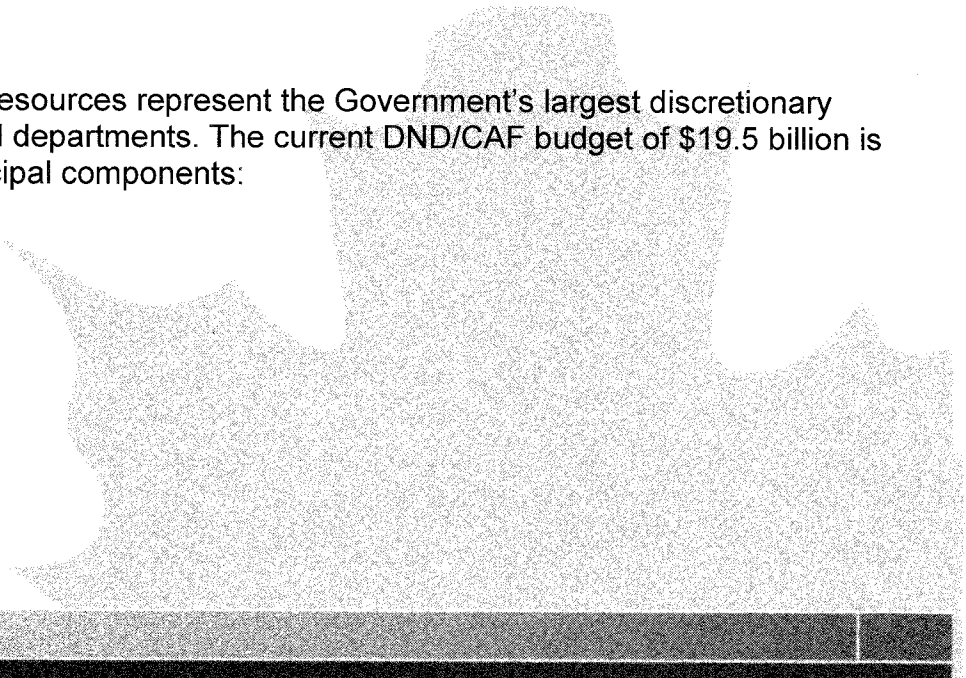
operations with the United States through NORAD while also contributing to multinational security operations abroad (such as the current operations in Iraq and Syria) and assisting civilian authorities in their response to a natural disaster at home (such as this summer's wildfires in Saskatchewan). On occasions, the CAF may even be directed to conduct all or nearly all of its core missions at the same time. Such was the case in early 2010 when the CAF simultaneously conducted major coalition operations in Afghanistan, provided security support to the Vancouver Olympics and responded to a massive earthquake in Haiti, all while continuing to conduct daily patrol operations through NORAD and preparing, as always, for a possible terrorist attack.

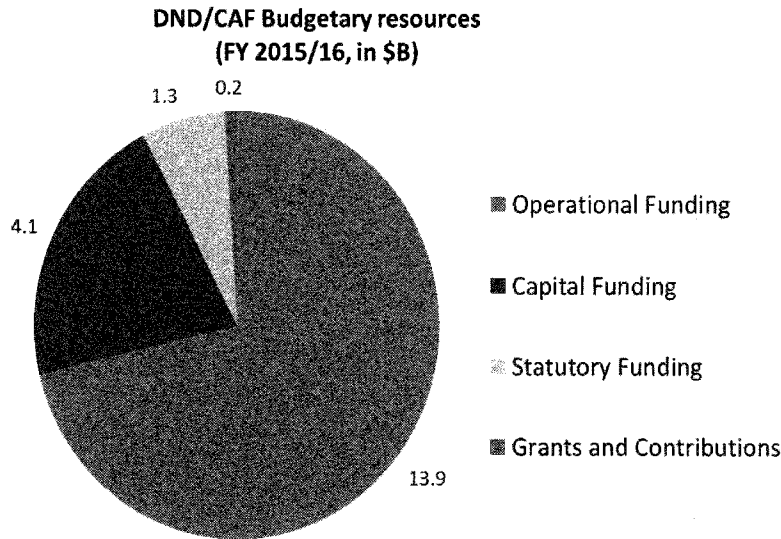
This required level of flexibility and responsiveness necessitates that the CAF maintain a broad range of capabilities across the maritime, land and air domains (with increasing support from space and cyber-based capabilities as well). The CAF must be prepared to conduct the full spectrum of military operations – from conducting surveillance and reconnaissance, to providing engineering and logistical solutions, to delivering humanitarian assistance, to engaging in various forms of combat with various types of enemies. Maintaining this range of capabilities requires DND/CAF to make ongoing investments in the acquisition, maintenance and replacement of military equipment fleets, as well as in the training and readiness of the men and women of the CAF.

As generating and maintaining a full range of military capabilities unfolds over many years and decades, DND/CAF relies on a sustained commitment of resources from the Government. This includes both annual operating funds to sustain current capabilities and conduct military operations as well as capital funding earmarked in future budgets for the acquisition of new and replacement equipment. As military technologies become more sophisticated over time, investing in their acquisition and sustainment becomes increasingly expensive.

### **Budgetary Resources**

DND/CAF budgetary resources represent the Government's largest discretionary spending amongst federal departments. The current DND/CAF budget of \$19.5 billion is sub-divided into four principal components:





When measured as a percentage of Gross Domestic Product (GDP), Canada's defence spending of approximately 1% ranks lower than that of many allies. At NATO's Wales Summit in 2014, allies agreed that they would move towards the 2% mark within a decade, which will result in further pressure on Canada (see Annex A).

Commencing in 2006, to help support the most significant defence recapitalization since the Korean War and a period of high operational tempo, funding for DND/CAF was increased in nominal terms. This growth has included an increase in the automatic annual growth of the Defence budget (referred to as the 'Defence Escalator', intended to help mitigate the effects of economic inflation) from 1.5% to 2% beginning in Fiscal Year 2011/12. Subsequently, a further increase of the Defence Escalator to 3% beginning in 2017 was announced as part of Budget 2015. In addition, growth was also achieved through the creation of an 'Accrual Envelope', consisting of funds earmarked in the Fiscal Framework for the amortized cost of acquiring, sustaining and operating major new equipment capabilities approved by the Government.

Although the Defence Escalator helps mitigate the effects of standard economic inflation, it does not address other defence-specific cost drivers, such as:

- Currency exchange rates – the increase in acquisition cost caused by the depreciation of the Canadian dollar relative to U.S. and other currencies in which goods and services are purchased.
- Technological inflation – the increase in the acquisition cost of replacement equipment as it becomes more technologically complex (approximately 2-5% higher than standard economic inflation);
- Sustainment cost growth – the steadily increasing cost of sustaining and operating more and more advanced equipment once it has been acquired; and,

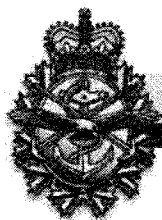
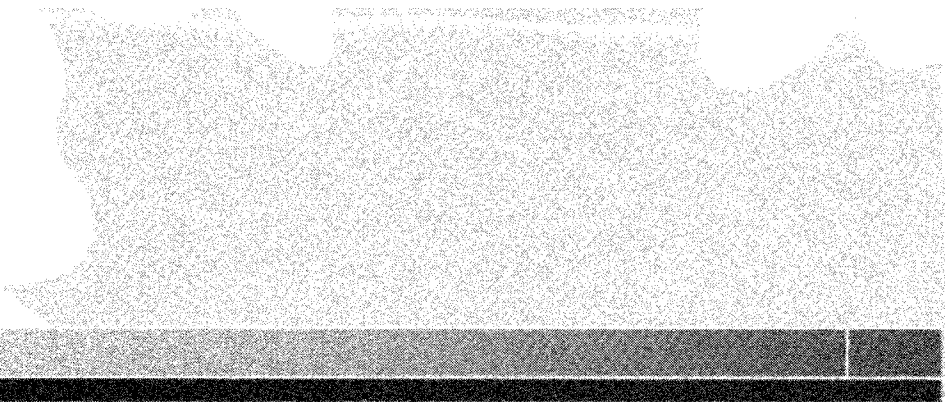




- Lack of industry competition and substitution options – the high costs of acquisition and sustainment imposed by the small number of companies producing military equipment and the lack of options for subsequent maintenance due to the manufacturer's intellectual property rights.

DND/CAF has also supported a series of budget-balancing initiatives, resulting in approximately \$2.1 billion in funding reductions. Under Strategic Review and the Deficit Reduction Action Plan, DND/CAF conducted a thorough evaluation to determine which of its costs and activities represented a core part of the National Defence mandate and which were non-core. Activities identified as low priority or non-core were ceased and the associated funds were removed from subsequent budgets. In addition to these efforts, close to \$1 billion in additional ongoing funding was transferred out of DND/CAF budgets to reflect the establishment of the Communications Security Establishment as a separate entity and the delivery of some services have been centralized through Shared Services Canada and the Canada School of Public Service.

In recent years, DND/CAF has been able to internally address some operational costs through the reallocation of personnel funding.





## Addressing Operational Cost Pressures

In 2013, DND/CAF launched an ambitious Defence Renewal initiative to strengthen business processes and improve its culture of efficiency and good management with a focus on the maximization of operational output. With support from the consulting firm McKinsey and Company, DND/CAF developed a suite of 32 renewal initiatives focused on improving performance and generating reinvestment opportunity in major business processes (including maintenance and materiel, infrastructure, and management systems) and on redesigning organizational practices to embrace, drive, and sustain change over the long term (including through strategic clarity and disciplined business execution). While the savings in operational and capital budgets are still being validated, National Defence estimates that Defence Renewal has resulted in \$158 million in ongoing efficiency savings from 2014/15. This figure is expected to grow with the continuation of Defence Renewal in the years to come.

In addition to DND/CAF's own cost-saving efforts, Budget 2015's announcement of an increase to the Defence Escalator from 2% per year to 3% per year will provide an additional \$11.7 billion in funding between 2017/18 and 2026/27. Of note, this new funding does not apply to the Accrual Envelope.

Although the combination of Defence Renewal savings and the planned increase to the Defence Escalator is expected to help mitigate pressures on the DND/CAF operating budget in the short term, should a large-scale crisis emerge and/or the Government direct a significant increase in CAF operations.

## DND/CAF Funding Pressures – Capital Investment

Beginning in 2006, the Government directed DND/CAF to invest in a number of large-scale procurements and other major capital projects, both in support of ongoing military operations and to prepare the CAF for future challenges.





### Addressing Capital Cost Pressures

To address the disparity between potential future capability demand and available investment funds, DND/CAF initiated a detailed analysis to refine and prioritize its investment priorities. Central to this analysis is the Capital Investment Program Plan Review (CIPPR), which captures project information and strategic input from across the Defence portfolio and subjects it to a rigorous and objective analysis to propose the optimal capability package for the CAF based on available resources.

After analyzing identified capital projects, CIPPR has proposed an initial list of projects, valued at approximately for potential inclusion in future DND/CAF Investment Plans ( of which would be invested over the next 20 years). It has also proposed an initial list of projects, valued at approximately which are potentially at current and planned funding levels. DND/CAF's Investment and Resource Management Committee (IRMC) is now working to review and refine these results. Once IRMC's analysis is complete, all funding decisions will be taken by the Project Approval Authority in accordance with Treasury Board policy.

Included in the of potentially projects are several high cost, high importance investment requirements.





Furthermore, DND/CAF's project analysis to date has focused on the investments required to maintain its current levels of operational capability and readiness over the next 20 years and beyond. It did not consider additional projects or sustainment costs that might be required should the Government consider expanding or enhancing the future size, capabilities and/or operational readiness of the CAF to address evolving security threats.

## **CONSIDERATIONS**

In developing and considering options to improve the sustainability of DND/CAF funding, the Government may wish to consider the following factors:



**Page 151**

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**21(1)(a), 21(1)(b)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

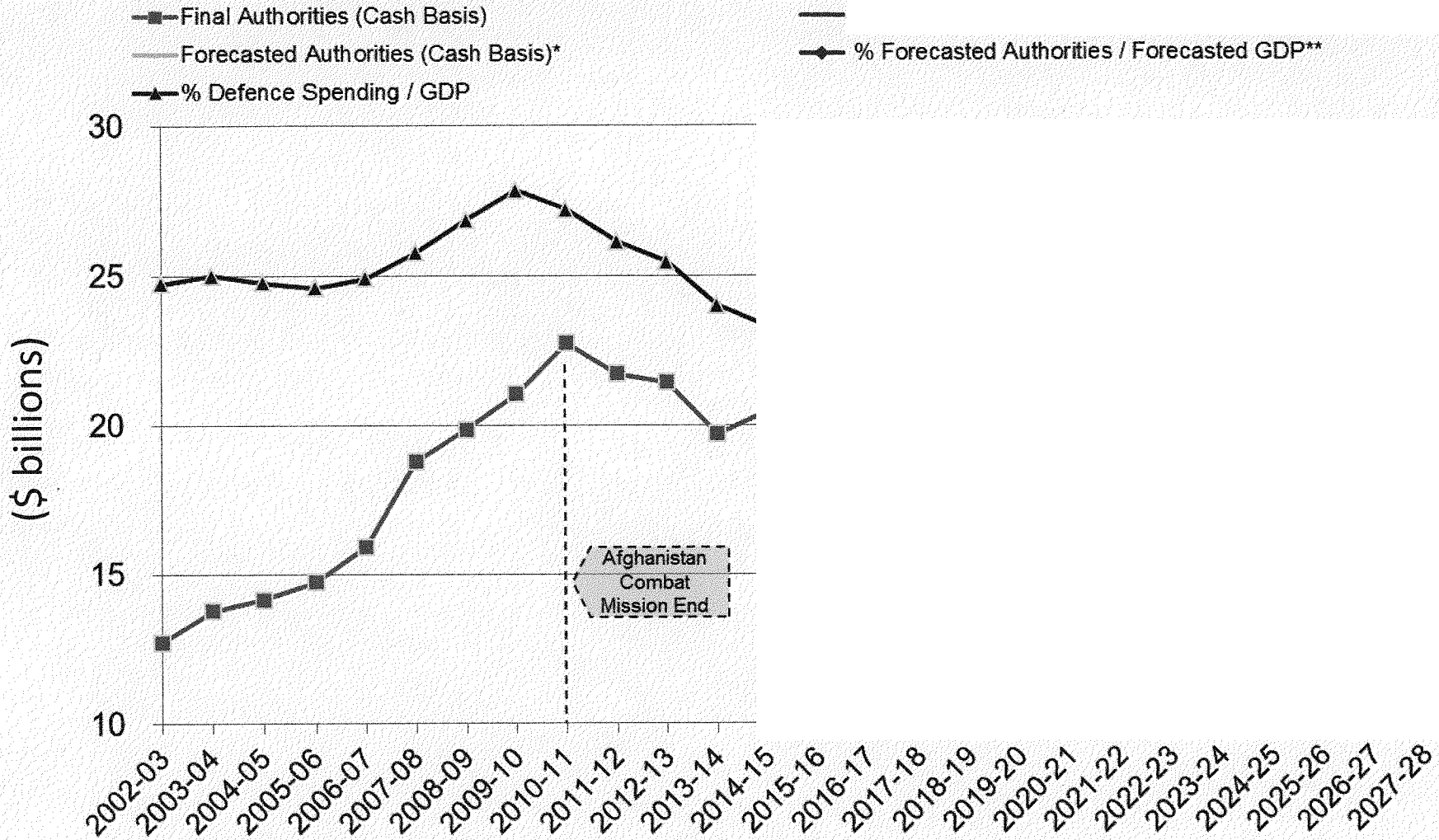
**Page 152**

**is withheld pursuant to sections  
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**21(1)(a), 21(1)(b)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

# Annex A: Departmental Final Authorities and Future Supply



\* Forecasted Authorities includes

\*\* Forecasted GDP (Budget 2015) is as follows:



**ISSUE PAPER: ARCTIC POLICY**

**HIGHLIGHTS**

- As activity and geopolitical interest in the Arctic grow, the demand for Canadian Armed Forces (CAF) resources will also increase, particularly with respect to CAF's presence in the region, safety and security operations, and its capacity to support whole-of-government priorities.
- Canada's North has been a policy priority for many years, with particular focus on exercising sovereignty, promoting social and economic development, protecting the Northern environment, and improving and devolving northern governance. With several projects currently underway to improve CAF capabilities in the region, National Defence is a leader in meeting whole-of-government objectives in the North.
- Several existing and emerging challenges continue to impact defence policy in the Arctic, including a harsh operating environment
- 
- Given the increasing importance of the Arctic region and its evolving security dynamics, it is recommended that the Minister of National Defence:
  - 
  - 
  - 
  -

**CONTEXT**

Why Does the Arctic Matter?

Environmental factors are gradually changing the Arctic and stimulating international interest and activity in the region, including within Canada's Arctic Archipelago and exclusive economic zone. Annual summer sea ice has steadily declined over the past several decades, opening up new access routes to the Arctic and encouraging commercial shipping, extraction of natural resources, and even tourism. While estimates vary, it is possible that the Arctic (i.e., North of the Arctic Circle, 66°33'N) holds close to 20-25% of the world's undiscovered petroleum and potentially \$1.5 trillion worth of





mineral deposits. Of the undiscovered petroleum, 80% of these deposits may lie offshore, buried beneath the seabed.

While climate change is impacting the entire region, the two main Arctic sea lines of communication most likely affected over the coming decades will be Canada's Northwest Passage and Russia's Northern Sea Route. As a result, countries like Canada, the US, and Russia are seeking to reinforce control of their territories and commercially develop their Arctic resources. However, non-Arctic countries as far away as China, India, and Japan are also interested in exploring the economic potential of the Arctic and equally seek to influence international Arctic policy.

From a defence perspective, the increase in human activity in the Arctic and growing international interest have generated greater demand for CAF presence in the North, including through persistent surveillance and monitoring and increased CAF preparedness to conduct safety and security operations in the region.

**DEFENCE STRATEGIC OBJECTIVES IN THE ARCTIC**

- **Exercise surveillance and control in Canada's North**
- **Maintain capability to defend the North**
- **Support whole-of-government cooperation**
- **Foster international relationships in the Arctic**

Approach to Date

*Whole-of-Government Policy*

Canada's North has been a policy priority for many years, with particular focus on exercising sovereignty, promoting social and economic development, protecting the Northern environment, and improving and devolving northern governance. Aboriginal Affairs and Northern Development Canada (AANDC) is the Government of Canada lead on this file.

National Defence plays an integral role in exercising surveillance and control in the North, particularly by demonstrating visible presence in the region, maintaining the capability to operate in and defend the North, and providing assistance to other government departments and agencies when requested. Indeed, National Defence has taken a whole-of-government approach to cooperation in the Arctic, collaborating routinely with AANDC, the Department of Foreign Affairs, Trade and Development (DFATD), the Department of Fisheries and Oceans, the Department of Public Safety, Environment Canada, the Royal Canadian Mounted Police, and a range of other federal, territorial and municipal actors. To this end, National Defence participates in numerous whole-of-government working groups, and actively involves these partners in annual operations and exercises.

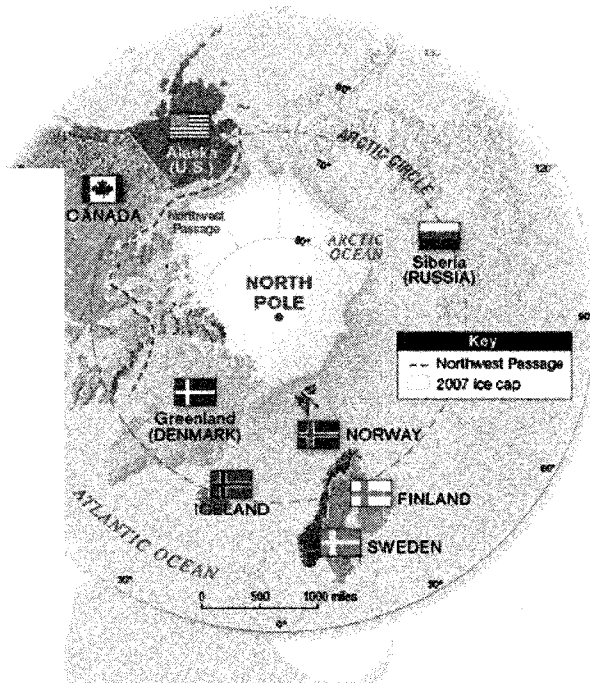


### *International Dynamics*

National Defence plays an active role in building international relationships in the Arctic, an issue of foreign policy importance for some years. In particular, National Defence supports DFATD in its management of Canada's participation in the Arctic Council, the preeminent international forum for Arctic cooperation. While the Arctic Council has no defence or security mandate, Arctic Council members have collectively signed multilateral agreements related to safety and security issues such as search and rescue and maritime oil spill responses.

National Defence also contributes to efforts to build bilateral relationships with the Arctic states (e.g., Denmark, Finland, Iceland, Norway, Russia, Sweden, and the US) to support Canadian interests in the region. The US is Canada's preeminent defence partner in the Arctic, but National Defence also has robust relationships with Norway and Denmark.

Canada strongly believes that the Arctic requires collaboration, not confrontation, and should remain a region of peace.





### Canadian Armed Forces Initiatives in the North

The CAF maintains a significant presence in the Arctic, particularly by maintaining infrastructure which supports CAF and NORAD activities in the region. In addition, the



Canada's CF-18s maintain a constant state of readiness

CAF undertakes several annual sovereignty exercises, such as Op NANOOK, NUNAKPUT, and NUNALIVUT, which strengthen Canadian defence and emergency response capabilities throughout the Arctic. Many of these exercises include participation from other federal, territorial, and international partners, as well as local Aboriginal communities, and have in the past involved search and rescue and environmental disaster response scenarios.

Several new capabilities will also be developed for CAF use over the next few years. The CAF is set to receive the first

of five Arctic Offshore Patrol Ships (AOPS) in 2018, which will conduct armed sea-borne surveillance in Canada's Arctic waters during the navigable season and enhance the Government's situational awareness and control over the Arctic.



Arctic/Offshore Patrol Ship design

To support the AOPS, the CAF is establishing a berthing and refueling facility at Nanisivik, Nunavut.

In addition to these capabilities, the CAF is planning a series of Northern Operations Hubs to facilitate the initial rapid deployment of troops and up to 30 days of sustained operations, in the event that an environmental or man-made emergency response is required in the North.

### CONSIDERATIONS

#### Key Challenges

The changing climate in the Arctic has allowed for increased human activity in the region, escalating the likelihood of various safety and security challenges. This reality has underscored the need for persistent monitoring of maritime and air traffic and has called for increased CAF preparedness to conduct search and rescue operations and support civil authorities in their response to environmental mishaps, natural disasters, or the potential illegal entry of people and goods into Canada.





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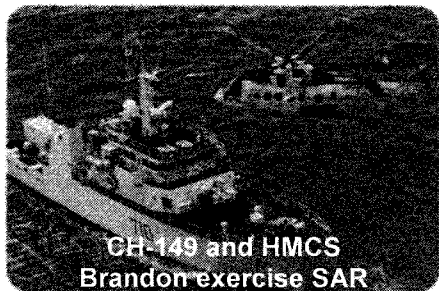
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To date, many CAF initiatives in the Arctic aim to build CAF capacity to carry out these types of safety and security missions. While great strides have been made, these demands on the CAF are only forecasted to increase as the Northern environment continues to evolve.

Despite the steady increase in activity in the Arctic, it remains incredibly difficult for any country to operate in the North. Harsh terrain and climates, sparse populations, and minimal infrastructure present challenges even for activities that would be considered routine in the Southern regions of Canada. Conducting military activities in the Arctic region requires unique skills, focused training, and specialized equipment – a dynamic that introduces significantly increased costs and longer time requirement for nearly all activities. Moreover, building and maintaining infrastructure in the North presents particular difficulty.



Canada has not yet faced a maritime oil spill in its Arctic



CH-149 and HMCS Brandon exercise SAR

Modern military operations increasingly rely on satellite systems to communicate and coordinate amongst land, air, maritime and special operations forces and their respective headquarters. Satellite capabilities are also critical to sharing digital

information and imagery instantaneously, as well as to supporting vehicle navigation and other operational activities.

Arctic states often work closely together to meet these types of regional safety and security challenges,

**KEY CHALLENGES IN THE NORTH**

- Increased potential for safety and security operations
- Harsh terrain and climates
- Expensive to operate
- 
- 





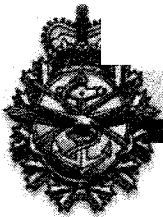
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**SECRET CEO**

Through NORAD, Canada and the US maintain the North Warning System (NWS), which consists of 47 unmanned radar stations designed to detect potential threats entering North American airspace and facilitate an early response by Canadian and US fighter aircraft and other assets if required. The current system was constructed between 1986 and 1992



**SECRET CEO**





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### *Opportunities*

Canada continues to leverage core partnerships to meet safety and security challenges in the North. For example, National Defence has integrated whole-of-government capabilities into its Northern operations, particularly its signature series of sovereignty operations. Indeed, Operation NANOOK 2015 leveraged the expertise of over 10 government departments and agencies from federal, territorial, and local partners to exercise a government response to an oil spill in the Beaufort Sea.

Canada also regularly invites other Arctic states to take part in Op NANOOK. In 2015, the US participated in a table-top exercise involving an oil spill response. The UK and France also observed this exercise.

In addition, in its capacity as the current Chair of the Arctic Council, the US held a table-top exercise in October 2015 to exercise the implementation of the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, signed by all Arctic Council states in 2011. A live exercise will follow in summer 2016.

National Defence played an important role in coordinating Canada's contribution to this exercise. This event provided an opportunity to advance international cooperation on incidents of this nature in the Arctic, which are only expected to increase in the years ahead.

Defence Research and Development Canada is also currently pursuing an All Domain Situational Awareness Initiative, which will explore



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## NEXT STEPS

*Cooperation with the US*

*Capability Development*







### *International Engagement*

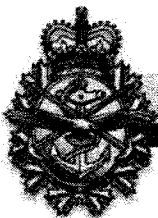
In terms of international engagement,

This includes the participation of DND/CAF officials in existing fora, such as the Arctic Security Forces Roundtable (ASFR) and the Northern CHODs, both of which focus on safety related issues. ASFR, which includes non-Arctic nations, has continued to meet

### **RECOMMENDATIONS**

Given the increasing importance of the Arctic region and its evolving security dynamics, it is recommended that the Minister of National Defence:

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**Pages 163 to / à 167  
are withheld pursuant to sections  
sont retenues en vertu des articles**

**15(1), 21(1)(a), 21(1)(b)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**



## ISSUE PAPER: CYBER

### HIGHLIGHTS

- Cyberspace has become a prominent facet of the modern military environment. Militaries are exploiting cyberspace for new opportunities to achieve their objectives, but their increased dependence on information technology also makes them vulnerable to cyber attacks.
- 
- 
- DND/CAF
- 

### CONTEXT

Cyberspace has become an essential enabler for modern economies and societies. In 2013, Internet users worldwide were estimated at 3 billion. In Canada, about 26 million people use the Internet for day-to-day activities and nearly 95% of Canadian enterprises use the Internet for their operations. Revenues generated by Canadian businesses out of Internet sales were already worth over \$100 billion in 2012.

Connectivity and dependence on information technology has also become a military reality. Progressively, the benefits brought by technologies have been leveraged to better manage and integrate military functions, contributing to a so-called "revolution in military affairs".



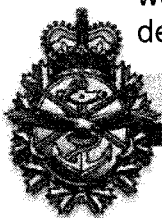
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## The cyber threat

The rapid evolution of cyber technology makes it extremely challenging to keep pace with the threat. There has been a steady increase in the number of countries and non-state actors (e.g. terrorists, criminals, hackers) with the capability to conduct disruptive cyber operations and a willingness to target Western interests. This has been coupled with the proliferation of increasingly sophisticated cyber tools and techniques that can be used to achieve a range of effects (e.g. espionage, theft, sabotage) with relatively little financial investment. This is a highly complex threat environment that poses significant challenges for Canada.

erased data on three quarters of Saudi Aramco's (Saudi Arabia's state-owned oil company) corporate computers and replaced it with an image of a burning US flag. The company was forced to shut down its internal network and took about two weeks to recover. The attack was considered by media report to be among the most destructive against a company to date. Other examples include the targeting by the





Syrian Electronic Army of US military and media websites. North Korea has also disrupted South Korean banking and media networks in 2013, recently targeting Sony Pictures in the US, and continues to threaten cyber attacks against both the US and South Korea.

Non-state actors such as terrorist groups are also seeking to operate in cyberspace, and are already successful in using cyberspace for propaganda, inciting hate and terrorist activities, misinformation, coordination and recruitment. ISIL, in support of its broader objective to establish and expand an Islamic State/caliphate, has declared its intention to establish a "cyber caliphate" and conduct a "cyber jihad" against the "Enemies of Islam".



Allied approaches

Cyber security has become a top priority for countries around the world. Although approaches differ, militaries in like-minded countries typically play a supporting role in national cyber security, and are focused on strengthening the resilience and defences of their military systems and providing assistance to civilian departments and agencies in cyber incident management.

**US**

- Established US Cyber Command in 2010 to defend Department of Defence (DoD) networks, ensure US freedom of manoeuvre in cyberspace, deny same to adversaries, and enable US military operations
- US Cyber Command is integrated within National Security Agency (NSA, cryptologic agency) to enable military cyber operations
- Released revised DoD Cyber Strategy in April 2015; states that DoD should be able to employ cyber capabilities against an adversary in conflict or in response to a cyber incident affecting the US, and aims to deter cyber attacks

**UK**

- 2011 Cyber Security Strategy articulates vision to fully institutionalize cyber operations within military operations by 2015
- Joint Forces Command took the lead for the "integration of defence cyber capabilities" in 2012, including a Joint Cyber Unit, hosted by Government Communications Headquarters (GCHQ, cryptologic agency) whose role includes the development of techniques and plans to deliver military effects
- Created a Joint Cyber Reserve in 2013 as part of full-spectrum cyber military capability

**AUSTRALIA**

- Defence White Papers 2009 and 2013 highlighted importance of cyber





The US, UK, and Australia are investing in new resources and integrating cyber operations into their military activities,

## OUR APPROACH SO FAR

### Canada

Canada's Cyber Security Strategy was released by Public Safety in October 2010, with a focus on securing federal government systems, partnering to secure vital cyber systems outside of the federal government, and helping Canadians to be secure online. The Strategy assigns supporting roles to relevant departments and agencies, including DND/CAF, which must: protect its own networks; work with federal partners to identify threats and possible responses; and work with allied militaries to develop best practices and policy and legal frameworks for military aspects of cyber security.

### DND/CAF

Current defence policy recognizes that the CAF must be able to effectively respond to asymmetric threats, including cyber, but does not provide further guidance on cyber-related issues. DND/CAF's appreciation of the importance of cyber capabilities as critical enablers of military operations has grown considerably,

Since : DND/CAF is developing a Cyber Program to ensure the integrity of DND/CAF networks and systems;

Key Cyber Program efforts include





strengthening cyber defences;

Also in DND/CAF released an interim policy on cyber operations,

## GAPS AND CHALLENGES





Strategic uncertainties and complexities

National and international discussions remain nascent on issues such as norms for responsible state behavior in cyberspace. Many nations are grappling with questions about how to most appropriately treat cyber within their national security and defence policies, and how to define their own thresholds as to what cyber actions against them should be deemed unacceptable and warrant a response. Internationally, even though there is a growing consensus that existing international law, including the Law of Armed Conflict, applies in cyberspace, the precise application of legal concepts (e.g. self-defence) is largely untested. Similarly, the international community is only beginning to explore measures to increase confidence between states regarding cyber activities.

Canada's participation in such multilateral discussions on norms for state behavior in cyberspace and confidence-building measures between states is led by other departments, such as Foreign Affairs and Public Safety. DND/CAF provides military and defence-specific advice in support of these discussions, and has been supportive of Canada's positions that states should use existing international law as a basis to inform their actions in cyberspace and that confidence-building measures are practical first steps to promote stability in cyberspace. As international discussions in these areas progress, DND will likely be expected to play more of a leadership role as part of Canada's engagement.

*The UN Group of Governmental Experts on cyber produced a report last summer recommending, notably, that states not conduct or knowingly support unlawful cyber actions that intentionally impair other nations' critical infrastructure, or prevent them from dealing with cyber incidents. It also recommended that states adopt measures to improve communications, transparency and cooperation between them regarding cyber capabilities, threats and incidents.*

*Also of note, both the US and the UK recently reached bilateral agreements with China, pledging to refrain from computer-enabled theft of intellectual property for economic gain (the deal does not cover national security information).*

**NEXT STEPS**

It is critical in a modern military environment for DND/CAF to be able to effectively operate in cyberspace. To this end, DND/CAF will continue its capability development efforts,





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- Continue to invest in strengthening its ability to defend DND/CAF networks through, for example, the development of tools to improve threat detection, and the development of training environments;
- 
- 
- 
- Develop career plans for its cyber workforce, and
- 



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They would also help Canada achieve more coherence and influence in its participation in international discussions by demonstrating clear positions on issues which remain the subject of considerable international debate and uncertainty. As these discussions continue evolving, particularly on norms for responsible state behavior in cyberspace and confidence-building measures, **DND/CAF will need to**

RECOMMENDATIONS – DND/CAF SHOULD:





**ISSUE PAPER: SPACE**

**HIGHLIGHTS**

- While space capabilities are vital for the Canadian Armed Forces, and Canadian society, they are increasingly threatened.
- In concert with allies and partners, DND/CAF has built a robust space program to support and enable CAF operations. Space is increasingly being viewed as a domain in its own right, and has been a focus area of significant allied cooperation. However, it is also becoming an arena of increased competition :
- 
- 

**CONTEXT**

Why does space matter?

Space is an essential enabler for Canada's economy and society. For example, space capabilities provide the 'time-stamp' function for ATMs and the New York Stock Exchange, help coordinate air traffic control and 'just-in-time' delivery, and provide valued services like cell phones and satellite TV.

Space is also essential to national security and defence. The CAF depends on the  
that the CAF have the ability

and around the world. Space-based search and rescue capabilities contribute to force protection and allow the CAF to respond more quickly to Canadians in distress. And

of otherwise inaccessible areas in support of information and situational awareness requirements.

As a result, space capabilities are a critical source of strategic military advantage over potential including Canada.

Whereas space used to be the domain of a few advanced states, an ever-increasing number are developing space capabilities for military purposes. Further, commercial companies now





offer highly advanced space capabilities such as satellite communications and radar and optical data on the open market, thus somewhat leveling the playing field. Moreover,

These man-made threats join a growing amount of space debris in posing a threat to allied space assets.

Approach to date

*DND/CAF policy and capabilities*

DND/CAF's last space policy was released in 1998.

the 2008 *Canada First Defence Strategy* recognizes the need for the CAF to effectively respond to asymmetrical threats,

DND/CAF's appreciation of the importance of space capabilities has grown considerably, as has the recognition that space has become an important operational domain in its own right.

Supported by an active R&D program, DND/CAF has developed a large and effective space program – by far the largest space program in the Government of Canada – the main priority of which is providing support to military operations. The program is established along several main lines of operation:

- 

Space-based ISR is important for a range of missions across government, including environmental monitoring. It is also critical for maritime domain awareness.

- 





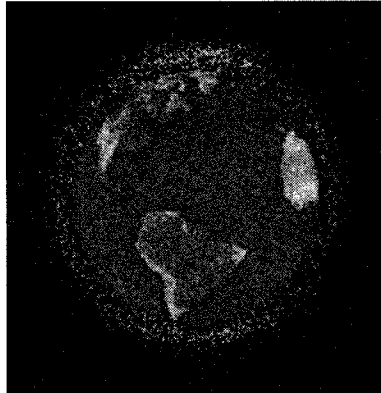
- *Positioning, Navigation and Timing* (e.g. accessing and protecting for a range of functions, from navigating to coordinating attacks, to guiding 'smart' munitions. Given the importance of maintaining access to the CAF is investing with allies in means of protecting this signal
- *Space support to operations and decision-making* through the CAF Canadian Space Operations Cell (CANSpOC). In close coordination with our close allies and government partners, the CANSpOC maintains a 24/7 space watch to maintain awareness of the space environment, serve as a space point of contact, liaise with key allies, and provide space support to Canadian Commanders and decision-makers. CANSpOC was established as part of ongoing force structure adjustments, DND/CAF plans to augment the current cadre of approximately highly-skilled space personnel with an additional personnel over the next five years. These efforts flow from a recognition that space is not just an enabler but an operational domain and a fully integrated part of planning and operations.
- *Space Situational Awareness*. As the space environment becomes more congested from the increasing amount of satellites and debris, there is a globally recognized need to better understand what is happening in space. For the military, Space Situational Awareness (SSA) is essential to ensuring the protection of, and deterring attacks against, critical systems. This is because SSA allows operators to understand threats posed by debris and potential adversaries, and attribute malicious activity in space. Canada's first military satellite, Sapphire, is an optical sensor that looks outward to monitor space objects in high-earth orbits. It was launched in February 2013 to provide data to the US Space Surveillance Network. DND/CAF is the only non-US partner in the network with a space-based sensor, and Sapphire has been recognized as a highly effective contribution to space-based SSA



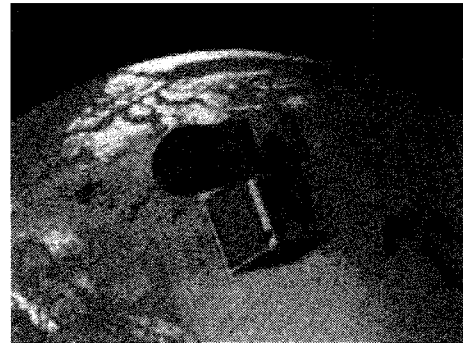


at relatively low cost. DND/CAF's planned follow-on, the Surveillance of Space 2 project (cost TBD), will also contribute to US-led SSA efforts.

**Illustrative depiction of space debris problem**

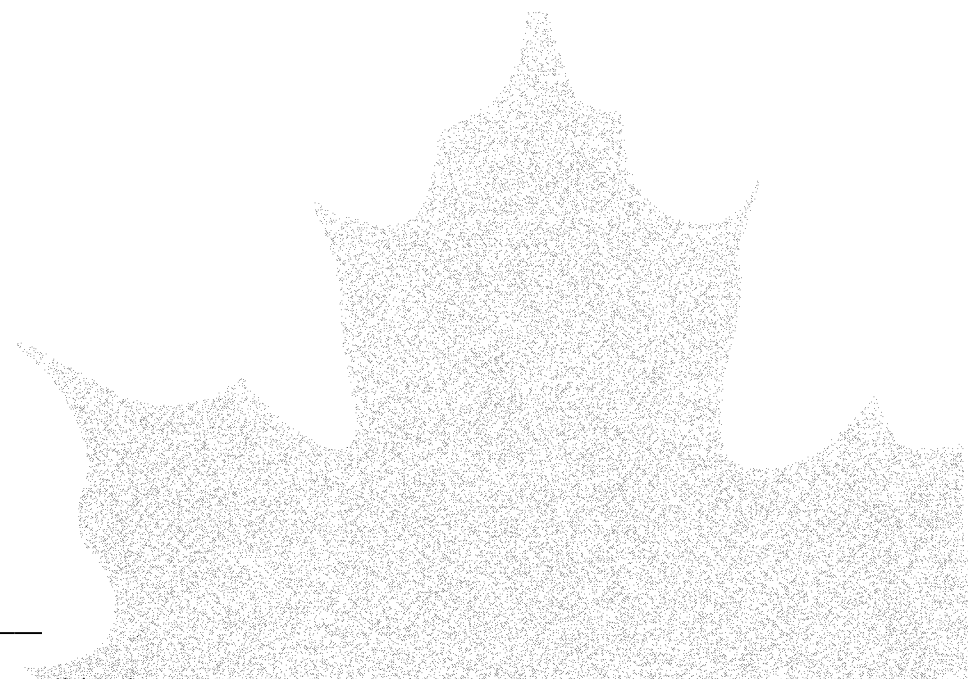


**DND's Sapphire Satellite**



- *Satellite Communications (SATCOM)*. Satellite communications are essential for command and control of military operations and the transmission

DND has made significant investments in protected military satellite communications (million)<sup>1</sup> and wideband satellite communications (million). These investments have involved SATCOM partnerships with the US, again leveraging capabilities that would otherwise be well beyond our means. DND is also currently exploring working with potential partner governments for the purpose of identifying and developing options for shared investment in an enhanced satellite communications network



<sup>1</sup> All figures TBC based on latest available data.





## Types and Uses of Satellite Communications

Definition
Use





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## CONSIDERATIONS

Key challenges



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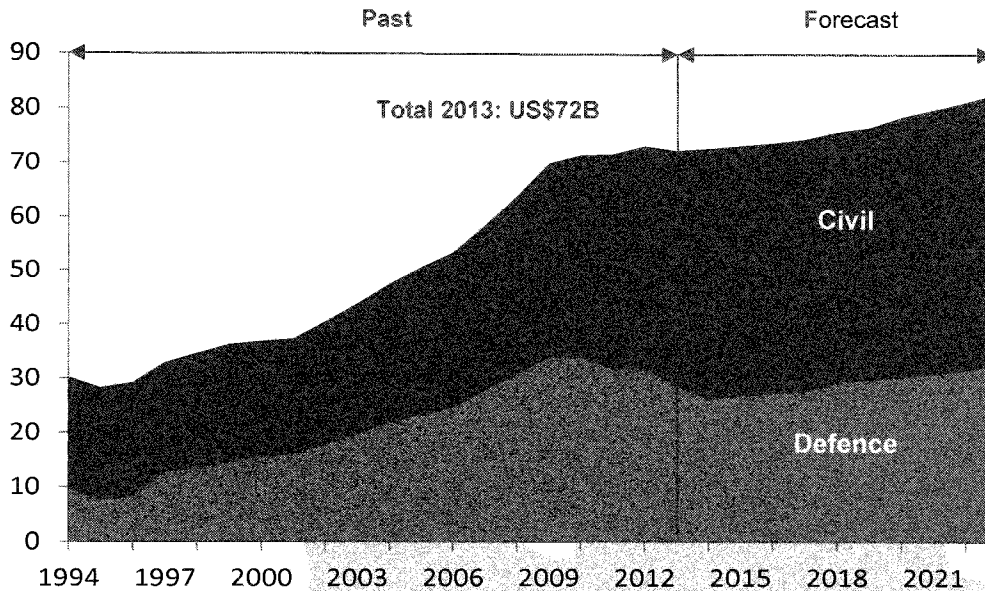
*Reliance on partners*

DND/CAF is particularly reliant on other departments and agencies on space issues. For instance, while DND/CAF possesses significant space expertise, it frequently depends on commercial space programs managed by the CSA, such as and the for access to space-based capabilities.

As noted above, partnership allows Canada to leverage capabilities well beyond our means. However, in a time of

Private companies are becoming more important than militaries as the key source of space investment and development in space. As DND/CAF becomes more reliant on private sector capabilities, it faces the challenge of coordinating with a wider range of partners to protect and promote national interest.

**World Government space budgets FORECAST TO 2023 (US\$ billion)**



The commercialization of space also poses policy challenges regarding issues such as ensuring dedicated and secure military access, deterring threats, managing complex export control, foreign direct investment, supply chain and information-sharing issues, and regulating new multi-use capabilities like robots built to repair or refuel a satellite in orbit.







*The lack of consensus on norms*

While there is considerable international momentum to establish more widely-held norms of behavior in space, there are significant differences in approach, reflecting variations in national interest and ideology. And while the international community is beginning to coalesce around certain peacetime norms – such as not causing devastating long-lived space debris – the application of several legal concepts in space remains uncertain and largely untested. For instance, although legal determinations will necessarily be made on a case-by-case basis, there is currently no policy consensus regarding whether and what types of non-kinetic counterspace measures, such as lasing or jamming, would be considered unacceptable. The application of fundamental legal principles (e.g. self-defence) can also be challenging from a practical perspective given the rapid development and unique characteristics of the technologies involved, and because the idea of the use of force in space remains underdeveloped. This has significant implications in that it hinders operational planning and force development, makes it difficult to establish a clear vision and level of ambition in international partnerships, and contributes to potential misperception, strategic instability, arms racing and unintended conflict escalation.

Key opportunities

*Strengthening CAF capabilities*





*Deepening international cooperation*

*Whole-of-government policy, planning and coordination*

The whole-of-government space community is increasingly recognizing the limitations of the existing, largely compartmentalized and *ad hoc* approach to space. Effectively seizing the opportunities and addressing the challenges of space requires a combination of whole-of-government legislative and policy development to more comprehensively and coherently cover and provide direction to Canada's space activities. DND and the Department of Foreign Affairs, Trade and Development



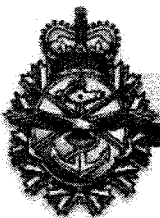
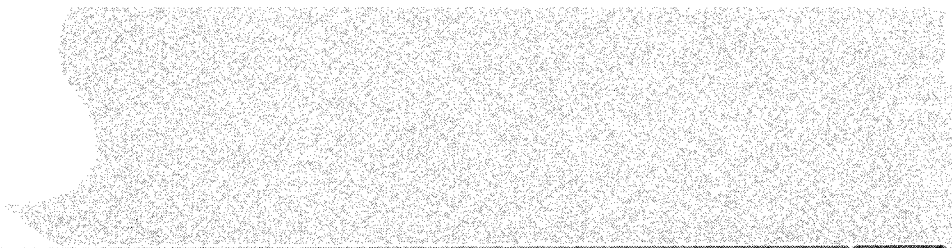


(DFATD) are

Looking further abroad, influencing international norm development requires a more strategic and proactive approach that leverages a wide array of policy, legal, operational, scientific, technical expertise.

**RECOMMENDATIONS**

**DND/CAF should:**

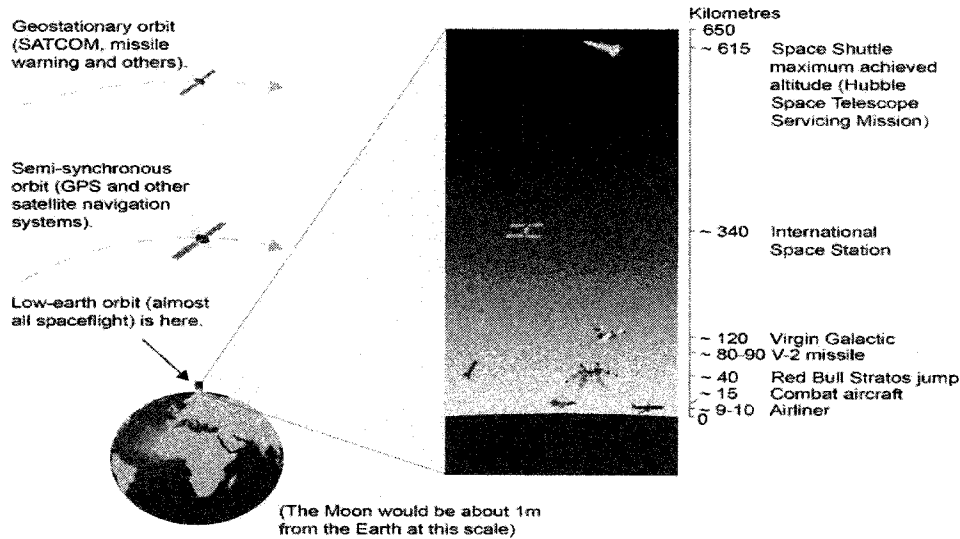




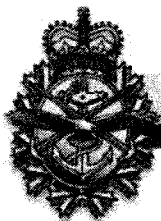
## ANNEX

### Space Backgrounder

- Different orbits are particularly useful for different tasks. For instance, low-earth orbit is frequently used for intelligence, surveillance and reconnaissance due to quick re-visit times, semi-synchronous (or mid-earth) orbit is particularly good for Global Positioning (GPS) navigation systems, and geostationary orbit is useful for Satellite Communications (SATCOM) and missile warning because satellites at this orbit travel at the same speed as the earth, which means they essentially hover directly over a given spot on the Earth.

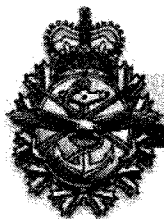


- The unique physical qualities of space have a variety of important military implications. For example, the paths of satellites are entirely predictable, and satellite manoeuvrability is highly limited, making satellites vulnerable to attack. For the same reason, if one misses an opportunity to use a satellite (to take an image for example), one must often wait hours or days for that opportunity to come again.
- Importantly, used rocket bodies, dead satellites and other pieces of debris stay in space (sometimes for decades) and pose a threat to functioning satellites. The United States is currently tracking around 22,000 pieces of debris as big or bigger than a softball, and estimates that there are approximately 500, 000 smaller pieces. Considering that space debris travels at 8km/s in low earth orbit, even tiny pieces can be highly destructive. For example, a piece of debris the size of fleck of paint nearly shattered the space shuttle window. Moreover, debris could cause 'cascading' collisions with devastating and very long-lasting effects.
- States can freely fly satellites, whether to provide services to its citizens or to spy on enemy territory, because space is recognized as a global commons (like international waterways or airspace). Thus, the principle of 'freedom of space' is important for both civil and military space operations. There is also widespread belief





that space should be a sanctuary free from conflict; that it should be used for the benefit of all human kind; and that it should be something that unites rather than divides us. On the other hand, there is an increasing recognition that space is also an important military domain, along with sea, air, land and cyberspace, and that it should be exploited and protected for purposes of national security. There is a constant tension between these conceptions.



**ISSUE PAPER: BALLISTIC MISSILE DEFENCE**

**SUMMARY**

- The strategic importance of ballistic missile defence (BMD) has grown considerably in recent years, particularly given the increase in countries with access to ballistic missile technology.
- In accordance with its 2005 decision, Canada does not participate in the US BMD system for the defence of North America.

However, Canada has been involved in discussions on the development of the NATO BMD system for the protection of NATO *European* territory, populations, and forces, and contributes financially to elements of the system that are eligible for NATO common funding.

- Alliance. <sup>1</sup> including within the NATO

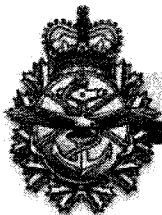
**CONTEXT**

Why Does It Matter?

Over the last decade, BMD has become an issue of growing concern

NATO estimates that over 30 countries have, or are acquiring, ballistic missile technology that could be used to carry conventional warheads, or in some cases, weapons of mass destruction (WMD).

<sup>1</sup> Please see 'Annex I: About Ballistic Missiles' for further information on ballistic missiles.





### Approach to Date: Canada's 2005 Decision

In 2005, the Government of the day decided that Canada would not participate in the US missile defence system for North America.

At the time, given the limited missile technology of potential adversaries, the system was considered by many to be unnecessary and too costly, particularly given widespread reporting of the system's many technical shortcomings.

<sup>2</sup> Please see Annex III: Global Ballistic Missile Threat Environment for an overview of the ballistic missile threat





The system was also seen as detrimental to global arms control efforts,

Since 2005, advances in ballistic missile technology have led to a shift in international opinions towards greater support for the establishment of BMD systems.

### CONSIDERATIONS

#### Continental BMD:

In addition to bolstering its capability to defend the US homeland, the US also works closely with regional allies both within and outside of the NATO context to develop cooperative solutions to ballistic missile threats.

Respecting Canada's 2005 decision not to participate in continental BMD, the US assigned responsibility for the execution of BMD for the continental US to US Strategic Command (USSTRATCOM) and US Northern Command (USNORTHCOM), rather than the bi-national NORAD. the *assessment* of the missile threat to North America and the *warning* of any potential attack is a joint Canada-US effort through NORAD,

#### US Investments in BMD

In 2014, the US announced its intent to deploy an additional 14 ground-based interceptors (GBI) to Fort Greely in Alaska, effectively increasing the number of deployed GBIs on US soil by nearly 50 percent. It is also exploring an additional GBI site, potentially on the US east coast.

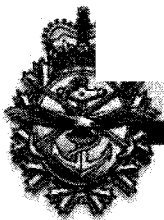
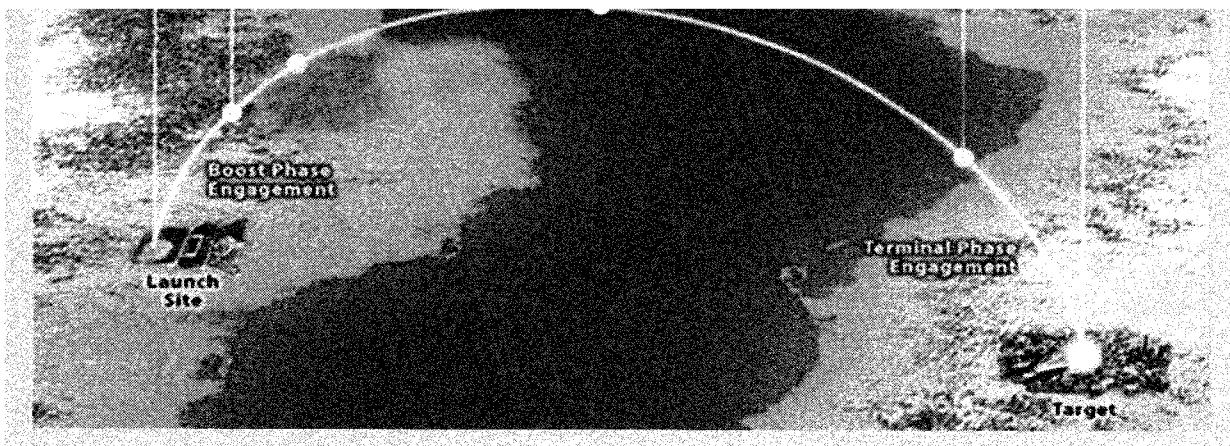
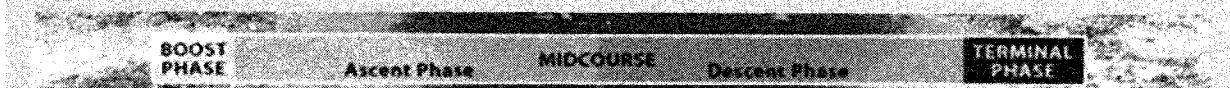
Despite pressures on the US Defence budget, missile defence mission continues to be prioritized. Of note, President Obama's Fiscal Year 2016 Budget requests \$9.6 billion total investment in missile defence. This includes \$8.1 billion for the Missile Defence Agency.







Once a ballistic missile is launched, it is estimated that a ballistic missile defence system to intercept the incoming missile.





## NATO BMD

In 2010, NATO Allies decided to develop a BMD capability as part of the Alliance's core task of ensuring collective defence. Since then, NATO members have been engaged in active discussions regarding the development of the NATO BMD system, including the coverage and scale of this system.

Notably, the NATO system distinguishes between *territorial* and *theatre* ballistic missile defence based on the purpose of the assets deployed.

### **Territorial vs. Theatre Ballistic Missile Defence**

*Territorial ballistic missile defence* assets are deployed solely for the protection of NATO European territory, populations, and forces. These assets are provided to NATO by BMD-capable nations on a purely voluntary basis.

*Theatre ballistic missile defence* assets are for the protection of deployed NATO forces both within and outside of NATO territory. NATO members may be asked to provide these assets as a national contribution target to NATO.





However, as Canada does not participate in missile defence for the protection of North America, Canada considers the NATO system to be solely for the protection of NATO *European* territory, populations, and forces.

#### **Allies' Contribution to NATO BMD**

The US provides critical support to the NATO territorial BMD system through its three-stage European Phased Adaptive Approach (EPAA).

Under this approach, the US has signed agreements with Turkey, Romania and Poland to base sensors and interceptors on their territories, as well as to port US Navy Aegis ships in Spain, to provide missile defence coverage for the defence of Europe.

In addition to the US contribution, other NATO Allies have also announced their intent to make further investments in BMD capability that could be integrated into the NATO system if required.

#### Growing International Collaborations on BMD:

Due in large part to the US emphasis on collaboration with Allies and partners under the Obama Administration, there are now more players involved in BMD. Beyond NATO, other BMD-capable nations are also gradually grouping together as like-minded partners on missile defence to contribute to overall deterrence.

The US has been open to Canadian involvement in low profile, multinational simulation events, which has led to a better Canadian understanding of the US and NATO BMD systems.



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are withheld pursuant to sections  
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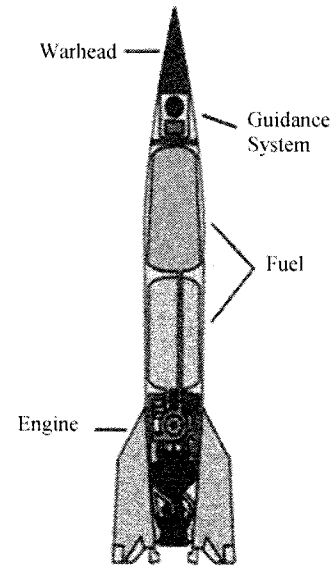
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## ANNEX I: ABOUT BALLISTIC MISSILES

A ballistic missile is made up of an air frame, a rocket engine, a guidance and control system, and a warhead that can be nuclear, chemical, biological or conventional in nature. In general, BMs are launched vertically and follow a ballistic trajectory that needs to be calculated beforehand in order to reach the desired target.

Basic Components of a Ballistic Missile



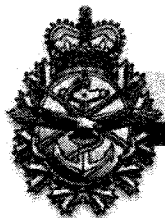
Unlike cruise missiles or other “air-breathing” platforms, ballistic missiles are powered by rockets that do not require an external source of oxygen to function. It is this design element that allows a ballistic missile to leave the atmosphere and reach speeds that can approach 7 kilometers per second – the longer the range, the greater the speed of the missile. The key attributes of the ballistic missile that makes defensive measures difficult include short flight times over long distances and high terminal velocities. Their main drawbacks are very visible launch signatures and low accuracy unless terminal guidance is used.

Ballistic missiles are categorized according to their maximum ranges:

- Close Range Ballistic Missile (CRBM) - <300km
- Short-Range Ballistic Missiles (SRBMs) – 300-1,000km
- Medium-Range Ballistic Missiles (MRBMs) – 1,000-3,000km
- Intermediate-Range Ballistic Missiles (IRBMs) – 3,000-5,500km
- Intercontinental Ballistic Missiles (ICBMs) – >5,500km

### Missile Launchers

Ballistic missiles are very large and cannot be launched by aircraft. They are typically launched from fixed installations or mobile launchers from land or from purpose designed submarines at sea. On land, these missiles are transported horizontally and then erected into a vertical position prior to launch.



## Ballistic Missile Trajectory

The trajectory of a ballistic missile consists of three phases before impact – boost, midcourse, and terminal phase. Ballistic missiles are only guided and powered during the boost phase, which begins at launch and lasts until rocket engine is spent. Once the missile enters the midcourse phase, it relies on gravity to determine its course, or trajectory. At terminal phase, the warhead detaches from the body of the missile and re-enter the atmosphere to continue its downward trajectory towards the intended target.





## ANNEX II: INTERCEPTING A BALLISTIC MISSILE

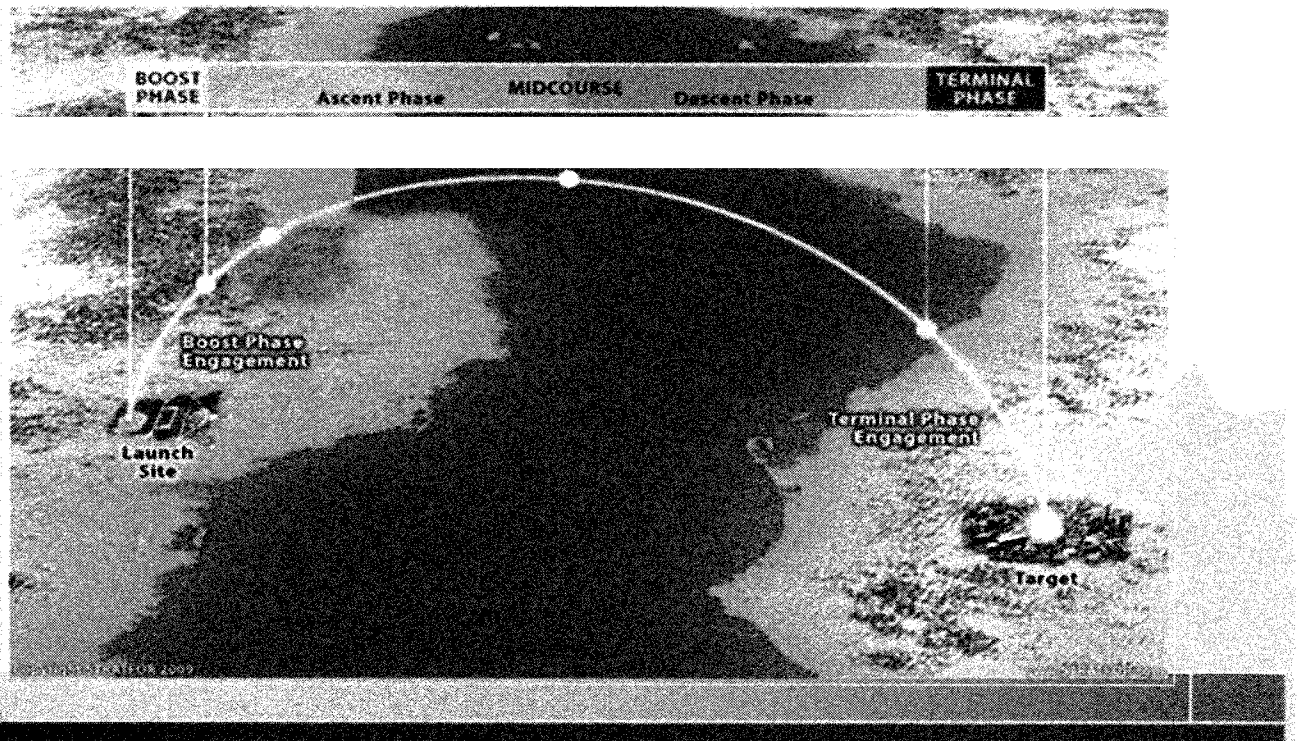
Once in its trajectory, a ballistic missile can only be stopped or destroyed by a successful intercept.

Ballistic missiles have significant signatures that are readily detected and tracked once launched, but their hypersonic velocity (up to 7 km/s) presents a significant problem for defensive systems. The problem is often described as 'hitting a bullet with another bullet', and the problem increases in difficulty as the range of the missile and hence its terminal velocity increase.

There are three possible strategies for the interception of ballistic missiles. A boost-phase intercept sees the threat attacked when it is slow moving with a highly visible exhaust plume. A midcourse phase intercept sees the threat attacked around the apex of its trajectory, usually outside the atmosphere. A terminal phase intercept involves engagement of the threat as it dives on to its target.

Of the three, the mid-course phase is the longest in both time and space, and thus affords the most opportunities for intercepts. It also limits the contamination by WMD warhead debris since it will be burnt up during re-entry.

### PHASES OF BALLISTIC MISSILE TRAJECTORY







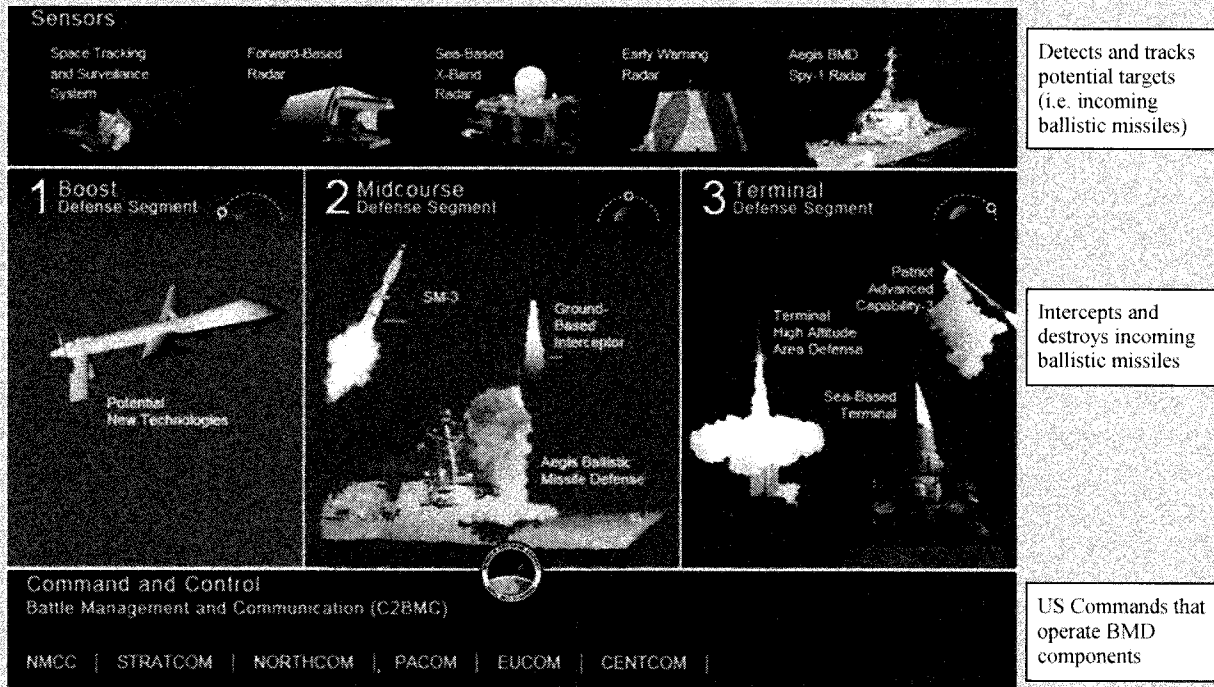
### US Ballistic Missile Defence Systems

The US BMD system is designed to provide multiple opportunities to destroy missiles and their warheads before they can reach their targets, and is capable of countering ballistic missiles of all ranges. The system includes three types of components:

1. Network sensors and ground- and sea-based radars for target detection and tracking;
2. Ground- and/or sea-based interceptor missiles for destroying a ballistic missile using either the force of a direct collision, or an explosive blast fragmentation warhead; and,
3. A command, control, battle management, and communications network to establish links between the sensors and the interceptor missiles.

The system leverages various assets depending on the type of ballistic missile it encounters and the stage at which the intercept will take place (see diagram below for possible assets). For example, the missile interceptors onboard Aegis-equipped cruisers and destroyers can be used to intercept and destroy short- and medium-range ballistic missiles during the midcourse and terminal phases of flight. Additionally, Aegis-equipped ships can also provide surveillance support to assist other BMD components to counter intercontinental ballistic missiles, and to provide advance warning for the defence of the nations, deployed forces, and allies.

In the US, BMD elements are operated by military personnel from US Strategic Command, US Northern Command, US Pacific Command, US Forces Japan, US European Command, and others. The US also has BMD cooperative programs with a number of allies, including the UK, Australia, Czech Republic, Denmark, Germany, Israel, Italy, Japan, Netherlands, and Poland.



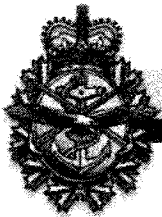




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<sup>3</sup> A threat is defined in terms of a harmful *capability* and the *intent* to employ the capability.



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**Page 201**













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**ANNEX IV: US COOPERATION WITH INTERNATIONAL PARTNERS ON BMD**




**Europe**

	<b>NATO</b>	NATO BMD Interim Capability; ALTBMD; BMD (Territorial Missile Defense); Interoperability Tests with EPAA
	<b>Czech Republic</b>	BMD Framework Partner; RDT&E Cooperative Projects
	<b>Denmark</b>	BMD Framework Partner; Thule Upgraded Early Warning Radar; RDT&E Cooperative Project
	<b>France</b>	University to University Research; Cooperative R&D Agreement
	<b>Germany</b>	PAC-3
	<b>Italy</b>	BMD Framework Partner
	<b>Netherlands</b>	PAC-3; Maritime BMD studies
	<b>Poland</b>	Agreed to host Aegis Ashore
	<b>Romania</b>	Agreed to host Aegis Ashore
	<b>Spain</b>	Hosting BMD-capable ships to support NATO BMD and other missions
	<b>Turkey</b>	AN/TPY-2 radar host; University to University Research
	<b>UK</b>	BMD Framework Partner; Fylingdales Upgraded Early Warning Radar; Joint Project Arrangements for Cooperative Projects

**Middle East**

	<b>Israel</b>	Arrow Deployed; Arrow System Improvement Program; development of David's Sling Weapon System; Iron Dome
	<b>Kuwait</b>	Missile defense discussions
	<b>Qatar</b>	Missile defense discussions
	<b>Saudi Arabia</b>	Missile defense discussions; PAC-3 purchase
	<b>United Arab Emirates</b>	Foreign Military Salescases for THAAD and PAC-3

**Asia / Pacific**

	<b>Australia</b>	BMD Framework Partner; R&D Cooperative Project
	<b>Japan</b>	BMD Framework Partner; AN/TPY-2 radar host; 21" Missile Development; 4 Aegis BMD capable ships
	<b>ROK</b>	Missile defense discussions

US Missile Defence Agency, 16 April 2015





## ISSUE PAPER: GLOBAL ENGAGEMENTS AND ALLIANCES

### CONTEXT

As articulated in current defence policy, the defence mandate comprises three enduring roles: defending Canada, defending North America in cooperation with the United States, and contributing to international peace and security. Defence engagement enables the execution of this mandate while at the same time promoting broader national security, foreign and trade policy objectives.

National Defence employs a broad spectrum of tools in support of its engagement agenda, including defence cooperation agreements, high-level engagements abroad, joint exercises, and capacity building activities such as military training (Annex A provides an overview of the principle tools of engagement). Canada possesses a strong and professional military with valuable expertise in a number of areas, such as military training and capacity building. With an internationally respected reputation, Canada routinely provides effects that "punch above the weight" of its contributions in international engagements.

To guide defence engagement activities in a way that maximizes finite resources and promotes overall policy/programming coherence, regional engagement strategies are being developed to articulate specific defence interests and objectives (see below). These strategies outline the parameters for defence engagements and identify areas where defence resources should be targeted for strategic effect. In all cases, the evergreen strategies are planned and executed in line with Government of Canada priorities and principles, and defence-specific needs and modalities: Canadian sovereignty; Canadian prosperity; regional and international stability; primacy of a rules based international order; network of defence partners; mobility and reach; and access to advanced capabilities.

### CANADA'S STRATEGIC INTERESTS AND OBJECTIVES

#### Key Allies and Alliances

United States – Strategic Interests: The United States is Canada's most important ally and defence partner. Canada's relationship with the United States directly contributes to Canadian sovereignty and prosperity, regional and international stability, and the primacy of a rules-based international order. Engagement and cooperation at various levels are regularly sought by both countries, and new areas of potential cooperation continue to be explored.





The current Canada-US bilateral defence relationship is characterized by a high degree of military-to-military cooperation, overlaid with regular strategic-level engagements by Ministers and policy dialogue across geographic and thematic areas (i.e. Americas, Asia Pacific, Middle East, Russia, cyber defence, space, nonproliferation and NATO). Practical cooperation is supported by a range of bilateral arrangements including the Civil Assistance Plan (CAP), which enables Canada or the US to provide military assets to assist with civil emergencies, as well as the Combined Defence Plan (CDP) which synchronizes military efforts from both countries into one coherent bilateral military defence plan to face continental defence challenges.

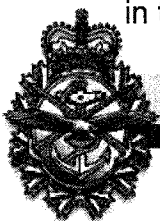
Canada's defence cooperation with the United States is most notable through the work of North American Aerospace Defense Command (NORAD), which directly enhances the security of Canadians as our nations continue to work together to effectively counter new threats to the continent. Canada and the US are engaged on issues impacting the ability of NORAD to fulfill its missions,

The United States is also Canada's premier partner in the Arctic. Under the auspices of the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic, negotiated by Arctic States in 2011, Canada and the United States work closely with other Arctic States – namely Denmark, Norway, Iceland, and to some extent Russia – to enhance interoperability and coordination of national search and rescue capabilities, and to exercise collective responses to emergencies in the Arctic region. The United States is also a regular participant to Canada's annual Operation NANOOK, which aims to enhance interoperability between Canada and its Arctic partners as one of its operational objectives.

*Strategic Objectives:*

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NATO – *Strategic Interests:* NATO is an essential collective defence organization that serves as the key transatlantic link, which is critical to the security of Canada. Membership in the Alliance is a tangible expression of Canada's strong relationships with both the United





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States and with European Allies. In an ever-evolving security environment, NATO provides both a forum for dialogue among Allies and access to high quality interoperable capabilities from 28 military forces, which constitute both a deterrent against threats to Allies' security, and a force multiplier for military operations. Due to Canada's continued demonstration as well as the deployable and interoperable capabilities that CAF brings to the Alliance, NATO Allies proactively seek CAF participation in NATO initiatives, exercises and operations.

Among other effects, the institutionalized network of NATO Allies and Partnerships countries enables the global reach of the Canadian Armed Forces (CAF); provides opportunities to assist Canadian defence industry exports and business development activities; and facilitates access to the advanced capabilities required for the CAF to implement its mandate. Moreover, as a hub for engagement on defence and security issues, NATO provides a forum to complement bilateral engagements with Canada's closest Allies, or, in cases where relations are more modest, augment limited bilateral cooperation. It similarly provides access to decision-makers and the potential to leverage the multilateral forum to advance an agenda favourable to Canadian interests. Finally, as an instrument for interoperability and standardization, NATO is a force multiplier that affords the CAF with access to Allied capabilities, defence and security training, and expertise. Although the nature and the scope of threats faced by Canada and our NATO Allies have changed over time, the basic tenets of solidarity, dialogue and cooperation continue to uphold the Alliance's approach to defence and security.

In light of recent events in Ukraine

Canada has committed a broad range of capabilities to the Alliance's efforts to reassure Eastern and Central European Allies of NATO's resolve

Canada also supports NATO's adaptation to improve the readiness of its forces to address other potential threats to its territory.

*Strategic Objectives:*

- Sustain NATO as a relevant and effective trans-Atlantic institution
- Enhance NATO as a fit-for-purpose military alliance that is flexible, interoperable and fully deployable
- 

*Strategic Objectives:*



**SECRET CEO**



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**Regional Snapshots**

Latin America and the Caribbean – *Strategic Interests*: Latin America and the Caribbean is a region characterized by significant diversity, made up of countries with very different histories, cultures, aspirations, challenges and capacities. Consequently, defence engagement in the Americas must address a range of disparate relationships, interests, policy opportunities and challenges. As the Americas are of growing importance to regional prosperity, security and well-being, the Government has declared the region a foreign policy priority for Canada.

There is a genuine interest from countries in Latin America and the Caribbean in collaborating with Canada on defence and security issues. Our hemispheric partners recognize that Canada possesses a modern and professional military, and that CAF has valuable expertise to share.

Thus, by capitalizing upon the nature and reputation of the CAF, Defence is uniquely suited to engage substantively with countries in the region and open doors for Canada's whole-of-government team.

*Strategic Objectives:*

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Broadly put, Canada takes a multifaceted approach to promoting security in the hemisphere, playing an active role in helping modernize the hemispheric security architecture and ensuring that multilateral efforts to address threats are effective. To this end, focussing on key bilateral relations and conducting engagements with regional institutions (for example, the Regional Security System, Conference of Defence Ministers of Americas, and the Inter-American Defence Board) are important to the realization of DND/CAF strategic objectives in this region. Canada is also committed to working with Mexico and the United States to advance trilateral defence cooperation.

Asia-Pacific – *Strategic Interests*: The Government of Canada has identified Asia as a foreign policy priority, with a focus on expanding Canadian prosperity through engagement in the region.

DND/CAF efforts to  
deepen relationships with regional militaries will help demonstrate Canada's increased





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focus on Asia Pacific, with the follow-on benefit of promoting trade initiatives such as the Trans-Pacific Partnership. Furthermore, to the extent that a stable security environment promotes economic growth, Asia's economic and strategic rise means that Asian security concerns will have an increasingly direct impact on an array of Canadian interests. Canada's partners and allies seek Canadian expertise in areas such as maritime security, peace support operations, and humanitarian assistance and disaster relief.

DND/CAF strategic interests in the region are also shaped by the recognition that the CAF has been called upon to deploy to the region, particularly as part of disaster response missions in the aftermath of natural disasters.

Moreover, for the strategic effects of defending Canada and Canadians against the persistent threats of international terrorism, proliferation of weapons of mass destruction, and human trafficking, it is required that CAF improves its understanding of – and ability to act in – this region.

*Strategic Objectives:*

- 
- Support capacity-building and the promotion of a rules-based international order

In addition, the Environmental Commands also take part in other regional groupings such as the Western Pacific Naval Symposium. Finally, DND/CAF participates in a number of high-level special events (e.g., Shangri-La Dialogue, PACOM Chief of Defence Staffs), which are often viewed by Asian partners as a bell-weather of Canada's commitment to the region.

Europe – Strategic Interests: Europe and the European Union (EU) plays significant roles in international peace and security, and Canadian engagement with Europe remains critical to the advancement of Canadian strategic interests. Europe enjoys a high concentration of relatively wealthy states fielding modern militaries with advanced capabilities. Some European countries are the source of Canada's most capable and reliable partners in the region and across a wide range of areas, and they can be valuable partners given the strategic location of Europe as a power projection hub to facilitate CAF deployments in Africa and the Middle East. As European Allies also appreciate our contribution as a defence partner,



**SECRET CEO**





Many of Canada's most mature and enduring defence relationships are with European countries, while cooperation with some newer European powers has grown significantly.

With support from key EU member countries the EU has demonstrated a renewed interest in establishing itself as an important player in defence and security. Canada has an interest in addressing security challenges that impact Europe and by extension the Euro-Atlantic area. From in Eastern Europe to the challenges facing Europe from the south, in the Mediterranean, North Africa and the Middle East, these threats directly or indirectly affect Canada. Canada is one of the EU's top ten "strategic partners", a status that will be formalized under the Canada-EU Strategic Partnerships Agreement, once ratified by the EU and Canada. This legally binding agreement calls for cooperation in international peace and security, and effective multilateralism.

Moreover, Canada has stood alongside Ukraine and taken a number of important steps to support the Ukrainian Government, including by pledging support to help stabilize its economy and promote economic and social development, and by providing non-lethal security assistance and training for the Ukrainian defence force.

*Strategic Objectives:*

- Strengthen relations with key European partners
- Promote cooperation and stability in the wider European region
- 

Middle East – *Strategic Interests:* Given the significant diversity of the constituent states in the Middle East, the depth and nature of Canada's defence and security interests vary significantly. Canada shares with Israel a

With Jordan, Canada shares an

Kuwait continues and now hosts DND/CAF's Operational Support Hub. the Defence Team is in the early stages of expanding defence relations, with partner interest in Canadian training opportunities and materiel





exports and DND/CAF interest in maximizing access to the region. DND/CAF is responding to a call for operational support against a militant threat.

DND/CAF is

The primary strategic interests for DND/CAF in the Middle East are broad, and include: contributing to regional peace and stability through the professionalization of national armed forces; reducing the threat of terrorism; and countering the proliferation of weapons of mass destruction. In addition, partnerships in the region are vitally important to enabling CAF to effectively carry out operations, in particular by providing regional footholds through which to support such needs as ship re-supply, materiel trans-shipment, and aircraft over-flight. There are also significant defence industrial trade interests in the region, facilitated by DND/CAF cooperative arrangements and regional personnel presence.

*Strategic Objectives:*

- Participate in United Nations and other multinational security efforts, including through Operation PROTEUS and Operation CALUMET
- Provide capacity building and training to key partners
- Ensure CAF mobility and access
- 

Africa – Strategic Interests: Africa’s geopolitical importance is derived largely from its potential to supply the global economy with an array of natural resources, including oil and gas, and from the evolving threat of Violent Extremist Organizations. African economies are among the fastest growing in the world and Canadian commercial engagement with Africa has similarly expanded.

Defence engagements promote regional and international stability and a rules-based international order that contributes to increased prosperity for both Canadians and Africans. DND/CAF’s role in Africa supports Canada’s foreign policy priority issues, including the protection of civilians, delivery of humanitarian and development assistance, sexual and gender-based violence, mass atrocities, as well as broader discussions on peacekeeping policy in the United Nations.

*Strategic Objectives:*

- Address threats to Canada at the source
- Promote and support the maintenance of a rules-based international order
- Ensure mobility/access for DND/CAF assets

**NEXT STEPS**

Regional Strategies: Regional engagement strategies which guide in-year programming (currently in development) are to be reviewed regularly and kept evergreen.

United States: To advance Canada’s defence objectives with the United States, the Defence Team should continue to maintain the momentum of high-level visits and strategic policy dialogues, in particular, via the Defence NORAD Steering





Operations, joint exercises, functional and sector engagements as well as personnel exchanges and placements, should also be key to maintaining the unique level of communication and military interoperability.

NATO: It is recommended that

Latin America and the Caribbean:

Asia-Pacific:

Europe:

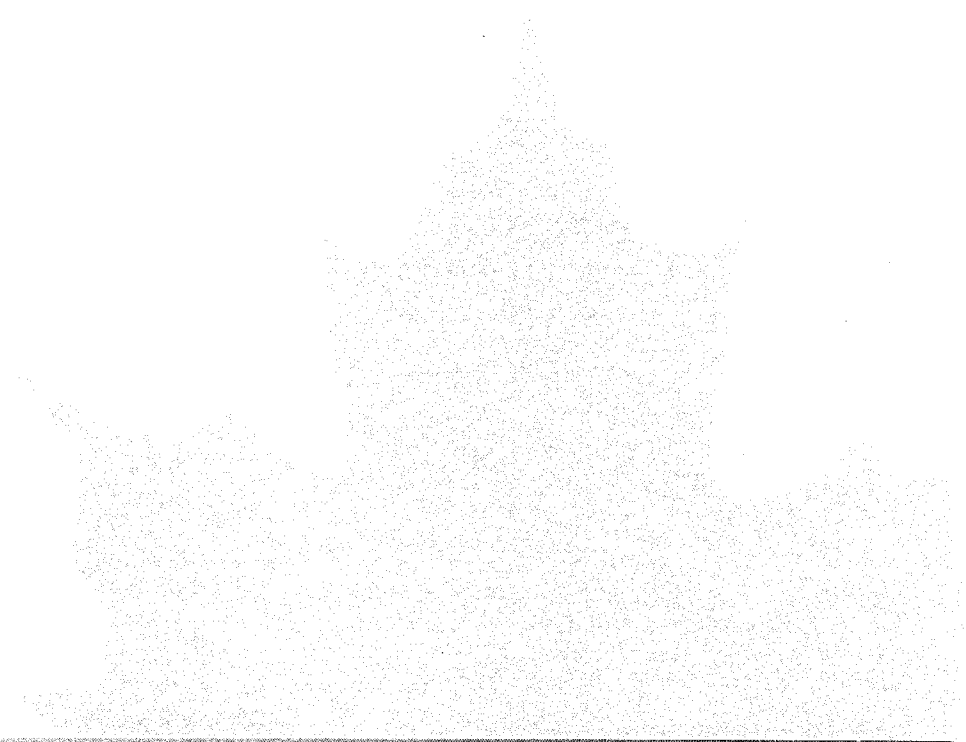
Concrete examples of engagement activities could include:





Middle East:

Africa:





**ISSUE PAPER: FLASHPOINTS OF FOCUS**

**HIGHLIGHTS**

- Canada and its allies are currently faced with two complex, enduring crises in Ukraine and Iraq/Syria that pose a threat to our security interests. Both have far-reaching implications for international security beyond the immediate theatre of operations, and there is no end in sight to either conflict.
- The Canadian Armed Forces (CAF) are engaged in responding to both crises, through efforts to bolster the readiness and responsiveness of the North Atlantic Treaty Organization (NATO) as well as through coalition operations in Iraq and Syria.
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- 

**CONTEXT**

The global security environment has been characterized by increasing volatility in recent years. Not only do transnational threats from terrorism, cyber attacks and proliferation continue to pose security challenges, but more conventional threats have also resurfaced. 2014 witnessed the outbreak of two major conflicts that continue to threaten international security.

in June 2014, the Islamic State of Iraq and Syria (ISIS) swept through large parts of Iraq and took Mosul.





contrast, ISIS – despite its claims to the contrary and its attempt at establishing the basis of a Salafist state – remains a non-state actor. It uses terrorist tactics, and its recruitment of would-be jihadists from around the world gives it a multinational identity.

Nonetheless, pose similar challenges. SIS have shown a sophisticated ability to use the internet for propaganda and subversion purposes, and demonstrated skill in spreading their narrative.

on irregular ground forces. Although ISIS uses terrorist tactics to control the local population and propagate its narrative online, in its fight against forces in Syria and Iraq it uses conventional ground-based capabilities,

Why Does It Matter?

flashpoints pose potential threats to Canada’s security interests and have led to the involvement of the Canadian Armed Forces in military operations.

**The North Atlantic Treaty, signed 4 April 1949, Washington D.C.**

Article 5: “The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all; and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.”





At the same time, the focus of the North Atlantic Treaty's Article 5 on

**Hybrid Warfare**

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Canada's involvement in Coalition efforts to defeat ISIS is motivated by a number of domestic and international factors. The rise of ISIS poses a threat to Canada through its recruitment of Canadian foreign fighters and its online incitement for Canadians to conduct attacks on home soil. The threat it poses to stability in the wider region also negatively impacts Canadian interests in the Middle East and international security more generally.

Approach to Date

in Ukraine has been three-fold:





While in line with the approach of our NATO Allies,

Canada remains one of the strongest supporters of the Ukrainian government.

In Iraq and Syria, Canada has joined the international coalition to counter ISIS. The CAF contribution includes approximately 600 personnel and an air task force (six fighter jets, one air-to-air refueller and two surveillance aircraft) tasked to strike ISIS targets in Iraq and Syria. Canada also deploys up to 69 special operations forces personnel to advise and assist Iraqi forces in planning and conducting their military operations against ISIS.

### CONSIDERATIONS





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## Challenges

The Minsk agreements brokered by Germany and France in February 2015 began to take hold in late August and the situation on the ground in eastern Ukraine has been relatively calm since. An agreement on the withdrawal of heavy weapons, signed by leaders in October, has furthered progress on the conventional frontline. While there remains a risk that violence could re-emerge, the situation has become a "frozen conflict".

however.

Some countries within Europe

called for an early lifting of sanctions, but the EU agreed to extend sanctions until January 2016.

## Syria and Iraq

There are a number of complex and intertwined issues at play in Iraq and Syria, which have led to widespread instability and provided the conditions that have allowed ISIS to flourish.

Syria is embroiled in a bitter conflict that started when the wave of popular uprisings sweeping across the Middle East reached the country in March 2011. Protests against President Bashar al-Assad, fuelled by grievances over repression, corruption, unemployment, low wages and high inflation, were met with increasingly violent governmental responses. The conflict has since metastasized into something far more complicated, with various forces pursuing disparate goals. The armed opposition – made up of a spectrum of actors from more secular nationalists to the al-Qaeda affiliated al-Nusra Front – and the Assad regime see each other as the main adversaries. Kurdish forces, supported by Iraqi Kurds, are working to secure greater





autonomy, clashing primarily with ISIS. After long targeting almost exclusively opposition and Kurdish groups in its goal of carving out a safe haven in Syria, ISIS has recently begun to fight the regime for certain strategic resources such as border crossings and oil fields in eastern Syria. Nevertheless, these relationships only reflect current trends, and the conflict has frequently seen various groups fall into or out of alignment with one another.

Neither Assad's forces nor any of the various armed factions have been able to gain a definitive advantage in Syria, resulting in a protracted conflict with no end in sight. The UN estimates that there are 7.6M Internally Displaced Persons inside Syria, half of whom are children. Almost 4 million Syrian refugees have fled to neighbouring countries and more than 210,000 are estimated to have lost their lives in the conflict. The Syrian conflict has also generated a refugee crisis across many parts of Europe, the likes of which have not been witnessed since the Second World War.

The various forces in the conflict also have different backers beyond Syria, which gives the conflict broader geopolitical significance,

Iran, another key player in the conflict, provides its own fighters and supports others from Hezbollah and Iraqi Shia militias. Most members of the international community, from Canada, the US and the UK to Turkey, Saudi Arabia and Qatar have called for Assad to step down.

**Chemical Weapons Use in Syria and Iraq**

- In September 2013, the Syrian regime acknowledged that it possessed chemical weapons and agreed to join the Chemical Weapons Convention (CWC) and dismantle its chemical weapons program. Syria completed the removal of 100% of its declared chemical weapons stockpile from its territory in June 2014 and by March 2015 nearly 98% of all chemicals had been destroyed.
- The Organization for the Prohibition of Chemical Weapons (OPCW) has also concluded that chlorine has been used as a weapon in Syria. Although it did not have a mandate to attribute responsibility, an OPCW Fact-Finding Mission established what Canada believes is a clear link between the use of chlorine gas and its delivery by helicopter, a capability possessed only by the Syrian regime's forces. While chlorine is not specially identified in the CWC, the Convention prohibits the use of any chemical as a weapon. As such, this is a clear violation by the Syrian regime of its obligations under various UN Resolutions and the CWC.



in Iraq in the last year, including a severe humanitarian crisis, a financial crisis caused by low oil prices and increased security expenses

It is still too early to predict the impact of the recent nuclear agreement between Iran and the P5+1 (the United States, the United Kingdom, France, Germany, Russia, China) on the crisis in Syria and Iraq. However, important diplomatic relationships have been formed as a result of the deal and these may enable discussions to occur in the weeks and months ahead.

#### Islamic State of Iraq and Syria

There are three broad dimensions to the ISIS threat:

- The territorial-based campaign in Iraq and Syria;
- Its regional reach, which has seen a number of organizations across Africa and Asia declaring allegiance as ISIS affiliates; and
- Its global reach through the internet that attracts foreign fighters and inspires homegrown attacks abroad.



ISIS has exploited the chaos created by the ongoing revolt against Assad in Syria as well as Sunni grievances in Iraq to violently establish control of large stretches of territory. It uses particularly brutal tactics, including public and mass executions, abduction and sexual violence, reprisals against potential opponents and instituting harsh shar'ia laws across the territory it has conquered.

The speed with which ISIS advanced into Iraq and took Mosul in June 2014, coupled with reports of the humanitarian plight of populations persecuted by ISIS, mobilized international support and led the US to launch airstrikes in Iraq in August 2014. In September 2014, the US led the formation of an international coalition against ISIS that currently comprises over 60 partners and focuses on whole-of-government efforts across six discrete lines of effort: supporting military partners in the region; stopping the flow of foreign fighters; countering ISIS financing and funding; addressing humanitarian crises; delegitimizing ISIS's ideology; and supporting stabilization efforts in the region.

Although the CAF's military contribution is currently Canada's most visible line of effort, Canada is also a top tier humanitarian donor to Iraq and Syria and has contributed to international efforts to aid those affected by the conflicts. In addition, Canada is delivering stabilization and development assistance in the region and is taking action to reduce the risk of individuals who have gone abroad to participate in terrorist-related activities or training. It is also working to cut off ISIS funding sources while cooperating with allies and supporting international initiatives to counter ISIS propaganda, thwart





recruitment efforts and reduce radicalization.

#### A Regional and Global Threat

- ISIS poses a threat to stability in the broader Middle East/North Africa region, firstly because it creates large refugee flows and secondly because it inspires and attracts allegiance from other terrorist groups. Groups aligned with ISIS have threatened attacks in Jordan and attempted attacks in Lebanon. In North Africa, groups in Morocco, Algeria, Egypt and Tunisia have pledged allegiance to ISIS, but of most concern is the group's expansion into Libya, where persistent instability provides fertile ground for ISIS's expansion. ISIS has also stated its intention to "invade Europe" via Libya; a risk that cannot be discounted given the large flows of refugees seeking to cross the Mediterranean to Europe.
- Further afield, Boko Haram in Nigeria has pledged allegiance to ISIS, and some groups in Afghanistan, Pakistan and Southeast Asia claim to belong to its network as well. ISIS also claimed responsibility for attacks in Yemen in March 2015.
- In addition, ISIS has global reach through its sophisticated use of the internet and social media, and it poses a potential threat to Canada and its allies in two ways. Firstly, ISIS can inspire radicalized individuals to conduct homegrown attacks in the West, as has been witnessed in Canada, Australia, France and Denmark in recent months. Secondly, ISIS has proven adept at attracting foreign fighters to Iraq and Syria, including an estimated 3,400 from the West. There is a risk that these fighters will return home, trained and battle-hardened, to spread ISIS's ideology and plot attacks on home soil, as was the case in the thwarted plots in Belgium in January 2015.

#### Challenges

The campaign against ISIS will not be successful without addressing its presence in both Iraq and Syria. Although some coalition members, including Canada, are conducting airstrikes in Syria,

The coalition strategy is focused on training Iraqi forces to confront the threat posed by ISIS,





s.15(1)

s.21(1)(a)

s.21(1)(b)

**SECRET CEO**

## LOOKING AHEAD

advance its objectives.

while ISIS uses terror tactics and barbarism to



**SECRET CEO**



In the fight against ISIS, given the reluctance by outside countries to commit ground forces to the fight

We should also expect that both conflicts will continue to feature prominently in high-level international discussions, including at NATO leading up to the Summit of Heads of State and Government in Warsaw in July 2016.

Despite the apparent intractable nature of these conflicts, we need to make an effort to look past current challenges and think about how best to defend Canada's interests.







As the crises in Ukraine and Iraq/Syria are expected to persist for the foreseeable future, Canada will have to continue assessing the extent of its involvement in the international community's efforts to deal with these challenges. In the lead-up to the 2016 NATO Summit in Warsaw,





## ANNEX A: RELEVANT ACTORS

### IRAQ/SYRIA

**Coalition Forces:** The US-led international Coalition against ISIS comprises over 60 countries conducting whole-of-government operations across multiple lines of effort including supporting military partners in the region; stopping the flow of foreign fighters; countering ISIS's financing and funding; addressing humanitarian crises; delegitimizing ISIS's ideology; and stabilizing areas recovered from ISIS. Canada and a number of its closest Allies are taking part in the military aspects of the Coalition campaign. The Coalition is currently focused on halting the advance of ISIS through an air campaign and enabling the Iraqi forces, including the Iraqi Security Forces and the Kurdish Security Forces.

**Russia:** On 30 September Russia's Federation Council approved President Putin's request for authorization to use Russian Armed Forces outside the country and airstrikes began in Syria later that same day. public statements have indicated that the military goal of this operation is exclusively to provide air support to the Syrian government in their fight against ISIS,

**ISIS:** The Islamic State in Iraq and Syria (ISIS) announced its "Caliphate" on 29 June 2014 and aims to consolidate or maintain an Islamic State in Iraq, the Levant and beyond, based on an extreme interpretation of Islam. Despite its origins as an affiliate of Al Qaeda in Iraq (AQI), ISIS has evolved into more than just a terrorist organization. It now strives to operate as a state, governing some 8 million citizens and controlling territory roughly the size of Britain.

**Government of Iraq:** Shia-led governments have held power in Iraq since ousting President Saddam Hussein in 2003. The current Prime Minister of Iraq is Haider al-Abadi who holds most of the executive authority and who appoints the Council of Ministers.

**Iraqi Security Forces:** The Iraqi Armed Forces consist of an army, an air force and a navy and have a combined strength of over 271,000 personnel. The Interior Ministry controls the various paramilitary forces which currently number over 531,000 personnel. Combined, they are referred to as the Iraqi Security Forces. The United States and





allies are investing significantly in their preparedness and training but the Iraqi Security Forces

**Iraqi Shia Militias:**

Most Shia fighting groups are linked either to Iran, powerful Iraqi Shia clerics, or factions of the Shia-dominated government.

**Assad Regime:** The regime of President Bashar al Assad remains powerful in and around the capital city of Damascus, and throughout much of western and southern Syria. Assad has been able to count on the support of Syria's Alawite population – a Shiite group of which the Assad dynasty is a part – concentrated in western Syria along the Mediterranean coast. However, the Assad regime is stretched both militarily and economically, though it retains the strongest, most cohesive armed forces and steady foreign backing from Russia and Iran.

**Al Nusra Front:** Al Nusra Front seeks the overthrow of the Assad regime in Syria and the establishment of an Islamist government in its place. It opposes ISIS as well as many elements of the Free Syrian Army that includes defectors from the government's forces. The group also supports the wider jihadist goals of al Qaida and the eventual creation of an Islamic caliphate. Al Nusra Front has recruited heavily from the Syrian countryside and quickly established itself as a skilled fighting group of local Syrians that has steadily been augmented by foreign fighters.

**Syrian Opposition Groups:** There is a wide spectrum of groups (at least hundreds) that operate under the banner of the Syrian Opposition. Many are small and operate at the local level, although some have emerged as powerful forces with affiliates across the country. Several of these groups face internecine divisions as well as funding and supply issues and remain beholden to the diverging agendas of their external backers. Political opposition also remains fragmented

While some espouse a secular outlook, many more support a strong Islamist model of governance.

**The Kurds:** The Kurds of Turkey, Syria, Iraq and Iran all have longstanding aspirations for their own Kurdish state. Syrian Kurds have gained significant political and military power because of the Syrian civil war, while Iraqi Kurds have benefitted from the security vacuum left by the Iraqi Security Forces.

There are 15 million Turkish Kurds and their aspirations for independence are strongly opposed by the Turkish government.





## UKRAINE

**Ukrainian Government Forces:** Following [redacted] and mounting unrest in eastern Ukraine, the Ukrainian government launched an “Anti-Terrorist Operation” (ATO) to counter [redacted] separatist forces.

The Ukrainian National Guard, under the Ministry of the Interior, as well as volunteer territorial defence battalions have quickly taken a prominent role in the ATO. To further support Ukraine security, the current president, Petro Poroshenko, supports Ukraine joining NATO.

**International Partners:** A number of international partners have provided and continue to provide support to Ukraine. The US, the UK and Canada, which together with Ukraine form the Multi-national Joint Commission, have provided non-lethal military equipment and sent troops to Ukraine to train Ukrainian forces. Poland is also training Ukrainian military personnel on its territory.

**Pro-Russian Separatists:** Pro-Russian separatist forces are organized under the self-proclaimed “Donetsk People’s Republic” and “Luhansk People’s Republic”. Since the beginning of the conflict in eastern Ukraine

The separatist forces have recently become more organized as a result [redacted] Although separatist leaders have initially sought to detach the territories under their control from Ukraine, they have aligned their objectives [redacted] to attain a special status for the breakaway republics within a federalized Ukraine.





## ANNEX B: CANADIAN CONTRIBUTIONS

### IRAQ/SYRIA

#### *Airlift of military supplies from donor countries to Iraqi security forces in Northern Iraq*

- The CAF deployed the following capabilities to the UK airbase in Cyprus to deliver military supplies from donor nations to Iraq:
  - 1x CC-130J Hercules
  - 1x CC-177 Globemaster III
  - Approximately 100 Canadian Armed Forces (CAF) aircrew, technicians and logistics specialists.
- Between 28 August and 26 September 2014, 25 flights were successfully completed, delivering more than 1,600,000 pounds of military supplies donated by Albania and the Czech Republic to Iraq. This line of effort is now completed.

#### *Advise and Assist Iraqi security forces*

- Approximately 70 members of the CAF have been deployed to Iraq to advise and assist the Iraqi security forces in effectively countering ISIS.

#### *Air Operations*

- The CAF deployed up to 600 personnel as part of the US-led Middle East Stabilization Force (MESF) to:
  - Support and conduct air strikes against ISIS in Iraq
    - 6x CF-188 Hornet fighter aircraft, aircrew and logistical support elements
    - 1x CC-150T Polaris air-to-air refueller
  - Provide intelligence, surveillance and reconnaissance capabilities
    - 2x CP-140 Aurora surveillance aircraft
  - Provide planning and liaison personnel to work with the U.S.-led Coalition headquarters
- As of 20 October 2015, Air Task Force-Iraq conducted 1643 sorties, including 304 reconnaissance missions and 286 refuelling missions, delivering some 17,128,000 pounds of fuel to Coalition aircraft. The Canadian fighter jets conducted 1053 sorties.

### UKRAINE/NATO

#### *Assistance to Ukrainian Armed Forces*

- In support of the Ukrainian security services, Canada has:





- Enhanced DND's Military Training and Cooperation Programme (MTCP) with Ukraine to provide language, professional development, and peace support operations training in addition to training exercises
- Provided \$5 million in non-lethal materiel assistance to the Ukrainian Border Services (helmets, body armour, sleeping bags etc)
- Provided \$22 million in winter uniforms (sufficient for about 30,000 troops) to the Ukrainian armed forces
- Pledged a further \$6 million in non-lethal assistance to the Ukrainian Armed Forces (optics, radios, medical and engineer equipment) to be delivered in 2015; and
- Joined the US/Ukraine Joint Commission (now the Multi-national Joint Commission, comprised of Ukraine, the US, Canada, and the UK) on capacity-building and signed a Declaration of Intent with a view to providing further capacity-building assistance to Ukraine beginning in 2015
- 

*Training assistance to Ukrainian security services (Op UNIFIER)*

- On 14 April 2015, then-Prime Minister Harper announced that Canada would conduct a mission to provide training assistance to the Ukrainian security services. This training mission will provide support along the following Lines of Effort:
  - Individual and small unit tactical training
  - Explosive Ordnance Disposal and counter-Improvised Explosive Device
  - Military Police professionalization
  - Flight Safety
  - Medical support
  - Logistical system professionalization
  - Enhanced MTCP
- The majority of these commitments are currently being delivered.

*Contributions to NATO's Assurance Measures (Op REASSURANCE)*

On 16 April 2014,

Canada's contribution to

the NATO reassurance package has been the following:

- Canada deployed six CF-18 fighter jets, along with 200 support staff, to Romania to train with NATO Allies between April and August 2014. In September, four of these aircraft redeployed to Lithuania and participated in NATO's Baltic Air Policing mission through to the first week of January 2015.
- HMCS REGINA was re-tasked to join Standing NATO Maritime Group Two in the Eastern Mediterranean and was replaced by HMCS TORONTO in August. In early January 2015, HMCS FREDRICKTON relieved TORONTO and on 7 July 2015 HMCS WINNIPEG relieved FREDRICKTON.





- Canada sent 13 Canadian Armed Forces operational planners to NATO's Supreme Headquarters Allied Powers Europe in Casteau, Belgium, and four to Joint Force Command in Naples, Italy to reinforce planning functions and monitor events in the region. The 20 personnel in Belgium returned to Canada in mid-September 2014.
- Initially, approximately 120 Canadian Army soldiers deployed to Eastern and Central Europe to participate in a series of training events in airborne operations and infantry skills alongside Polish, American and NATO Allies with a view to enhancing Alliance interoperability and readiness.
- The Land Task Force now totals approximately 200 soldiers. They have been conducting bi- and multi-lateral training activities in Poland, Germany, the Baltics, and Eastern Balkans. Their mandate (along with the rest of Op REASSURANCE) expires in mid-2016.





## ISSUE PAPER: ASIA-PACIFIC

### HIGHLIGHTS

- Despite fluctuations, long-term trends will likely see the Asia-Pacific region continue to rise in economic, geopolitical and military importance.
- For Canada, Asia represents a growing source of goods, investment and markets. However, it also poses challenges. Asia is home to a host of security concerns that can and do have serious implications for Canada and the world more generally.
- 
- A conflict in the region arising from miscommunication or miscalculation related to territorial or maritime boundary disputes could have serious consequences
- 

### CONTEXT

Asia is home to sixty percent of the world's population and is becoming more urban and affluent. It overtook Europe as the largest trading region in the world in 2012. Ernst and Young predicts that by 2030, two thirds of the global middle class will live in the Asia-Pacific region. The implications of these trends are enormous. The world has seen the effects of a rising China on the global economy and geopolitics, but we have yet to see the apex of growth in other large Asian states such as India and Indonesia. As Asia's middle class becomes more established and sophisticated, it will put pressure on governments to ensure markets meet its needs; to balance the competing objectives of a clean environment and continued economic growth; and to guarantee domestic, regional and global governance mechanisms meet their expectations. All the while, many Asian states face numerous development challenges that could contribute to regional insecurity, including social and economic inequality, a lack of infrastructure, under and unemployment, as well as a lack of basic services. Therefore, in responding to the demands of both the affluent and poor, regional governments will have an imperative to become more responsive and effective, if not necessarily more democratic, to maintain legitimacy.

Nationalism is a prevalent feature of many of the rising economies in Asia. It is a result of numerous and complex factors, including historical animosities and memories of colonial oppression, state-sponsored education to promote nation-building, pride in economic achievements, a growing middle class and regional rivalries. This limits the options of







regional governments, notably when negotiating on issues such as integration, trade or territorial disputes, as important portions of their respective publics would see such transactions as a political sellout.

Within this setting, the rise of Asia is shifting the geopolitical balance from the West to East.

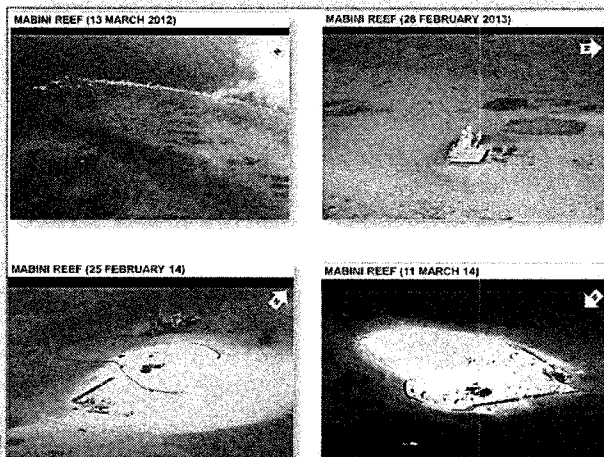
Beijing wishes to lessen US influence and power in Asia to consolidate control over what it considers its sphere of influence.

The two countries are also enmeshed in a territorial dispute along their shared border. However, this rivalry does not prevent cooperation. Bilateral trade

**The South China Sea**

- China, Taiwan, Vietnam, the Philippines, Malaysia and Brunei have disputed claims over the islands, rocks, reefs and atolls in the South China Sea, including the Paracel Islands, Spratly Islands and Scarborough Shoal. China bases its vast claim to the South China Sea on the so-called "Nine Dash Line".
- Since 2014, Beijing has been conducting and reclamation and construction activities among the features it occupies in the Spratly Islands (see picture).

- While others (including Vietnam, the Philippines and Taiwan) with claims in the South China Sea have also undertaken reclamation activities on the reefs and atolls that they occupy, China is conducting its reclamation.



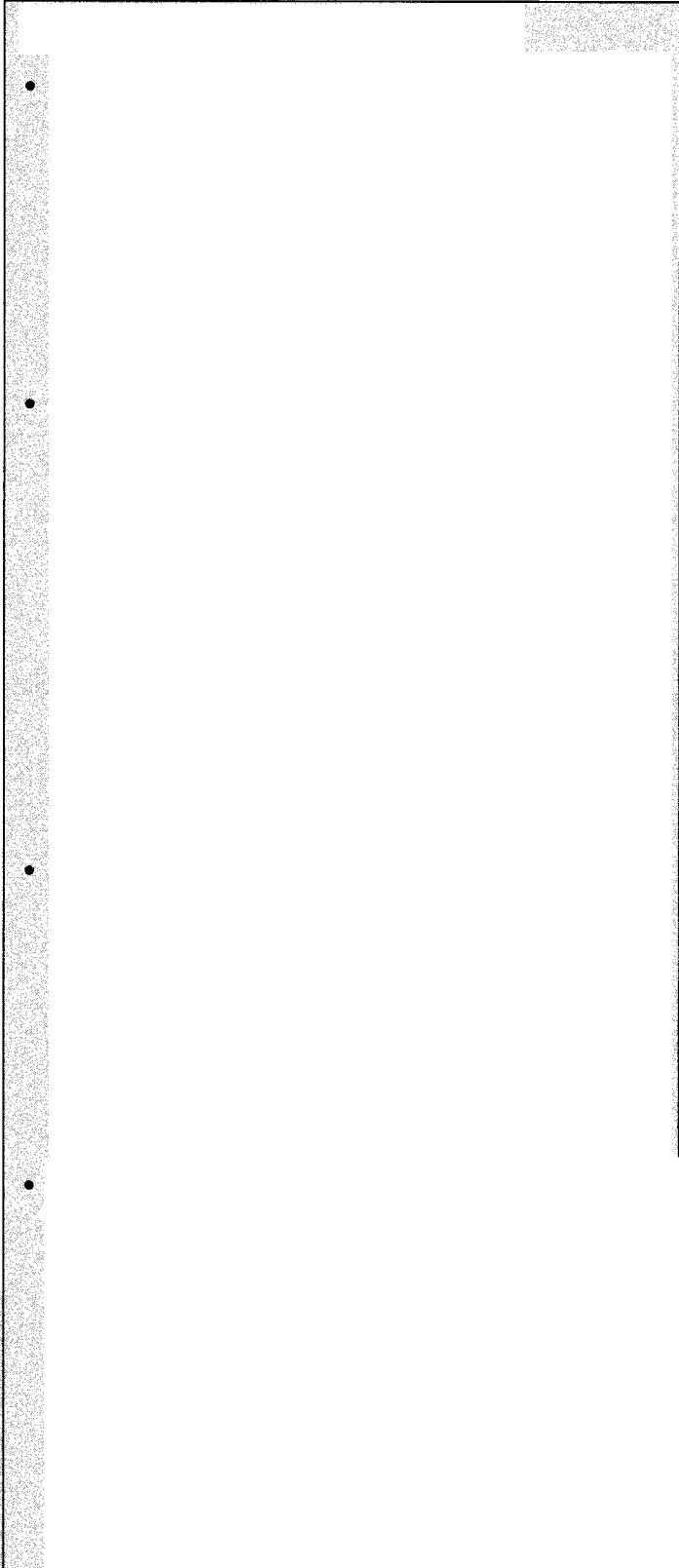


reached more than \$66B in 2012. Furthermore, Beijing and New Delhi conducted a joint Army exercise for the second consecutive year in March, and the Indian Navy participated in a multilateral exercise in Qingdao, China, during the Western Pacific Naval Symposium in April 2014. Finally, India and Pakistan are both acceding states to the Shanghai Cooperation Organization (approval for them to join was granted on 10 July 2015).

Pyongyang's provocations against South Korea have the potential to undermine regional stability and

The key to solving these issues lies in regional cooperation,

Several regional countries are also challenged by separatist movements and Islamic extremism that has been reinvigorated by the Islamic State in Iraq and Syria (ISIS). Renewed interest in Jihad has fractured the existing extremist networks in Southeast Asia as some have pledged allegiance to ISIS, while others remain loyal to Al Qaeda. This poses challenges for regional governments in monopolizing the use of force and imposing the rule of law.

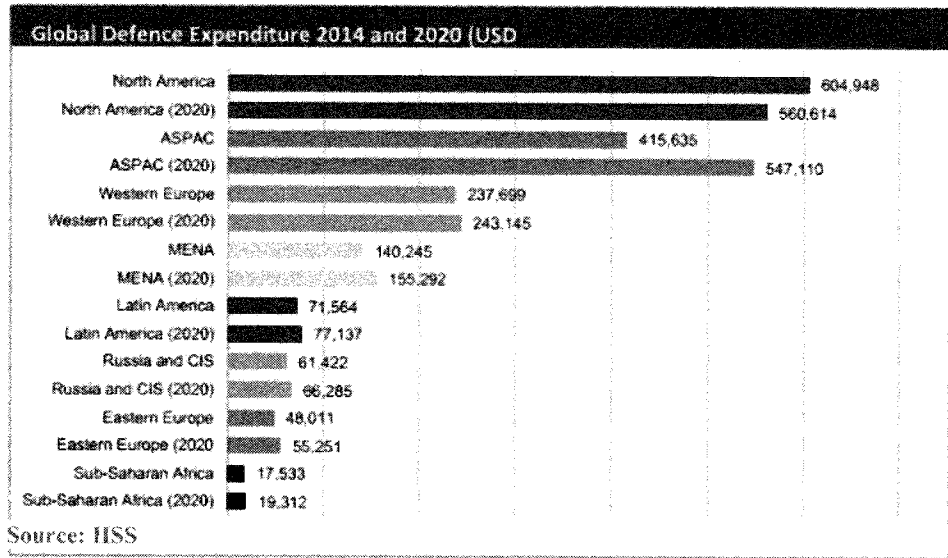




In the past,

illegal migration has had direct security implications for Canada.

The dynamic security environment in Asia has led regional countries to invest heavily in their militaries in recent years. The International Institute for Strategic Studies (IISS), a London-based think tank that reports on military affairs, confirmed in 2013 that Asia had, for the first time, outstripped Europe in military spending.

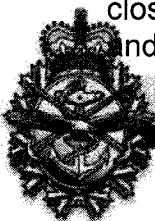


Finally, the Asia-Pacific straddles the "Pacific Ring of Fire" and is prone to natural disasters, including earthquakes, tsunamis, and volcanic eruptions, as well as typhoons. Large coastal areas, dense populations and inadequate mitigation measures mean the impact of these events can often be horrific.

Why Does It Matter?

The Asia-Pacific is important to Canada for numerous reasons. Canada is looking to develop relations with increasingly important regional countries such as Indonesia and India

Moreover, the region is of vital military, economic and political importance. Finally, Asia is home to a number of close partners, both in the region and globally, such as Australia, New Zealand, Japan and South Korea.





Regarding security dynamics, the Asia-Pacific has a number of challenges that, if escalated, would have serious implications for Canada.

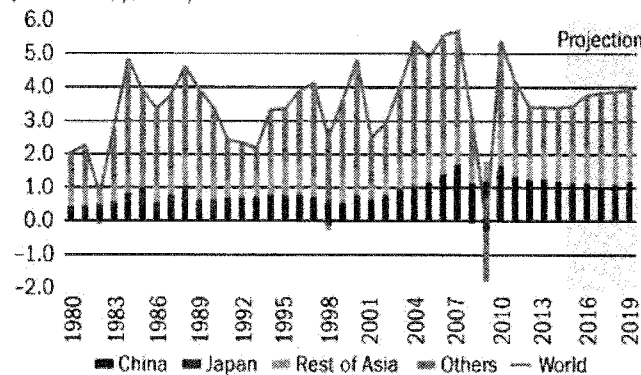
As previously noted, the region is susceptible to natural disasters and many countries have inadequate infrastructure and response capabilities to deal with large-scale disasters alone. Therefore, Canada will continue to be called upon to provide support in the wake of such disasters as it did in the Philippines (2013) and, more recently, in Nepal (2015).

The rising Asia-Pacific also has significant implications for the future of Canada's economy, which increasingly relies on Asian markets.

### Feed the World

While Asia accounts for nearly 40 percent of global output, it contributes nearly two-thirds of global growth.

(PPP based; percent)



Sources: IMF, World Economic Outlook database; and IMF staff projections.

Source: The Economist

The US has sought to strengthen its economy through the Trans Pacific Partnership (which has been agreed to in principle but has yet to be ratified, including by Canada) and Canada will have to align its economy to these changes accordingly.

Finally, the rise of Asian countries is having consequences for global governance

For example, the increasing importance of Asian states may lead to a shift away from Western-dominated institutions and governance mechanisms (take for example China's establishment of the Asian Infrastructure Investment Bank or AIIB). In such a scenario, Canada's international weight and standing would further decline.

### Approach to Date





Canada has therefore aimed to bolster its economic and political engagement in Asia, notably by expanding targeted economic (e.g. Canada's free trade agreement with South Korea), security and governance partnerships; advancing market access plans with Asian markets, including China and India; further developing Canada's partnership with Southeast Asia and Association of Southeast Asian Nations (ASEAN), and the Asia Pacific Economic Cooperation Forum (APEC). Canada has also indicated its desire to join the East Asia Summit (EAS) and ASEAN Defence Ministers Meeting Plus (AMM-Plus).

This defence ministerial body was formed in 2010 to address regional security concerns and includes Canada's Five Eyes partners, as well as other key regional partners like Japan and South Korea.

Based on these high-level objectives, the Defence Team is pursuing several strategic interests and engagement objectives in the region, notably:

- Enhancing Canada's reputation as a contributor to stability in Asia-Pacific;
- Mitigating security risks to Canada and Canadians, including through capacity-building and the promotion of a rules-based international order;
- 
- Expanding opportunities for Canada through increased regional engagement and interaction; and,
- Supporting Canadian prosperity and the retention of domestic defence industrial capability by assisting whole-of-government efforts to identify opportunities for Canada's defence suppliers in the Asia-Pacific market.

To achieve this the Defence Team has worked in and with multilateral institutions (such as the ASEAN Regional Forum), key partners (US, Australia, New Zealand, Japan and Korea), ASEAN core countries (Indonesia, Malaysia, Singapore) and rising powers (India and China).

Canada's defence engagement in the Asia-Pacific, to date, has been based on the principles of being modest, reciprocal and enduring, and indeed National Defence has made some progress in regional engagement. This includes the conclusion of the Cooperation Plan Initiative that provides a framework for managing defence relations with China. Moreover, as of 2011, Canada was the first UN sending state, other than the US, to permanently embed staff officers (five) in the United Nations Command in Seoul. National Defence, through the Military Cooperation and Training Program, also provides support to Indonesia's Peace Support Operations Course that trains militaries throughout the region. The Canadian Armed Forces also participate in numerous regional exercises and fora in the region (See Annex B).



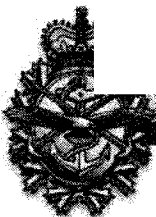


### CONSIDERATIONS

Recognizing the critical importance of the Asia-Pacific, many of our closest partners and allies have recently adopted deliberate strategies for the region. Since 2009, the Obama administration has been advancing Asia-Pacific Strategy formalized as the “Asia-Pacific Rebalance”, which was announced in 2012. The



strategy spans all areas of foreign policy, including economic (Trans Pacific Partnership), Diplomatic (EAS and key leader engagement) and military (strengthening alliances and partnerships as well as adjusting force posture) spheres.





## Main Challenges

China will be increasingly important to Canada's economic future as a source of manufactured goods, investment and capital as well as a market for Canadian exports.

The broader region also poses a challenge as a source of proliferation of weapons of mass destruction.

Press reports, in particular, often mention the risk that North Korea could deliberately transfer its nuclear technology to other states or to a non-state actor.

Some media reports have described the risk for theft of nuclear material as high.

Historical legacies will also complicate Canada's engagement in the region.



Opportunities

The numerous and complex challenges that affect the Asia-Pacific mean that Canada has a range of options to bolster its engagement.

**NEXT STEPS**

SECRET CEO



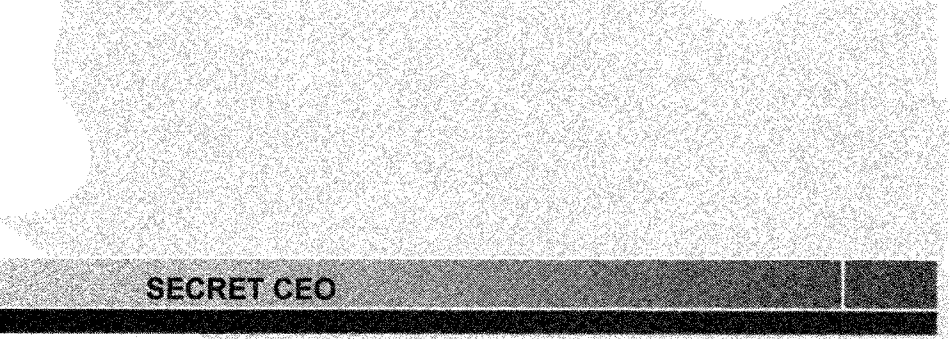


Currently, the Defence Team is well positioned to meet the potential operational requirements that it may face in Asia. This includes the ability to respond to humanitarian crises and natural disasters as well as short-term episodic requirements to deploy to the region.

National Defence could develop a number of options to contribute to such efforts.

In doing this, the Defence Team could draw from the opportunities that were identified in the previous section.

Stability is essential for the continued economic dynamism that Asia currently enjoys. An important element in building regional security is the Shangri-la Dialogue. The Dialogue occurs at the end of May/early June each year. Also known as the International Institute for Strategic Studies (IISS) Asia Security Summit, the Shangri-la Dialogue is attended by defence ministers, permanent heads of ministries and military chiefs of twenty-eight Asia-Pacific States. The summit serves to cultivate a sense of community among the most important policymakers in the region's defence and security community.





## ANNEX A: ASIAN MULTILATERAL ORGANIZATIONS

**APEC:** The Asia-Pacific Economic Cooperation Forum or APEC is the premier Asia-Pacific economic forum. Its primary goal is to support sustainable economic growth and prosperity in the Asia-Pacific region. APEC consists of 21 Asia-Pacific Rim countries that seek to build a dynamic and harmonious Asia-Pacific community by championing free and open trade and investment, promoting and accelerating regional economic integration, encouraging economic and technical cooperation, enhancing human security, and facilitating a favorable and sustainable business environment.

**ASEAN:** The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam then joined on 7 January 1984, Vietnam on 28 July 1995, Lao People's Democratic Republic (PDR) and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the ten Member States of ASEAN.

In their relations with one another, the ASEAN Member States have adopted the following fundamental principles, as contained in the Treaty of Amity and Cooperation in Southeast Asia (TAC) of 1976:

- Mutual respect for the independence, sovereignty, equality, territorial integrity, and national identity of all nations;
- The right of every State to lead its national existence free from external interference, subversion or coercion;
- Non-interference in the internal affairs of one another;
- Settlement of differences or disputes by peaceful manner;
- Renunciation of the threat or use of force; and
- Effective cooperation among themselves.

As set out in the ASEAN Declaration, the aims and purposes of ASEAN include (among others) to accelerate the economic growth, social progress and cultural development in the region through joint endeavours in the spirit of equality and partnership in order to strengthen the foundation for a prosperous and peaceful community of Southeast Asian Nations; to promote regional peace and stability through abiding respect for justice and the rule of law in the relationship among countries of the region and adherence to the principles of the United Nations Charter; and to promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific and administrative fields.

**ASEAN Regional Forum:** The objectives of the ASEAN Regional Forum (ARF) are to foster constructive dialogue and consultation on political and security issues of common interest and concern; and make significant contributions to efforts towards confidence-building and preventive diplomacy in the Asia-Pacific region.





## SECRET CEO

The current participants in the ARF are as follows: Australia, Bangladesh, Brunei Darussalam, Cambodia, Canada, China, Democratic People's Republic of Korea, European Union, India, Indonesia, Japan, Lao PDR, Malaysia, Mongolia, Myanmar, New Zealand, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Russia, Singapore, Sri Lanka, Thailand, Timor-Leste, United States, and Vietnam.

**ADMM-Plus:** The ASEAN Defence Ministers Meeting-Plus (ADMM-Plus) is a platform for ASEAN and its eight Dialogue Partners (namely Australia, China, India, Japan, New Zealand, ROK, Russian Federation, and the United States) to strengthen security and defence cooperation for peace, stability, and development in the region. The Inaugural ADMM-Plus was convened in Ha Noi, Viet Nam, on 12 October 2010. The Defence Ministers then agreed on five areas of practical cooperation to pursue under this new mechanism, namely maritime security, counter-terrorism, humanitarian assistance and disaster management, peacekeeping operations and military medicine. To facilitate cooperation on these areas, five Experts' Working Groups (EWGs) are established.

**East Asia Summit (EAS):** The East Asia Summit (EAS) is a regional leaders' forum for strategic dialogue and cooperation on key challenges facing the East Asian region. The EAS is a significant regional grouping with an important role to play in advancing closer regional integration and cooperation at a time of particular dynamism in East Asia. Australia participated, as a founding member, in the inaugural EAS held in Kuala Lumpur on 14 December 2005. Membership of the EAS comprises the ten ASEAN countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Burma, the Philippines, Singapore, Thailand, Vietnam), Australia, China, India, Japan, New Zealand, the Republic of Korea, the United States and Russia. The 18 EAS member countries represent collectively 55 per cent of the world's population and account for around 56 per cent of global GDP.

**Shanghai Cooperation Organization (SCO):** The main goals of the SCO are strengthening mutual confidence and good-neighbourly relations among the member countries; promoting effective cooperation in politics, trade and economy, science and technology, culture as well as education, energy, transportation, tourism, environmental protection and other fields; making joint efforts to maintain and ensure peace, security and stability in the region, moving towards the establishment of a new, democratic, just and rational political and economic international order. Membership includes China, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Uzbekistan, with India and Pakistan as acceding states.

**Multinational Planning Augmentation Team (MPAT):** The MPAT Program is a cooperative multinational military program established by the Commander of U.S. Pacific Command and the Chiefs of Defense of various nations in the Asia-Pacific region in November 2000, following observations from peace operations in Timor Leste. The Chiefs of Defence agreed on the need to expand beyond primarily traditional bilateral arrangements in the region to better improve multinational military cooperation. The goal of the program is to facilitate the rapid and effective establishment and/or augmentation of a multinational force headquarters and/or other multinational military and civil-military coordination mechanisms.



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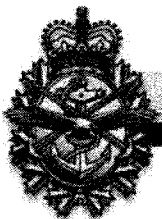
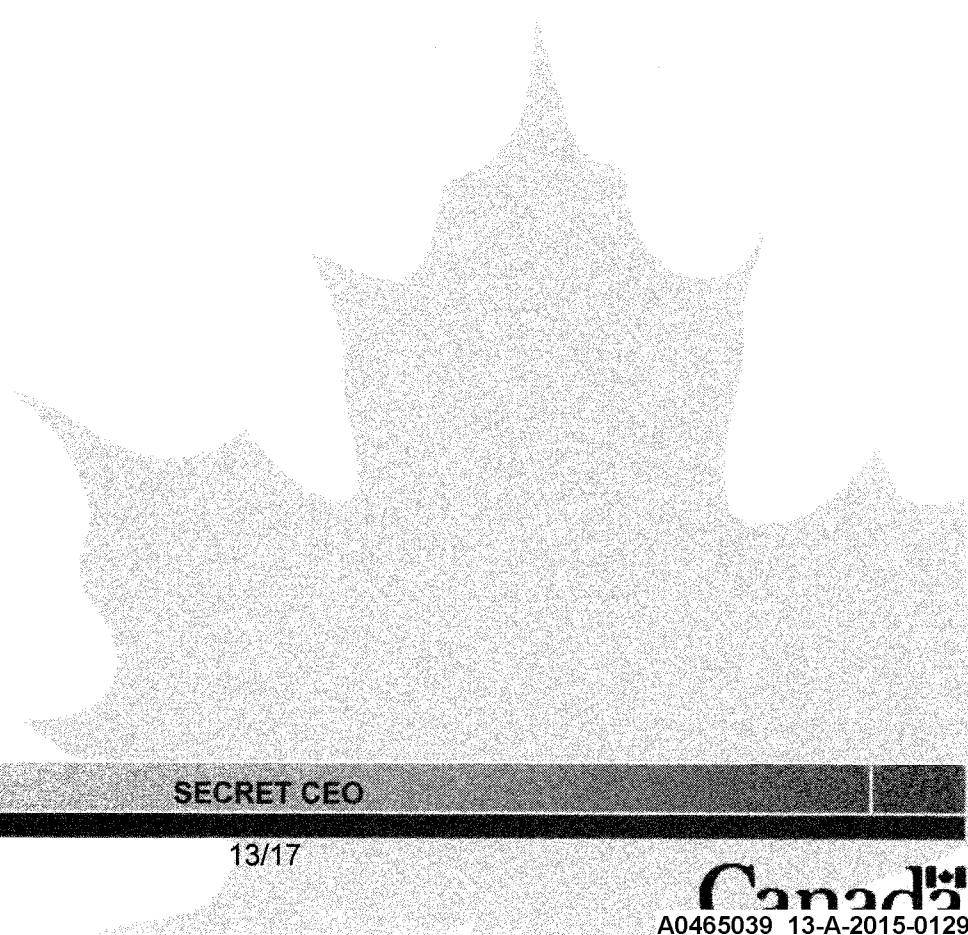
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Currently, there are 31 nations that participate in MPAT activities (Australia, Bangladesh, Brunei, Cambodia, Canada, France, Fiji, Germany, India, Indonesia, Italy, Japan, Korea, Malaysia, Maldives, Mongolia, Nepal, New Zealand, Papua New Guinea, Philippines, Singapore, Solomon Islands, Sri Lanka, Thailand, Timor Leste, Tonga, Tuvalu, United Kingdom, United States, Vanuatu and Vietnam).



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## ANNEX B: DEFENCE TEAM ACTIVITIES IN ASIA FOR 2015/2016

### *Engagement based in North America*

#### Halifax International Security Forum

- The Forum provides an excellent opportunity for Canada to reach out to important Asian partners to discuss the most pressing defence and security issues of the day. A number of invitations have been issued to Asian partners; so far the Minister of Defence for New Zealand and Vice Minister of Defence for South Korea have confirmed their participation.

#### United States

- US Pacific Command's Chiefs of Defence Meeting: an annual meeting of Chiefs of Defence from over 20 Pacific Rim countries allows military leaders to discuss regional security issues. The meeting was held in September.
- 
- Asia-Pacific Orientation Course: Offered by the Asia-Pacific Centre for Security Studies (APCSS) in Hawaii, the course provides an introduction into the security dynamics of the region. The APCSS annually provides a limited number of seats to Defence Team members.

### *Engagement with Northeast Asian countries*

#### China

- 
- China receives language training through the Military Training Cooperation Program on a pay per use basis.
- 

#### Japan

- 
- 
- 
- Pol-Mil/Mil-Mil Talks and Canadian participation in the Canada-Japan Peace and Security Symposium.



### Mongolia

- The Canadian Armed Forces participate annually in Mongolia's multilateral exercise Khan Quest. Mongolia is also a member of Canada's Military Training and Cooperation Program.
- Members of the CAF and the Mongolian Armed Forces undertook a joint Arms Control Verification Mission to Georgia from 6-9 July 2015.
- The Senior Associate Deputy Minister hosted the Mongolian Secretary of State in September 2015.

### Republic of Korea

- The Republic of Korea and Canada hold annual staff talks at the Director General-level to enhance defence relations and explore areas of collaboration. South Korea is also a member of the Military Training and Cooperation Program.
- Canada also participates annually in South Korea's main military exercises, Ulchi Freedom Guardian and Foal Eagle. These exercises are aimed at maintaining peace and stability on the Korean Peninsula.
- Additionally, Canada participates in the Seoul Defence Dialogue (Deputy Minister-level) and its associated Cyber Working Group (Director-level), as well as the

### *Engagement with Southeast Asian Countries*

#### Brunei

- The Royal Canadian Air Force offers pilot training to the Brunei military.

#### Indonesia

- Indonesia will host the Pacific Armies Chiefs Conference (hosting rotates among regional participants). Canada is a regular attendee
- Canada is also a regular participant in the Jakarta International Defence Dialogue, a forum that aims to build trust and cooperation among Asia-Pacific nations by addressing various security-related themes (the 2015 Dialogue was cancelled).
- The Defence Team also supports Indonesia's Peace Support Operations Course, through the Military Training Cooperation Program, which offers various courses and trains militaries throughout the region.

#### Malaysia

- Canada participated in ASEAN's DIREX 2015, which was hosted by Malaysia and co-chaired by Malaysia and China. The exercise enhances the ability of participating





countries in coordinating effective responses for disaster management and emergency response.

- Canada also cooperates with Malaysia in \_\_\_\_\_ capabilities through joint training and exercises. Finally, Malaysia is a member of the Military Training Cooperation Program.

Philippines

- 
- The Philippines is also a member of the Military Training Cooperation Program. MTCP hosted a course for the Philippines on gender, peace and security.

Singapore

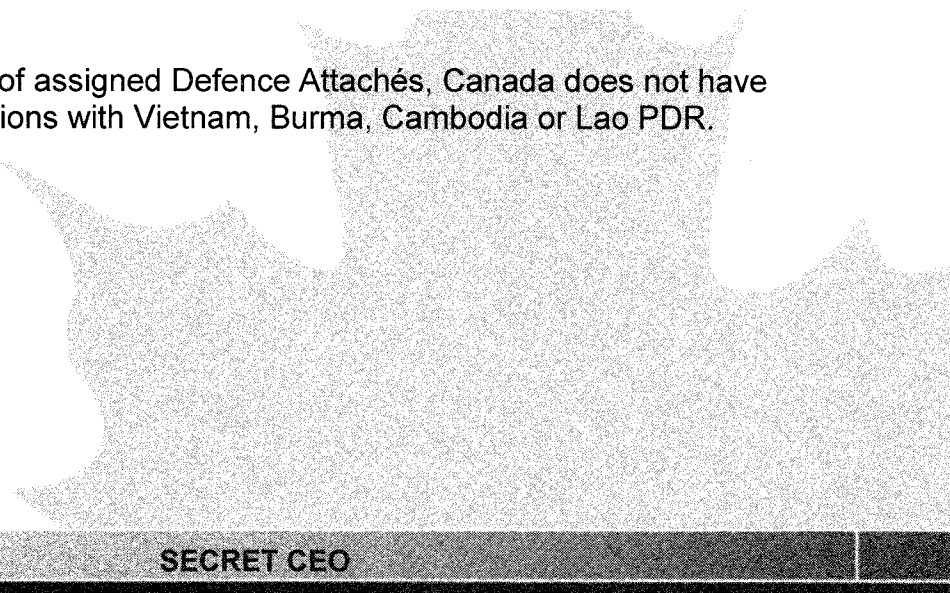
- The inaugural meeting of the Singapore-Canada Joint Working Group is scheduled for 2015.
- 
- The Canadian Army provides Leopard 2 training at Suffield and the RCAF hosts the Singapore Air Force for training at Moose Jaw. Singapore is also a member of the Military Training Cooperation Program.
- Canada has been a regular attendee at the Shangri-la Dialogue and its associated Fullerton Forum held in Singapore, which aim to build trust and understanding of regional security issues at the Ministerial-level.

Thailand

- 

Others

- Excepting the activities of assigned Defence Attachés, Canada does not have significant defence relations with Vietnam, Burma, Cambodia or Lao PDR.







*Engagement with South Asian Countries*

- Canada does not have defence relations with Bhutan or the Maldives.
- The Royal Canadian Navy will participate in the Galle Dialogue in Sri Lanka (Nov 2015).
- Afghanistan, Bangladesh, Nepal and Pakistan are members of the Military Training Cooperation Program.

India

- Canada will participate in India's International Fleet Review in February 2016. Defence relations with India are limited but growing, including through high-level dialogue.

*Engagement with the countries of Oceania*

Australia

- 
- The Canadian Navy participates in Australia's Sea power Symposium and the Canadian Army participates in Australia's annual Patrol Competition.
- Canada also has regular ADM-level policy talks and members of the Canadian military regularly go on academic exchanges in Australia.

East Timor

- East Timor is an associate member of the Military Training Cooperation program.

New Zealand

- 
- Canada will participate in New Zealand's International Fleet Review and the Canada also participated in New Zealand's Exercise South Kapito that aims to improve interoperability among allies in the southwest Pacific.
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Others

- Canada also participates in France's biennial exercise on New Caledonia known as Croix du Sud.







## ISSUE PAPER: DEFENCE PROCUREMENT

### HIGHLIGHTS

- National Defence oversees a multi-billion dollar budget to acquire and sustain equipment for the Canadian Armed Forces (CAF). The CAF's ability to operate as a modern military is dependent on having the right equipment to fulfill its missions.
- The vast majority of procurements projects are less complex and move through the various phases of the procurement process without any issues.
- However, Canada is facing challenges as it implements the largest recapitalization of the military since the Korean War.
- The need for trade-offs between cost, capability, schedule and benefits for Canadian industry results in inherent tension and often differing and competing objectives among implicated government departments.
- National Defence, in partnership with all members of the defence procurement system, is addressing these challenges through a number of initiatives, including the Defence Procurement Strategy, the National Shipbuilding Procurement Strategy and internal measures, including Defence Renewal.
- While these initiatives are still in the early phases of implementation, several upcoming reviews will help to determine whether they are having a positive impact on the procurement process.
- In the meantime, there are key decisions on major procurement projects that must be made over the coming year.

### CONTEXT

The CAF must be prepared to conduct the full spectrum of military operations – from conducting surveillance and reconnaissance, to proving engineering and logistical solutions, delivering humanitarian assistance, and engaging in combat. Maintaining this range of capabilities requires National Defence to make ongoing investments in both the maintenance and replacement of current operational capabilities, as well as the acquisition and integration of new capabilities as technologies and operational requirements change.

Acquiring technologically sophisticated military equipment for the CAF to deploy at home and abroad – often intended for use over 20-30 years – is complex and challenging. For major procurements, it generally takes several years to perform the



work required to move from concept to contract to ensure the right capability and value for money. In addition, as military technologies become increasingly sophisticated, investing in their acquisition and sustainment becomes increasingly expensive. Moreover, as the materiel support does not end with the acquisition but extends over the life cycle of the asset, significant investment in new equipment requires proportional investments in project management personnel, as well as maintenance and repair.

For these reasons, National Defence relies on a sustained commitment of resources from the federal government. This includes both annual operating funds to sustain current capabilities and conduct military operations as well as capital funding earmarked in future budgets for the acquisition of new and replacement equipment.

With the end of the federal government's debt reduction strategy of the 1990s and a return to balanced budgets, the Government reintroduced significant increases to the National Defence budget. Beginning in 2006, the federal government directed National Defence to invest in a number of large-scale procurements and other major capital projects, both in support of ongoing military operations and to prepare the CAF for future challenges. This is supported by \$100 billion for military procurement over the next 20 years.

A level of sustained and substantive investment is necessary to maintain a modern military with the broad range of capabilities necessary to operate effectively in a constantly evolving security environment. In the maritime domain, the modernization of the Halifax-class frigates and the planned procurement of the Arctic Offshore Patrol Ships, Joint Support Ships, and the Canadian Surface Combatants, will significantly revitalize the Royal Canadian Navy. Improvements to Canada's Army fleets, such as the purchase of armoured patrol vehicles, and the introduction of Chinook helicopters have allowed the Canadian Army to more effectively move supplies and personnel in operations at home and abroad. In addition, the revitalization and increased capacity of the airlift fleets has allowed the CAF to reach the far corners of Canada and around the world.

Over the last year alone, the Government of Canada:

- began construction on the first Arctic Offshore Patrol Ship
- issued a Request for Proposal for a fleet of new Fixed-Wing Search and Rescue aircraft
- took delivery of all CH147F Chinook helicopters
- purchased a fifth C-17 aircraft
- received six of 28 CH-148 Cyclone helicopters
- awarded a contract for new standard military pattern trucks
- delivered over 250 upgraded light armoured vehicles

The most significant of the projects ahead are the planned replacement of Canada's CF-18 fighter jets and the acquisition of a new fleet of surface combatant vessels for the Royal Canadian Navy. As of 2015, the vast majority of National Defence's capital



budget over the next 20 years (2014-2034) has already been committed, while several major capital projects will be delivered in the years to come.

Last year, the National Defence Materiel Group invested \$5.6 billion in recapitalizing and providing in-service support for military equipment fleets. A little over half of this budget (\$3.0 billion) was used to fund the approximately 200 ongoing projects to acquire new equipment and to upgrade/modify existing fleets, including C-17 strategic lift aircraft, Heavy Logistics Trucks, CH-147F Chinook helicopters, and modernized frigates.

The Materiel Group by the numbers:

- 4000 civilian and military personnel across Canada
- \$25 billion in equipment assets
- \$6.4 billion in inventory
- oversees over 12,000 contracts
- manages everything from clothing and rations, and ammunition, to ships, armoured vehicles and aircraft.

The rest (\$2.6 billion) was used to sustain the ships, aircraft, and vehicles, and to purchase the ammunition, spare parts and common materiel that enable CAF operations. This represented a total of over 10,000 contracts across a full spectrum of commodities and services, including the overhaul of fighters, ships and vehicles and the procurement of deployable camps, sea containers, small arms such as rifles, and food for deployed operations.

Examples of Maintenance and Repair Programs

- **Managed Clothing Solution** for the management and distribution of over 600 items of non-operational uniforms, including by allowing individual CAF members to order and have clothing delivered directly. The program has significantly reduced personnel requirements for both technical and procurement management, allowing fewer staff to oversee more items.
- **Submarine Refits and Docking** provides for cyclical deep maintenance on the Victoria-class submarines, comprising approximately one million person-hours of effort that culminate in a thorough materiel certification process.
- **Airworthiness Certification** of all RCAF fleets through professionally designed fleet sustainment programs. In collaboration with multiple stakeholders, the Materiel Group develops and delivers these required activities using a carefully tailored program which includes contracted support. An example is Canada's fleet of seventeen CC130J aircraft, whereby a multi-year In Service Support (ISS) contract delivers engineering & maintenance activities and supplies critical components. Typical activities include detailed inspections and repair of the aircraft, engines and electronic systems as well as component replacements and modifications when required. Program objectives ensure the fleet will consistently and safely complete all its intended missions and that Canada receives value for money through optimized fleet availability, quality products & services and by driving down the total cost of ownership.



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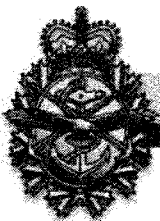
Though the large scale, multi-million dollar procurements receive most of the attention and can pose challenges for the government, the vast majority of procurements are less complex and move through their various phases without any issues. The CAF's ability to operate as a modern military is dependent on having the right equipment to fulfill its missions.

## ROLES AND RESPONSIBILITIES

Defence procurement is a complex process involving several federal government departments and agencies beyond National Defence, including Public Works and Government Services Canada (PWGSC), Industry Canada, the Treasury Board of Canada Secretariat and the Privy Council Office (PCO). Each department and agency is responsible for different elements of the defence procurement process.

- The CAF defines the operational requirements. National Defence is engaged (with PWGSC) in the procurement process, obtains expenditure authority, and is responsible for post-delivery inspections/certifications, maintenance and repair, and end of life disposal.
- PWGSC is responsible for the solicitation of bids, the contracting process, and the administration of contracts. In addition to its role as centralized purchasing agent across government, the Minister of PWGSC has additional authority under the *Defence Production Act* to act as the exclusive authority to buy or otherwise acquire defence supplies. This arrangement is unique to National Defence.
- Industry Canada is responsible for the coordination and administration of the Industrial and Technological Benefits program, which allows the federal government to leverage industrial and economic benefits for the Canadian defence industry and to generate economic activity across Canada.
- The Treasury Board of Canada Secretariat is responsible, among other things, for the Government's overall procurement policies, directives and guidelines, the approval of preliminary funding for major capital projects that have been accepted by Cabinet, granting expenditure and contracting authority, and for financial oversight.
- The PCO provides advice to the Prime Minister, the Cabinet and the Clerk of the Privy Council on key policy issues relating to defence and the economy, including on major defence procurement projects. PCO also plays a central role in monitoring and coordinating the government-wide implementation of procurement related policies and strategies.
- Other federal government departments and agencies are involved in different stages of the defence procurement process, such as Finance Canada and Foreign Affairs, Trade and Development Canada.

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Coordination between all departments is important to ensure a smooth procurement process.

## CHALLENGES

The Government faces a range of challenges as it undertakes major defence procurement projects. At the heart of every major defence procurement project is the need to find the right balance between cost, capability, schedule and benefits for Canada. No project, no matter how well designed, can deliver equally in all four areas. For example, projects that must be completed quickly often cost more whereas those designed to maximize Canadian industry involvement often take longer to deliver.

Currently, all players in the procurement process, are constrained by available manpower and expertise. In light of the technical expertise required to implement a major procurement project, the ebb and flow of investments in military equipment has significant implications. Injection of funds to purchase assets requires sufficient capacity across the defence procurement system. The technical expertise is not always available and it can take time to hire, train and deliver. Similarly, the withdrawal of funding as a result of changes to priorities reverberates through the system – manpower is reallocated to other priorities. The need to coordinate major procurements across several government departments also has an impact on capacity.

There are also several external realities that make defence procurement especially challenging. First, defining the requirements for new equipment is complicated given the challenge of predicting what the military will need to operate in a constantly evolving future security environment.

acquiring defence equipment takes much longer than procurement in the civilian sector. Military equipment is complex, highly specialized, and uses cutting edge technology that often requires integrating several systems and subsystems. The length of time between conceiving of a new capability and delivering

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the equipment can be years, sometimes decades. For example, the last of the Royal Canadian Navy's new class of warship, the Canadian Surface Combatant won't be delivered until around 2040. The design phase alone requires a series of competitive processes to source the required equipment, systems and sub-systems. In addition, the CAF operates its equipment for decades; In this context, planning for the costs and resources needed for equipment that will be operated for such an extended period of time is complex.

Third, defence procurement is expensive. This is due both to the quantities purchased (e.g. National Defence is acquiring 500 Tactical Armoured Patrol Vehicles with an optional purchase of up to 100 additional vehicles) as well as cost per unit. Per unit costs are directly linked to the requirement that military equipment be technologically advanced and constantly evolve in response to changes in the strategic context and adversaries' capabilities. As a result, manufacturers must make significant upfront investments in research, development and manufacturing equipment. In addition, the defence market is limited to government customers, all of who have unique requirements for their military capabilities for reasons of geography, climate and budget. This means that some equipment will be produced for only a short period of time for one customer, driving up costs. It is important, however, to put defence procurement expenditures into context. Canada spends approximately 1% of its Gross Domestic Product on the military and, of that, only 15% is allocated to capital acquisitions.

**Defence-Specific Cost Drivers:**

- **Currency exchange rates:** the increase in acquisition cost caused by the depreciation of the Canadian dollar relative to U.S. and other currencies in which good and services are purchased.
- **Technology inflation:** the increase in the acquisition cost of replacement equipment as it becomes more technologically complex (approximately 2-5% higher than standard economic inflation).
- **Sustainment cost growth:** the steadily increasing cost of sustaining and operating more and more advanced equipment once it has been acquired.

There is also much uncertainty around the costs associated with defence procurement. companies concerning competitive pricing, fluctuations in the value of the Canadian dollar over the life of a contract, and inflation associated with the defence industrial sector can together substantially influence costs. As a result, the initial cost estimate can be quite different from the final procurement cost. Additionally, a rough-order-of-magnitude cost estimate publicly released tends to stick as the ceiling cost of a project. The public dialogue around defence procurement often fails to





acknowledge that initial cost estimates are developed before final decisions are made around requirements, schedule and industrial benefits and therefore include a significant margin of error (often +/- 50 percent). This increases pressure on the Government to stay close to the initial estimate,

Fourth, the complexity of the technology involved and the rapid pace of change of that technology also pose challenges. The exact technology to be purchased may not be known at the time the Government initiates a procurement project and the length of time between requirements development and the delivery of the equipment may be such that technological updates are required. In addition, this technology must be kept up to date for the life of the fleet, at times 40 to 50 years.

**ADDRESSING THE CHALLENGES**

There are a number of measures and initiatives that have been undertaken to address the challenges associated with defence procurement. These include the Defence Procurement Strategy, the National Shipbuilding Procurement Strategy, and several measures internal to National Defence, including through Defence Renewal.

**Defence Procurement Strategy (DPS).** Announced in February 2014, the DPS seeks to streamline and coordinate decision making for major military procurements through a new defence procurement governance regime. This includes a permanent working group of Ministers that works towards ensuring the shared accountabilities for defence procurement are exercised in a more efficient, joined-up manner and acting as a forum for discussion, advice and to resolve issues in the implementation of major procurement projects.

This Ministers working group is mirrored by similar bodies at the Deputy Minister and Assistant Deputy Minister level which acts as key decision makers for implementing the DPS and will attempt to ensure timely and balanced decision-making among competing objectives. A permanent DPS Secretariat operating within PWGSC was established to support these committees.

- The DPS has three main objectives:
- to deliver the right equipment to the CAF in a timely manner;
  - to leverage the purchase of defence equipment to create jobs and economic growth in Canada; and
  - to streamline the defence procurement process.

The DPS also provides for a new challenge function within National Defence that supports the review of projects and associated resource allocation. Established in June 2015, the Independent Review Panel for Defence Acquisition reviews the requirements of major defence projects at the beginning of the process and provides advice to the Minister of National Defence, with the objective of greater up-front clarity. It is anticipated that the Panel will help to validate military requirements and enable more timely resolution of contract letting. Additional information on the panel is included at Annex A.



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In addition, as part of the DPS, PWGSC from \$25,000 to above which National Defence needs to request that PWGSC act as the contracting authority for the procurement of goods. As contracting authority, PWGSC often repeated much of the preparatory work National Defence had already done as part of the project approval process. Increasing National Defence's contracting authority will remove this duplication and overlap for thousands of files every year, freeing up PWGSC employees to focus on higher value, more complex projects.

which will have a significant impact as the vast majority of National Defence procurement contracts are below which is over of all defence equipment contracts.

Finally, recognizing that defence industry is a key partner in the defence procurement system and must be engaged early and continuously throughout the process to ensure sufficient capacity to deliver the right equipment in a timely manner, National Defence publishes the Defence Acquisition Guide (DAG) which identifies future potential CAF requirements and associated procurement projects over of a period of five to 20 years. It is anticipated that the DAG will better position Canadian industry to deliver equipment and services for the CAF, help Canadian industry to be better positioned to compete for future Canadian and international defence procurement opportunities, and enable Canadian industry and potential bidders to make informed research and development investments and strategic partnering decisions. This initiative complements ongoing efforts by National Defence to engage with industry early and often throughout the procurement process. The inaugural edition of the DAG was published in June 2014 and received its first update in June 2015. Given the nature of the document, feedback from industry has been mixed. While industry would always like more information on upcoming procurement projects, the information in the DAG is a significant step forward.

**National Shipbuilding Procurement Strategy (NSPS).** Following several unsuccessful Request for Proposals to procure ships for the CAF and the Canadian Coast Guard, in 2008 the Government put all major ship procurement projects on a two-year strategic pause while it reconsidered its approach to shipbuilding in Canada. In June 2010, the Government announced the NSPS, moving from a project-by-project basis to a long-term strategy that supports the development of a robust domestic shipbuilding industry. The intent of the NSPS is to create a long-term steady work flow in the shipbuilding industry to sustain highly skilled jobs and industry capacity for Canadians. Under the NSPS, the Government established a strategic relationship with two Canadian shipyards for the renewal of large vessels for the Royal Canadian Navy and Canadian Coast Guard: Irving Shipbuilding was selected to build combat vessels and Vancouver Shipyards to build non-combat vessels.

The NSPS addresses the challenge associated with surge spending that exceeds the system's capacity and maintaining a well trained workforce by providing a predictable and stable environment for government spending in which shipyards can make informed decisions.

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**Defence Renewal and other internal measures** National Defence is currently implementing a comprehensive renewal initiative focused on minimizing inefficiency, streamlining business processes and maximizing operational results. As part of this, National Defence is renewing its maintenance and materiel program from end to end, resulting in changes to how business is conducted both at headquarters and at units, bases, and wings. The focus is on optimizing inventory management, right-sizing warehousing and distribution, and implementing best practices for both maintenance program design and departmental procurement.

Already, better inventory management has generated savings that are currently being used to buy operational spare parts. In addition, improved maintenance forecasting has allowed the CAF to use lower cost ground and rail transportation for moving spare parts around the country. Through the Project Approval Process Redesign project, National Defence is streamlining the decision making process for approving and delivering major equipment to reduce cycle time and maximize the purchasing power of procurement dollars.

Finally, over the next few years, National Defence will work with PWGSC and Industry Canada to rationalize maintenance programs and improve the way it contracts for goods and services, including by simplifying specifications, matching the buy to the minimum operational requirement, understanding the total cost of ownership, and consolidating purchases.

to bring budget stability to the procurement process with firmer three year business plan notional allocations.

## INTERNATIONAL CONTEXT

This multi-departmental approach that assigns responsibility for contracting to one department and responsibility for defining requirements to another is unique to Canada and presents unique challenges. That said, Canada is not the only country looking for ways to improve its defence procurement processes. Faced with challenges and delays in major procurements, many of Canada's allies are implementing measures to reform and streamline their defence procurement organizations and processes. The defence procurement models used by Canada's allies can be grouped into three broad categories: procurement by individual armed services, procurement by centralized government organizations and procurement by an independent civilian corporation.<sup>1</sup>

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<sup>1</sup> Auger, Martin, *Defence Procurement Organizations: A Global Comparison*, Library of Parliament, 2014

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- **Individual Armed Services.** In several countries, including the United States, defence procurement is decentralized and each service (army, navy and air force) is responsible for procuring its own weapon systems and military equipment. Overarching policies and regulations are developed and managed by the defence department.
- **Centralized Government Organizations.** Other countries, including the United Kingdom and, until recently, Australia, have established centralized government organizations responsible for acquiring all weapons systems and military equipment. Most of these organizations operate within the purview of the defence department (although they generally remain independent of the military with separate budgets) while others act as independent agencies.
- **Independent Civilian Corporation.** And finally, in countries such as Sweden and Switzerland, defence procurement is contracted to civilian organizations, either state owned or part of the private sector.

## NEXT STEPS

The DPS, the NSPS and Defence Renewal are all in the early stages of implementation and, while their success has yet to be determined, it is expected that they will continue to yield dividends over the coming years. While the NSPS is in its fifth year and has now entered the implementation phase with construction beginning this summer on the first class of combat ships, the DPS is still in early days and more time is needed to understand the various processes, as well as to build capacity in the system.

Result of the review should be available in December 2015. The Defence Procurement Strategy includes a provision for an evaluation every five years to determine whether the strategy is working as anticipated. In addition, Ministers provide a yearly update to the Prime Minister on progress on implementation.

In the meantime, there are key decisions that must be made over the next year on several high-profile procurement projects. These decision points are explained in detail in Annex B.

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## ANNEX A

**INDEPENDENT REVIEW PANEL FOR DEFENCE ACQUISITION**

The Panel brings together the right combination of knowledge, experience and expertise to help validate the requirements for major military procurement projects and to provide independent, third-party advice to the Minister of National Defence.

The Panel is chaired by Mr. Larry Murray. Mr. Murray has held a number of senior positions in the Canadian Armed Forces and Public Service. During his career with the Canadian Armed Forces, he served at sea in a variety of ships and held several senior positions, including as Deputy Chief of the Defence Staff, Commander of Maritime Command, Vice Chief of the Defence Staff and, finally, Acting Chief of the Defence Staff from October 1996 until September 1997. Mr. Murray retired from the Canadian Armed Forces in 1997 and joined the Public Service as Associate Deputy Minister of Fisheries and Oceans. He was appointed Deputy Minister of Veterans Affairs Canada in 1999 and Deputy Minister of Fisheries and Oceans in 2003. He retired from the Public Service of Canada in 2007.

The Governor in Council has appointed the following panel members:

- **Mr. Martin Gagné.** Mr. Gagné spent 17 years at CAE before retiring in 2012. During his career with CAE, he served in various roles such as: Vice-President of Visual Systems, Vice-President of Military Marketing and Sales, and Executive Vice-President of Civil Simulation and Training. Prior to joining CAE, Mr. Gagné acquired extensive management and leadership experience during his 23 years as a member of the Canadian Armed Forces.
- **Ms. Renée Jolicœur.** Ms. Jolicœur retired from the Public Service in 2014 as the Associate Deputy Minister of PWGSC. Before joining Public Works and Government Services Ms. Jolicœur was an executive in National Defence first as Director Internal Audit and Review, and following a promotion she became responsible for administering CAF members' pay and pension.
- **Mr. Philippe Lagassé.** Mr. Lagassé is associate professor of public and international affairs at the University of Ottawa. Most recently, Mr. Lagassé completed consultancy contracts with the Office of the Judge Advocate General and the Office of the Auditor General, and was an independent reviewer of the evaluation of options to replace Canada's CF-18 fighter aircraft.





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## ANNEX B

### PROJECTS REQUIRING NEAR-TERM GOVERNMENT OF CANADA APPROVALS/ACTION

The **Interim Auxiliary Oil Replenishment (iAOR)** procurement will provide an at-sea replenishment service to the RCN. The RCN relies on the capability provided by AOR ships to supply fuel, ammunition, water, spare parts and food to individual ships or naval task groups, as well as to support task group helicopters.

The RCN has announced the retirement of the Protecteur-class, and its AOR capability will be replaced with the Joint Supply Ships (JSS). JSS is not expected to reach Full Operational Capability until late 2021,

While the path forward for the CAF remains the JSS project,

and provision of services with industry to sustain Canadian warships at sea.

Under the service contract, expected to be awarded in late 2015, the contractor will convert a commercial container ship into an interim AOR ship; own, operate, and maintain the vessel; and deliver at-sea replenishment services to the RCN. The service will be required for a period of five years, plus two one year options, until the second JSS is operational. The iAOR ship will provide a more modest capability than provided by the JSS and will not conduct full-spectrum military operations in high-threat environments.

On 31 July 2015, the Government of Canada signed a Letter of Intent (LOI) with Chantier Davie Canada Incorporated and Project Resolve Incorporated (a management company created by Chantier Davie to deliver the service) to continue discussions on pursuing an at-sea support services contract. The LOI provides Chantier Davie and Project Resolve with the ability to start limited activities to advance the schedule. It will also provide some financial protection to the shipyard for these expenses, should a service contract not be awarded.

The **Canadian Surface Combatant** project will recapitalize Canada's surface combatant fleet through replacement of the capability found in the Iroquois-class destroyers and the Halifax-class frigates, along with the provision of the necessary integrated logistics support for the ships and physical infrastructure. The rough order of magnitude project budget is \$26.2 billion and delivery is scheduled to start in the middle of the next decade. In 2015, the project's procurement strategy was approved and Irving Shipbuilding Incorporated was announced as the prime contractor for both definition and implementation of the project, subject to successful negotiations and Treasury Board's

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Approvals for Expenditure and Contract Authority. The design, build and delivery of naval warfighting ships are a magnitude more complex than other commercial or military procurements. Naval warships are typically large, complex, highly specialized in design to meet Canada's national strategic objectives and geo-political operational requirements. As the Canadian Surface Combatant project progresses through the definition phase, it is refining the operational requirements and confirming the technical requirements in order to reconcile capability and cost.

The project is currently in definition phase. Work is ongoing with Irving Shipbuilding Incorporated to reconcile and then confirm, through the Independent Review Panel for Defence Acquisitions, the operational and technical performance requirements. Work is also underway to refine and then validate, by the Chief Financial Officer and an independent third party, the estimated cost of definition design work to support a policy update and Treasury Board submission.

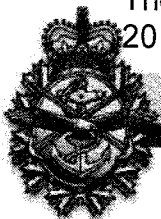
The potential for a construction gap between the Arctic/Offshore Patrol Ship and the Canadian Surface Combatant is a schedule risk identified by Irving Shipbuilding Inc. that is being actively managed by the National Shipbuilding Procurement Secretariat and the Project Management Office. All parties are examining options to advance schedule for the Canadian Surface Combatant in order to minimize this risk.

The **Fixed-Wing Search and Rescue Aircraft Replacement (FWSAR)** project will replace the fixed-wing Search and Rescue capability currently being provided by the CC115 Buffalo and CC130H Hercules aircraft. This replacement will address the operational deficiencies of the current capability while eliminating the supportability and affordability difficulties associated with the older aircraft. The project is executing a competitive, capability-based procurement strategy, wherein industry will propose the number and type of aircraft and where the aircraft will be based (3 to 5 bases are allowed) in order to meet required search and rescue outcomes. The total project budget that was established in 2011 is \$1.8 billion for acquisition for 20 years of in-service support. Contract award is expected in 2016, the first aircraft delivery in 2019 and full operational capability in 2022.

Between 2012 and 2015, extensive industry engagement took place on the Request for Proposals. In March 2015, the Request for Proposals was released. The three active bidders are Airbus Military (C295), Alenia Aermacchi (C-27J) and Embraer (KC-390).

The three active bidders requested an extension to the bid closing date of 28 September 2015, and an extension to 11 January 2016 was granted.

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The main potential challenges facing the project are as follows:

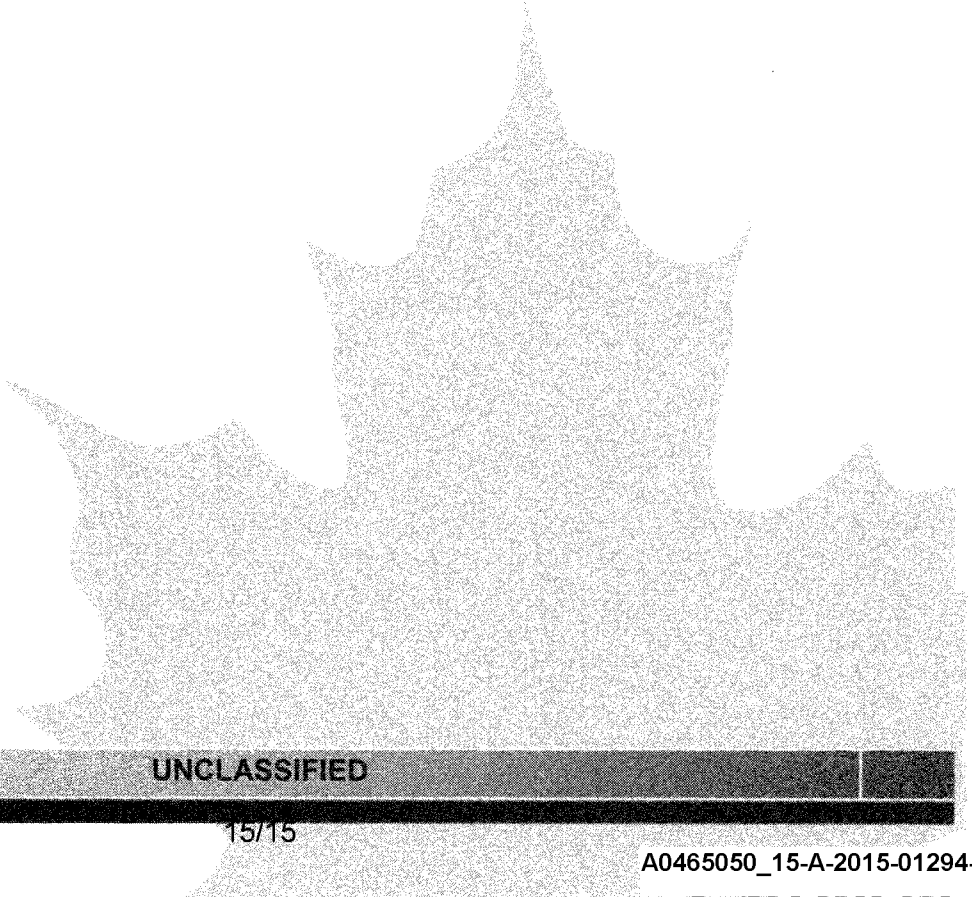
Over the next year, the main decision points will be to approve the project for implementation and approve the award of a contract to the winning bidder.

The objective of the **Future Fighter Capability Project (FFCP)** is to replace the CF-18 fleet on its retirement so as to maintain a manned fighter capability necessary for the defence of Canada and North America, and for Canadian Armed Forces' collective expeditionary operations. On 3 April 2012, the Government of Canada announced a comprehensive response to Chapter 2 of the 2012 Spring Report of the Auditor General of Canada that included a Seven-Point Plan to respond to the Auditor General's recommendation for replacing Canada's CF-18 fighter fleet. As a result, the National Fighter Procurement Secretariat was established to provide oversight and coordination among the Departments involved with the implementation of the Seven-Point Plan. A key part of the Seven-Point Plan is an evaluation of options to review and assess all available fighter aircraft. The Royal Canadian Air Force has completed the evaluation of options, which has been reviewed by an Independent Review Panel. No decision has been made on the replacement of Canada's fighter fleet; the project is currently in Options Analysis. To ensure that Canada retains a fighter capability during a transition



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to a new fleet, National Defence is extending the life expectancy of the CF-18s to 2025. In the meantime, Canada remains in the United States Joint Strike Fighter Program to keep that option open and to provide companies in Canada the opportunity to compete for contracts on the F-35 aircraft. As reported in the 2014 Annual Update, the acquisition envelope for this project remains frozen at \$9B. Additional information on this project is included at in Book 2.



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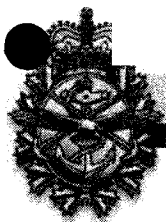
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ISSUE PAPER: JETS REPLACEMENT PROJECT



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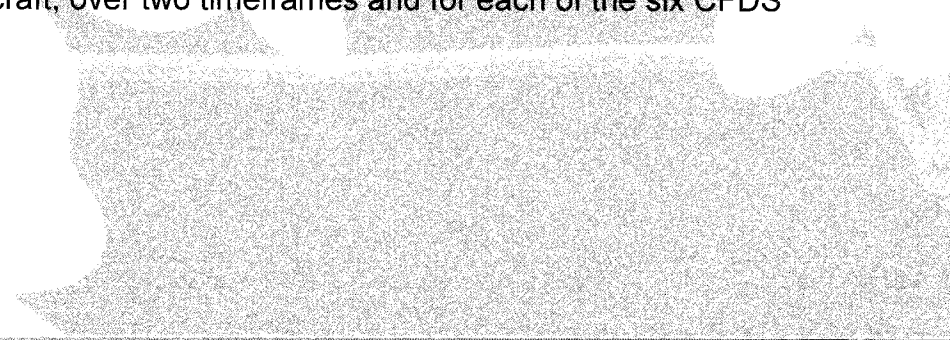
**ANNEX B: Summary of the Evaluation of Options**

In April 2012, the Government of Canada undertook a comprehensive review of the process to replace Canada's CF-18 fleet. Point 4 of the Seven-Point-Plan called for the Department of National Defence (DND) to evaluate options to sustain a fighter capability well into the 21<sup>st</sup> century. From November 2012 to April 2014, the Royal Canadian Air Force (RCAF)-led Evaluation of Options reviewed and assessed four fighter aircraft currently in production, or scheduled for production. The work resulted in a detailed and comprehensive analysis using the best available information about each of the options considered, including information provided by potential suppliers on follow-on development growth paths for their fighters. This work was informed by a broad range of subject matter experts drawn from across the DND/CAF, supported by the National Fighter Procurement Secretariat, and guided by an independent review panel external to government.

The CFDS, which specifies the three roles and six core missions for the CAF, was the Government of Canada policy foundation for the Evaluation of Options. The evaluation resulted in a mission-risk-based analysis of options that assessed the individual ability of four fighter aircraft (Boeing F/A-18 Super Hornet, Dassault Rafale, Eurofighter Typhoon and Lockheed Martin F-35 Joint Strike Fighter) to carry out fighter missions over two timeframes (2020-2030 and 2030+).

The high level work plan was comprised of a Mixed Fleet study, a Threat Analysis, a Mission Needs Analysis, a Fighter Capabilities Analysis, a CF-18 Estimated Life Expectancy Update, an Operational Capabilities Risk Assessment, a Critical Enabling Factors Risk Assessment, and the Integrated Risk Assessment.

The purpose of the RCAF evaluation was not to compare the four aircraft, nor was it meant to identify the best option. Rather, it was to present a summary of risk-based assessment of each aircraft's ability to successfully complete the CFDS assigned missions. Throughout the assessment process, the RCAF used a five scale risk rating for mission risk identification: Low (L), Medium (M), Significant (S), High (H) and Very High (VH). The assessment of each aircraft began with an operational level assessment which dealt with individual aircraft performance capabilities, followed by a critical enabling factors assessment which dealt with measures necessary to maintain a fighter's full operational capabilities over its entire life cycle. The following tables provide a summary of the Integrated Risk Assessment which articulates assessed mission risk for each aircraft, over two timeframes and for each of the six CFDS missions:





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National Defence  
Défense nationale

SECRET CEO

## ANNEX C: The Joint Strike Fighter Program and Canada's History of Participation

The F-35 has been developed by Lockheed Martin and partners through the Joint Strike Fighter (JSF) program, a multinational effort to build and sustain an affordable, multi-role, next generation stealth fighter aircraft. Partners in the program include: the United States, Canada, the United Kingdom, the Netherlands, Italy, Turkey, Denmark, Norway, and Australia. JSF is the single largest fighter aircraft program in history. The total value of the program is expected to exceed US\$383 billion; JSF partners are anticipated to acquire more than 3,100 aircraft.

Canada has been an active participant in the JSF program since 1997. Canada joined the Concept Demonstration phase with a contribution of \$15.2 million.

Canada also joined the second phase, System Development and Demonstration, in 2002 by contributing an additional \$139.4 million. Additionally, Canada invested \$77.9 million in Canadian aerospace industries through Industry Canada's Strategic Aerospace and Defence Initiative (SADI), formerly Technology Partnership Canada. Contributions made under the SADI program are repayable to Canada by Industry. Canada's participation in these early phases of the Joint Strike Fighter Program provided Canada with access to technologies and data, new management and engineering approaches, and increased opportunities for Canadian industry to bid for Joint Strike Fighter contracts.

In 2003, the United States invited the current partners to participate in the Production, Sustainment and Follow-on Development phase of the program. In December 2006, Canada signed the Production, Sustainment and Follow-on Development Memorandum of Understanding (PSFD MOU). The contributions made under this MOU are used to pay for costs shared by Joint Strike Fighter Program participants, such as program administration and the development of future modifications and upgrades to the aircraft. The PSFD MOU documents the maximum contribution for each participant nation. In 2006, the total lifetime cost of participation in this phase of the program (out to 2052) was estimated for Canada at \$551 million USD. However, Program estimates are continuously refined to reflect unanticipated changes in personnel requirements, tooling, or infrastructure. Most recent estimates (September 2014) indicate that the total lifetime cost will increase. In exchange for contributing its equitable share of the financial and non-financial costs of the program, Canada will receive an equitable share of the results of the program. These include having an active role in the executive structure of the program, access to opportunities for Canadian industry and receipt of royalties or levies on sales of F-35 aircraft to third parties.

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## ISSUE PAPER: CANADA'S MARITIME CAPABILITIES

- Canada requires a strong navy in order to protect its sovereignty and its interests.
- However, in recent years, the Royal Canadian Navy (RCN) has experienced a decline in capability and capacity as a result of the retirement of several ships and the impact of removing frigates from service to undergo the Halifax-class Modernization project.
- The RCN is addressing these challenges and is in the midst of the most intensive and comprehensive period of fleet modernization and renewal in peacetime history.
- Canada's maritime capabilities are in the process of being renewed through a number of programs, including the National Shipbuilding Procurement Strategy.
- 

### CONTEXT

Canada is a maritime nation. We have the world's longest coastline, stretching 243,000 kilometres across three separate oceans. Canada's ocean estate (which includes internal and territorial waters as well as Canada's Exclusive Economic Zone (EEZ) and continental shelf) covers almost 4% of the Earth's surface, with a quarter in the Arctic. Much of our economic prosperity depends upon seaborne trade and free access to the maritime global commons. For example, marine transport carries 20% of Canada's trade with the United States (US), and 97% of Canada's exports to, and 73% of Canada's imports from, countries other than the US.

The Royal Canadian Navy's most fundamental responsibility is to defend the nation by safeguarding and upholding our sovereignty in Canada's three ocean approaches and extending the writ of Canadian law and authority through support to other federal government departments. At the same time, the RCN is responsible for defending the maritime approaches to North America in partnership with the US.

However, the requirement to defend Canada extends well beyond our own maritime approaches. As a trading nation, Canada's economic well-being relies upon a safe and secure global maritime environment. As one of the world's largest coastal states, a global economic power, and a leading member of the international community, Canada has a deep and abiding stake in the norms, institutions, and legal framework of the international maritime environment. Therefore, Canada requires a self-sustaining, globally-deployable, multi-purpose navy with the right capabilities to maintain knowledge of our ocean estate, exert our presence where and when necessary, and an ability to wield latent or actual force at sea.

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The maritime security environment is evolving, becoming less certain and more dangerous. The economic, political, and demographic centre of gravity of the world is shifting towards the Asia-Pacific region – an essentially maritime domain. Some states, have begun to articulate a different interpretation of international maritime law with regards to EEZ rights. This is creating ongoing instability, insecurity, and tension, as witnessed in the South and East China Seas. The states of the region are building qualitatively and quantitatively bigger navies. It is in Canada's interests to play its part in enabling the security and freedom of the seas.

as evidenced by the development of 'blue water' capabilities and doctrine, as well as its interest in developing economic and military infrastructure well outside its borders.

Finally, challenges to a safe and secure global maritime environment go beyond those potentially posed by major powers with large navies. Non-state actors such as terrorists





and criminals engaged in piracy, and illicit trafficking of people and narcotics, pose distinct threats to the international rule of law. The influx of illegal migrants to European nations, especially by sea, has recently become a maritime security issue for our NATO allies. Issues such as competition among maritime states for undersea resources, including valuable minerals, hydrocarbons, and seafood, have the potential to spark conflict in the future. Climate change is likely to only increase this potential for conflict by changing the nature of the world's coastlines and seabed, thereby increasing the competition amongst states, as well as the number and scale of humanitarian disasters requiring a maritime humanitarian response.

**ROYAL CANADIAN NAVY: ROLES & CAPABILITIES**

The RCN operates several classes of vessel in support of Canada's maritime sovereignty and defence, for example: *Halifax*-class frigates; *Kingston*-class Maritime Coastal Defence Vessels (MCDVs); *Victoria*-class submarines, and an *Iroquois*-class destroyer. The multipurpose *Halifax*-class frigates are the backbone of the RCN, and, with their embarked maritime helicopters, provide a highly capable surveillance, presence, and response capability within Canada's waters. Their anti-submarine capabilities, as well as defence against surface and air threats, make them especially valuable when deployed in task groups. The ships are currently undergoing modernization which will enhance their capability to conduct defence and sovereignty missions by improving, among other things, their radars and other above water sensors.

The *Kingston*-class MCDVs' primary missions are coastal surveillance and sovereignty patrols. The RCN's *Victoria*-class submarines are an essential component of the RCN's maritime sovereignty and defence missions. Stealthy by design, the submarines are capable of covertly conducting surveillance and protection of Canadian and foreign maritime approaches, as well as anti-submarine warfare, and support to Special Operations Forces. Submarines are a vital capability for the RCN and a strategic asset for Canada, both for their deterrence impact and operational effect upon the rest of the fleet. Also, one *Iroquois*-class destroyer remains in the fleet, although with very limited capabilities. The RCN also has to manage the maintenance of these platforms, requiring both a significant physical infrastructure and a complex personnel management system of training and crewing.

**Royal Canadian Navy:**

- Approximately 9,000 Regular Force, 2,700 reservists, 4,000 civilians
- Current fleet: 29 ships roughly divided between the two coasts consisting of 12 Frigates; 4 Submarines, 1 Destroyer; 12 Coastal Patrol Vessels
- Major bases: Pacific coast, CFB Esquimalt; Atlantic coast,

The RCN has several core roles and responsibilities. Its primary mission is to generate and maintain combat-capable, general-purpose maritime forces in order to secure Canada and further Canadian interests. Domestically, these operations may be conducted with other government departments in support of Canadian sovereignty or a domestic crisis, or with the US Navy and US Coast Guard in support of the defence of North America. Internationally, the RCN deploys on operations in support of





international law (such as enforcing United Nations Security Council resolutions), to provide a response to humanitarian or natural disasters, to reassure allies, to build trust among states in regions of strategic interest, to deter those would act against our interest, and ultimately, should deterrence fail, to prevail in combat. The majority of these international operations are conducted alongside our key allies within a coalition. Accordingly, it is vital that Canada's navy be interoperable with the US Navy, and other allies, to ensure seamless integration when working together and to further leverage our capabilities.

In support of Canadian sovereignty, all RCN vessels while at sea contribute to providing the Government of Canada with a fulsome picture of Canada's maritime domain, in conjunction with their primary tasks. The RCN participates in several recurring domestic operations, including support to Fisheries and Oceans Canada and the Royal Canadian Mounted Police, Arctic sovereignty operations such as Operations NANOOK and NUNALIVUT, and support to the Canadian Coast Guard in maritime search and rescue operations when necessary.

Internationally, RCN assets have deployed to European waters in support of Operation REASSURANCE, the military activities undertaken by the Canadian Armed Forces (CAF) to support NATO assurance measures in Central and Eastern Europe, in response to Russian aggression and provocation in Ukraine. Over the past year, frigates HMCS *Regina*, HMCS *Fredericton*, and HMCS *Winnipeg* have joined Standing NATO Maritime Forces and conducted patrols in the Mediterranean, Baltic, and Black Seas. The RCN also regularly deploys on humanitarian assistance missions, including to Haiti in the aftermath of the 2010 earthquake when HMCS *Athabaskan* and HMCS *Halifax* arrived within days to provide disaster relief. Naval assets also contribute greatly in a defence diplomacy role around the world through port visits, which provide opportunities for Whole of Government engagement.

Until recently, the RCN played a key role in international counter-terrorism and maritime security operations across the Red Sea, the Gulf of Aden, the Gulf of Oman and the Indian Ocean. Through Operation ARTEMIS, Canada has clearly shown its solidarity with partners and allies in the greater Middle East region. This area contains some of the world's busiest and most important shipping lanes. It is in Canada's interest to assist multinational efforts to combat terrorist organisations funding their activities through smuggling weapons and illicit cargo, and piracy at sea, in order to ensure the security of lawful merchant shipping through the area.

In addition, the RCN participates in Operation CARIBBE, Canada's contribution to the multinational campaign against illicit narcotics trafficking by transnational organised crime in the Caribbean Sea and the eastern Pacific Ocean. A significant number of CAF assets – destroyers, frigates, MCDVs, and CP-140 Aurora aircraft – have been deployed since Operation CARIBBE began in 2006, and have been successful in locating and tracking vessels of interest. Thus far in 2015, these assets have assisted in the interception of more than 8000 kgs of narcotics at sea.





## CONSIDERATIONS

**Current challenges and the renewal of the fleet.** In recent years, the RCN has experienced a significant decline in capability and capacity. The RCN was forced to accelerate the planned divestment dates for the *Iroquois*-class destroyers and the *Protecteur*-class Auxiliary Oiler Replenishment (AOR) ships to 2015 due to a number of unforeseen events such as the 2013 collision between *Algonquin* and *Protecteur*, the 2014 fire in *Protecteur*, and inspections that showed higher than expected levels of corrosion and degradation of structural integrity within the aging ships. These divestments have caused limitations in fleet capacity and, in the case of the AORs, have left the RCN without a critical Replenishment at Sea capability. While the Navy had anticipated a manageable gap between the retirement of the two AOR vessels and the entry into service of the Joint Support Ships, their sudden withdrawal from service last year

Together, the

Furthermore, Canada's latitude to conduct international operations

or their willingness to permit Canadian warships more frequent access to their territorial waters and ports in order to replenish.

In addition, the requirement to remove frigates from operational service in order for them to undergo the *Halifax*-class Modernization Project initially reduced their availability, requiring the RCN to rely more heavily on the *Kingston*-class for domestic and continental operations. However, this year has seen the final frigates enter the modernization program and the first operational deployment of modernized ships. Under the auspices of the National Shipbuilding Procurement Strategy (NSPS) and other programs, the RCN is poised to address these challenges and is in the midst of the most intensive and comprehensive period of fleet modernization and renewal in peacetime history

**National Shipbuilding Procurement Strategy.** In June 2010, the Government of Canada announced the NSPS. The intent of the NSPS is to deliver ships effectively and efficiently to the RCN and the Canadian Coast Guard, while supporting and enhancing the Canadian marine industrial sector and enabling a long-term steady workflow in Canadian shipbuilding that sustains highly-skilled jobs across the sector. NSPS will deliver:

**Arctic Offshore Patrol Ships.** In 2007, the Government announced its intent to purchase a fleet of Arctic Offshore Patrol Ships (AOPS). This new class of ship will provide the RCN with the flexibility to operate in both the Arctic and North American offshore environments. The fleet will be used year-round in a variety of roles, including domestic surveillance, search and rescue and support to other government departments. Most importantly, the AOPS fleet will give the RCN an unprecedented capability to operate in the ice, in both the low and high Arctic, and have a persistent Arctic presence, a region of increasing activity. It is intended to employ AOPS mostly during the relatively ice-free navigable season, although it will





be capable of maintaining three knots of forward progress through up to one metre of continuous first-year ice. Full production commenced in September 2015 on the first AOPS and delivery of the first ship is scheduled for 2018.

**The Canadian Surface Combatant.** The Canadian Surface Combatant Project will recapitalize Canada's surface combatant fleet through replacement of the capabilities of the *Iroquois*-class destroyers and the *Halifax*-class frigates, along with the provision of the necessary integrated logistics support for the ships and physical infrastructure. It is the most complex component of the NSPS. The surface combatant fleet is critical to the CAF's ability to control and defend Canada's maritime approaches, defend North America, fulfill alliance commitments, and lead across a wide range of international operations, from disaster response to high-intensity combat operations. The project is currently in the definition phase, and as this phase progresses,

Estimated initial delivery is scheduled from 2026, with one ship delivered every 18 months subsequently, and an estimated hull life of 30 years.

**Joint Support Ship.** The Joint Support Ship (JSS) Project is designed to replace the capabilities of the AOR ships that were retired last year. The project will deliver ships capable of supplying fuel, ammunition, water, food, and spare parts to individual ships or naval task groups. The project will acquire two new support ships with an option for a third vessel if it is affordable or if additional funding becomes available. The project is currently in the definition phase, working with Vancouver Shipyards Co. Ltd. These ships will be built to the design of the German navy's BERLIN class tankers, and the important initial design review activity has just been completed. National Defence anticipates delivery of the first ship in 2019/2020.

**Halifax-class modernization.** The *Halifax*-Class Modernization program is delivering upgrades to Canada's fleet of 12 *Halifax*-Class frigates including a new Combat Management System, new radar capability, a new electronic warfare system, and upgraded communications technologies, to ensure they remain operationally relevant until the new Canadian Surface Combatants are delivered in the late 2020s. These upgrades will allow the ships to meet new challenges, such as smaller, faster, and stealthier threats that have emerged since the frigates were first commissioned, as well as operate more often in littoral environments. The program is well into implementation and is on schedule and on budget for completion in 2019. All ships have either completed or are in the process of being refitted.

**Interim Auxiliary Oil Replenishment.** The sudden retirement of HMCS *Protecteur* and *Preserver* resulted in a larger than anticipated gap before the delivery of the JSS. The CAF relies upon the capability provided by AOR ships to enable global, sustained operations through the supply of fuel, ammunition, water, food, and spare parts to individual ships or naval task groups. To mitigate the gap between the retirement of the AORs and the arrival of the JSS, the CAF is exploring options for acquiring an interim Auxiliary Oil Replenishment (iAOR) capability that will provide an at-sea replenishment service to the RCN. The Government of Canada recently signed a Letter of Intent with Chantier Davie Incorporated to continue discussions on pursuing an at-sea support







services contract. Under the service contract, the contractor will convert a commercial container ship to an interim AOR ship; own, operate, and maintain the vessel; and deliver at-sea replenishment services to the RCN. Of note, the iAOR would not be capable of performing full-spectrum military operations in high-threat environments. The delivery of an interim at-sea replenishment capability service will be required until the Joint Support Ships reach their full operational capability.

## AUGMENTING THE FUTURE MARITIME CAPABILITIES OF THE CAF

Given the recent, and foreseeable global rise in naval power across the world, and the uncertain evolution of the strategic maritime situation, the CAF is considering additional capabilities. One of these potential additions which had been under consideration was the French *Mistral*-class vessel. However, on 23 September, France announced that the two vessels originally built for sale to Russia will be sold to Egypt, with initial delivery due for March 2016.

There are two other issues potentially requiring decision over the long-term, and not included in the NSPS. As the demand for coastal surveillance and at-sea presence platforms will likely only grow in the decades to come, planning for the life extension and/or suitable replacement for the MCDVs to complement the AOPS and Canadian Surface Combatants will be important. Finally, while the *Victoria*-class submarine fleet is now operational and at a steady state, the fleet will reach the end of its estimated life expectancy between 2026 and 2031. The RCN is examining options for extending the service life of the vessels, as well as an eventual submarine replacement project.

## CONCLUSION

Canada needs a strong navy in order to protect its own sovereignty, contribute to the defence of North America, and play its part in international operations. While the earlier than anticipated retirement of several key ships and the ongoing *Halifax*-class modernisation program have temporarily reduced the RCN's capabilities, National Defence is undertaking a comprehensive renewal program that will ensure the CAF has the maritime capabilities it needs to fulfil its roles and missions well into the future.

Canada's naval doctrine is very much focused on the importance of interoperability for joint and combined operations with Allied forces. Maritime forces operate on a "larger than the sum of its parts" principle, with groups of ships working together exponentially increasing their power when in a task group. Since so many security issues and threats in the maritime arena are common to many states, working in concert with like-minded navies means that Canada will be significantly better positioned to face emerging challenges. The current and upcoming revitalisation projects are essential if the RCN is to remain an internationally relevant navy and Canada is to remain a significant maritime nation.

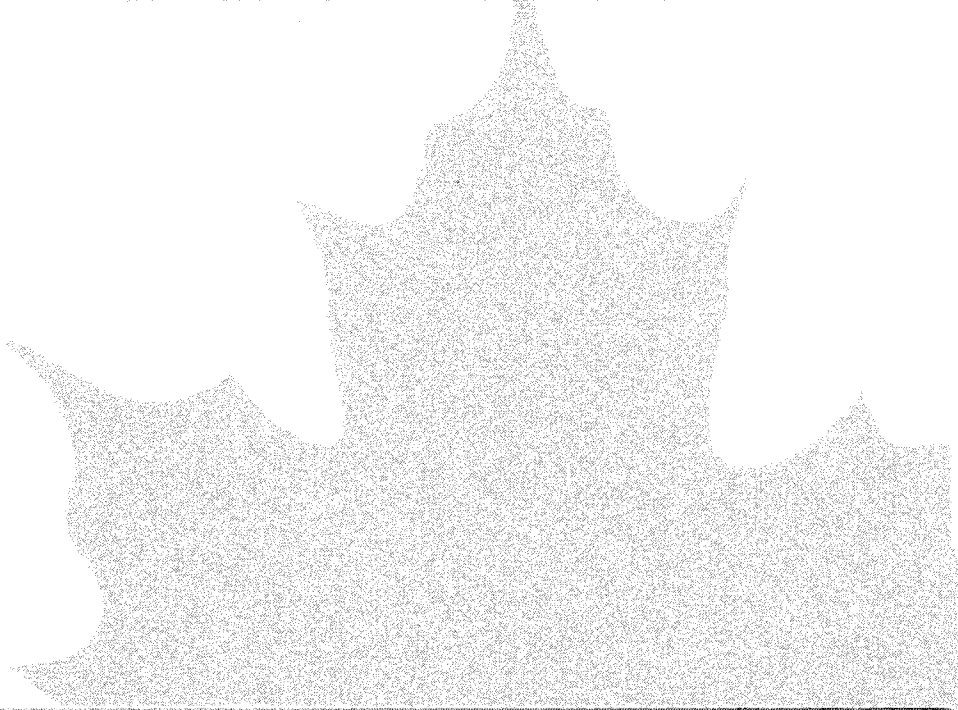




**ISSUE PAPER: CANADA'S MARITIME CAPABILITIES**

**ANNEX**

***Halifax-class***





*Kingston-class*



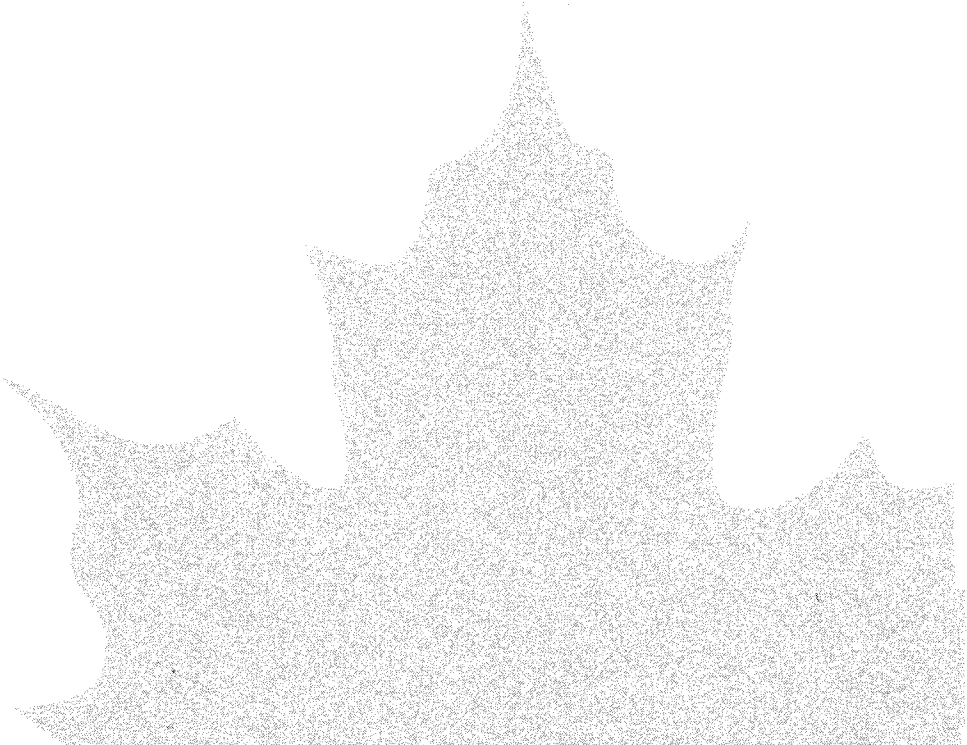
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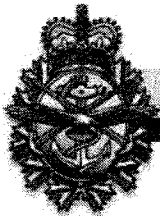
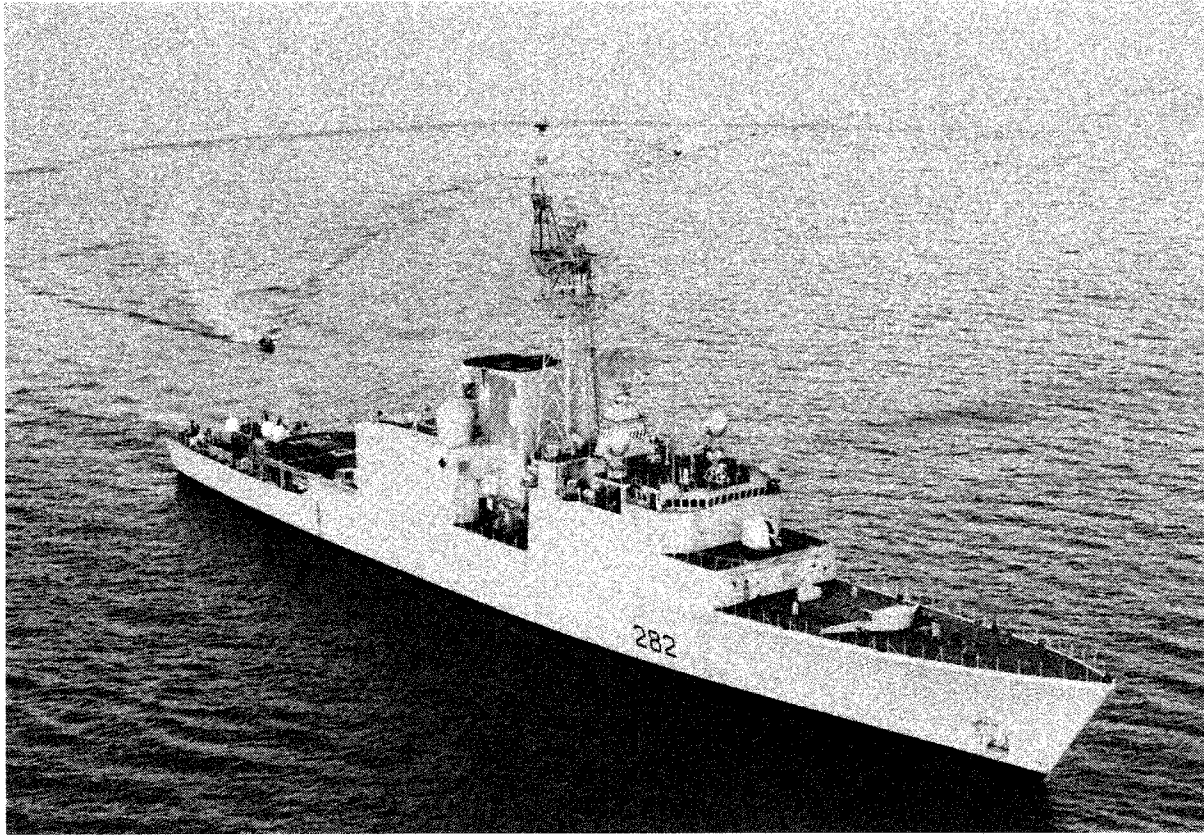


Victoria-class





*Iroquois-class*





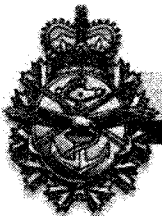
### Arctic Offshore Patrol Ships (AOPS)





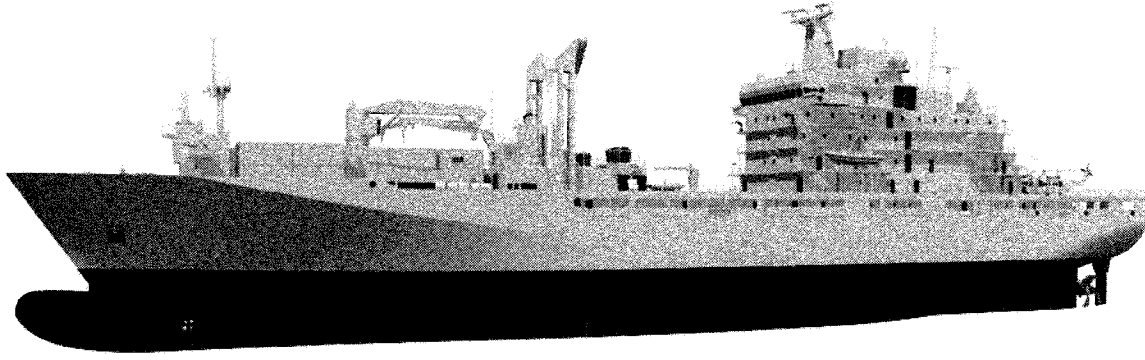


### Canadian Joint Surface Combatant

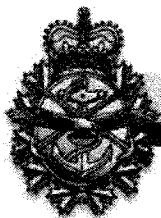
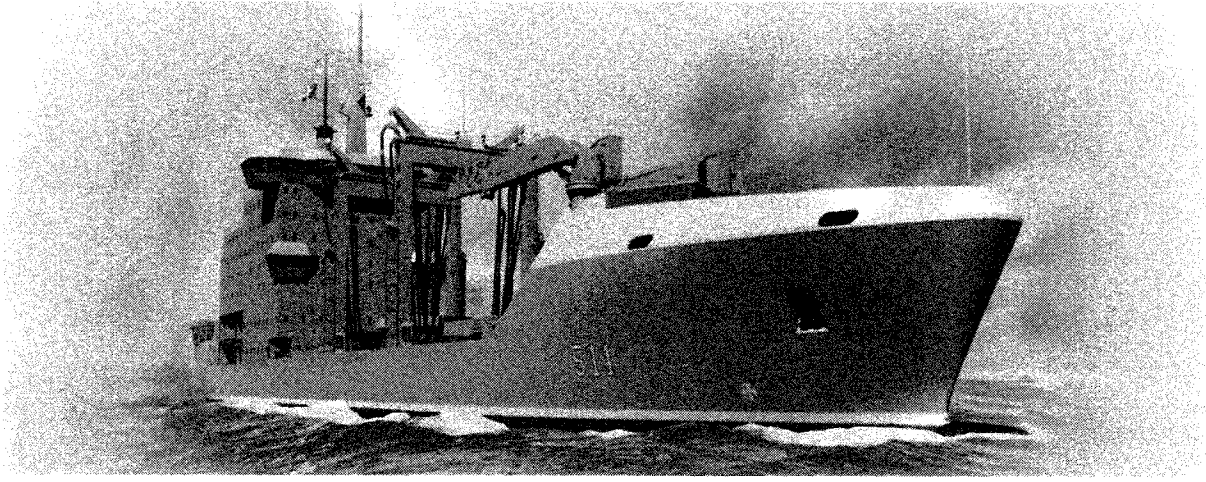




# Joint Support Ship



## Interim Auxiliary Oil Replenishment capability



**Page 302**

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**15(1), 21(1)(a), 21(1)(b)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

## ISSUE PAPER: MILITARY PERSONNEL

### ISSUE

- Military personnel management touches on virtually every component of military service. This includes recruitment and selection, planning for relocations across Canada and around the world, and offering training and education programs that provide the skills required to fulfill the CAF's mandate. The CAF also looks after members' physical, psychological, and spiritual well-being, negotiates rates of pay, provides compensation and benefits that are commensurate to service, and assists with the transition out of the military.
- National Defence effectively manages this complex and diverse array of personnel issues, directly supporting the CAF's ability to maintain the readiness it requires to fulfill its roles, missions and tasks.
- While challenges do arise given the breadth and depth of the subject matter, the CAF remains flexible and ready to respond to ensure that CAF members are well supported throughout their careers.

### CONTEXT

The Canadian Armed Forces (CAF) is a small, but highly professional force representing the full spectrum of skills and professions – from doctors to mechanics to IT specialists – and deployed across Canada and around the globe. Managing personnel in such a diverse organization is a complex undertaking. Effective management is crucial to ensure that the CAF maintains the readiness required to respond to the roles, missions and tasks assigned by the Government of Canada.

Personnel management issues often garner significant media and parliamentary attention as well. The sacrifices of the CAF in Afghanistan, the recent media reporting of military suicides and increased awareness of post-traumatic stress disorder, and the contribution to other international and humanitarian missions, as well as the targeting and killing of two CAF personnel in the fall of 2014, served to focus the attention of Canadians on the work of the CAF and its impact on CAF personnel. Sustained parliamentary engagement, including reports and studies undertaken by Parliamentary committees and reports by the Auditor General of Canada, as well as lobbying efforts by groups such as Canada Company and the True Patriot Love foundation, have also contributed to keep the spotlight on these issues and this attention is expected to continue.

National Defence successfully manages these diverse issues that are fundamental to the CAF's ability to fulfill its assigned roles and missions and continues to take action on all fronts to maintain the confidence of its personnel, of Parliament, and of Canadians. In this regard, CAF members are fully supported throughout their entire career. From enrolment to retirement and the transition to civilian life, National Defence ensures personnel receive first-rate training to expertly apply military and technical doctrine and







procedures, and are educated to improvise and to adapt to constantly changing threats and opportunities, including new and emerging security and defence challenges, such as those in the area of cyber and space. CAF members are also provided with one of the best health care systems in Canada. For example, the CAF are advancing mental health research and are exploring a research partnership with the Royal Ottawa Hospital focused on brain imaging technology that will help to better detect and diagnose mental illness. A commitment to continuous improvement is further supported by and reflected in the comprehensive Defence Renewal Initiative launched in 2013, which includes specific initiatives aimed at optimizing recruiting, training, and management of personnel.

Still, with such a diverse and wide-ranging portfolio, issues and challenges arise. The CAF continues to address key personnel management priorities, such as sexual misconduct in the CAF; compensation and benefits for Regular and Reserve Force personnel; the transition to civilian life; continuous improvements to health care and social support services for CAF personnel; housing for military personnel and their families; and recruitment.

### ***Deschamps Report on Sexual Misconduct in the Canadian Armed Forces***

A highly critical article published by Maclean's magazine in May 2014 focused on and brought to the forefront the issue of inappropriate sexual behaviour within the CAF. In response, the Chief of the Defence Staff (CDS) commissioned an independent external review, led by former Supreme Court of Canada Justice Madame Marie Deschamps, to look into sexual misconduct and sexual harassment in the CAF. Released in March 2015, the Report of the External Review of Sexual Misconduct in the Canadian Armed Forces identified inappropriate sexual behaviour as a serious problem that exists in the CAF and proposed 10 specific recommendations focused principally on changing institutional culture and increasing awareness in the CAF, support to victims, accountability, clarity of policies and enabling incident reporting.

In line with the Government's platform commitments, National Defence is committed to a workplace free from inappropriate sexual behaviour. The CDS has initiated OPERATION HONOUR to provide unequivocal direction to the CAF on the implementation of the Deschamps Report's recommendations, engaging with and calling upon senior leaders at all levels to address the issues identified in the report. The independent Sexual Misconduct Response Centre (SMRC), as recommended by the External Review Authority (ERA), became operational on September 15, 2015. The remaining recommendations will be implemented by September 2016 through an action plan.

The CAF's continued operational success depends on a strong professional ethos and unwavering trust and cohesion amongst all of its members. In addition, public, parliamentary, and media attention is expected to continue on the findings of the Deschamps Report and on how the CAF addresses the problem of inappropriate sexual behaviour in the military.



## Compensation and Benefits

The compensation and benefits framework for Regular and Reserve personnel recognizes and addresses the unique requirements associated with military service. With a direct impact on both recruitment and retention, this issue has generated significant public attention. Most notably, in the context of the mission in Afghanistan, Reserve Force members who filled similar roles to their Regular Force counterparts were not afforded the same benefits. The issue resurfaced with the death of Cpl Nathan Cirillo during the attack on Parliament Hill on October 22, 2014. As a Reservist, Cpl Cirillo's death benefits were not the same as a Regular Force member.

Compensation and benefits for CAF personnel are based on the terms and conditions of their service as either Regular or Reserve Force members. However, to address any potential inequities, the CAF initiated a study in December 2014 to review and harmonize where appropriate Reserve and Regular Force policies. This work is expected to result in a model that better reflects the current realities of Reserve service and particularly those instances when Primary Reservists are performing comparable duties to the Regular Force. Upon completion of this review, requests for changes to benefits will be submitted to Treasury Board for approval and implementation.

National Defence has also been criticized for the time that it takes for Veterans to begin receiving pension payment. To improve this process, in response to the 2014 Report of the House of Commons Standing Committee on Veterans Affairs (ACVA), the *Canadian Forces Members and Veterans Re-establishment and Compensation Act* (the New Veterans Charter) was amended to provide Veterans Affairs with the authority to adjudicate a CAF member's application for benefits prior to the member's actual release from the military. This is expected to reduce the time it takes for new Veterans to receive payments. Furthermore, as outlined below as part of facilitating the transition to civilian life, a pilot initiative was launched in fall 2015 that involves the integration of Veterans Affairs personnel within National Defence. It will have a direct and positive impact on reducing the overall processing time for payments to medically releasing CAF members.

The ACVA Report also noted inconsistencies between the compensation and benefits provided by the National Defence Service Income Security Insurance Program (SISIP) and those provided to members by Veterans Affairs after their transition to civilian life. As such, National Defence and Veterans Affairs have agreed to undertake an independent assessment of their respective programs. While the timing and scope of the review is still to be determined, it is in line with commitments made by the Government to ensure CAF members and veterans receive adequate support. It is anticipated that this review will entail significant effort and will require careful collaboration by National Defence and Veterans Affairs for the foreseeable future.

The CAF relocates over 10,000 military personnel every year through the Government of Canada's Integrated Relocation Program (IRP), and the current IRP contract is set to expire in November 2016. The procurement process for the 2006 IRP contract was heavily scrutinized by the Office of the Auditor General, and resulted in litigation that cost the government roughly \$40 million for what was deemed an unfair advantage



provided to the incumbent. To avoid such a situation in the upcoming process, National Defence is working closely with Public Works and Government Services Canada to ensure that the Smart Procurement Process will be strictly applied to the new procurement process in 2016.

Similarly, the Canadian Forces Ombudsman raised concerns in an October 2014 Report that Post Living Differential (PLD) rates may not adequately compensate CAF members. This benefit helps ease financial strain and stabilize the cost of living for CAF members who are posted to areas with a higher cost of living. Frozen by Treasury Board Secretariat at their 2008 levels, regional costs of living have changed considerably since then, resulting in inequitable PLD rates and rising program costs. A new cost of living survey has been completed to ensure CAF members are fairly compensated and the results have been provided to Treasury Board Secretariat. National Defence continues to work closely with internal and external partners with respect to how these benefits are allocated, and will eventually bring forward a proposal for Treasury Board approval.

### ***Transition to Civilian Life***

The transition from military to civilian life is a stressful time for CAF members and their families. Reports by the Auditor General of Canada, the Veterans Affairs and National Defence Ombudsmen, and Parliamentary Committees have criticized National Defence and Veterans Affairs' complex processes and the often lengthy delays during the transition. Specifically, criticism was targeted at insufficient assignment of case workers leading to delays in receiving benefits and in transferring individual's files (including medical records), and inconsistent policies and benefits.

National Defence and Veterans Affairs continue to strive towards a seamless transition for military personnel when they return to civilian life. A number of initiatives have been introduced that seek to improve the transition process for members and their families, which will be implemented within the next 12 months. For example, National Defence and Veterans Affairs will launch a trial project to expand access to the Military Family Services Program, including seven Military Family Resource Centers, to medically releasing personnel and their families to provide them with support and services in a familiar setting. National Defence is also working to hire an additional 15 personnel to process medical files and facilitate their timely transfer to Veterans Affairs for medically releasing CAF personnel. In addition, while the wait time for the adjudication of a transitioning member's eligibility for Veterans Affairs benefits has been significantly reduced over the last 12 months (from 71 to 21 days), a trial project to embed additional Veterans Affairs analysts within National Defence was launched in September 2015 in order to accelerate the process even further.

Releasing members may also experience challenges in obtaining civilian employment. To support them in this transition, National Defence and Veterans Affairs work closely with the private sector or third party organizations to ensure releasing members are well supported and have multiple opportunities at their disposal to assist with establishing a successful second career.





## ***Health Care and Social Support Services***

The CAF are supported by one of the best health care systems in Canada at a directly comparable cost to the civilian health system. Together, these facilities deliver a wide variety of programs to military personnel and their families, catering to their specific needs arising from the demands placed on them as a result of their service to Canada.

Maintaining the excellence of this health care system is critical to care for the physical and mental health of military personnel.

In response, the CAF has introduced a robust plan that includes specialist medical recruiters actively engaging civilian Health Care Practitioners to attract them to the Defence Team. The CAF also leverages contracted health care providers to address shortfalls that cannot be mitigated by military or public service professionals.

The importance of this system has been reinforced recently as a result of a period of high operational tempo, during which, in particular, the experiences of CAF personnel in Afghanistan focused attention on the mental injuries of war. An important minority of CAF personnel are suffering from mental health issues, with studies showing that CAF members have almost double the general population's rates of depression and anxiety disorders. Suicide is also an important public health issue facing the CAF. As is the case for society at large, most military members who die by suicide have an underlying mental illness with an acute trigger, like the breakdown of an interpersonal relationship. After each suicide, a Medical Professional Technical Suicide Review is conducted to better understand the associated factors and find ways to reduce future suicide. Suicide awareness is covered in CAF training programs as well, as outlined in the Mental Fitness and Suicide Awareness and the Road to Mental Readiness training. Superiors are also provided with additional tools to help identify people at risk and help them seek care. Attention on suicides in the CAF is expected to persist, notably as the CAF will soon release an updated Annual Report on Military Suicides to examine the relationship between deployment and suicide.

As such, National Defence has developed a comprehensive approach to improve mental health treatment and to de-stigmatize mental health issues, in line with the Government's commitment to the well-being of CAF members and ensuring that they receive adequate mental health support services. The CAF's robust mental health care system is built on three pillars: Understand (surveillance and research); Educate (education and training); and Care (programs and services). This system, along with specific initiatives such as the Road to Mental Readiness program and a partnership with Canadian Institute for Military and Veterans Health Research (CIMVHR) for research and education on mental health, to name a few, provide CAF members with the support they require when facing mental health issues.



The system has proven effective in a number of areas. The CAF health system provides specialized mental health care at 31 locations across the country. Seven of the largest clinics have dedicated Operational Trauma and Stress Support Centres (OTSSCs) that have specialized expertise to diagnose and manage complex Operational Stress Injury (OSI) patients. At the same time, the Joint Personnel Support Unit (JPSU) provides support to more than 5,000 ill and injured CAF members, veterans, and their families. More than 1,500 of these members are posted to the JPSU and provided an opportunity to focus on recovery and rehabilitation with a view towards returning to active duty, or with a focus on transition to civilian life. Work continues to ensure that CAF members receive the best mental health care possible and that they feel more comfortable speaking openly about mental illness.

### *Housing*

With the potential to be posted across the country on very short notice, ensuring CAF members and their families have timely access to suitable accommodations is key to support the overall readiness of the CAF. It is also a key factor in supporting the overall welfare and morale of CAF members and their families, with direct impact on the retention of skilled and trained personnel over the long-term.

To meet this need, National Defence holds approximately 12,000 homes at over 30 locations across the country; these are managed by the Canadian Forces Housing Agency (CFHA). Over the past 10 years, more than \$730 million has been invested to build new and renovate existing housing units. Notwithstanding this investment, the quality and availability of military housing has come under scrutiny in recent years. In particular, the majority of housing units as of July 2014 were assessed as being in either poor or fair condition.

Improvements are being made. In fact, over the past three years the condition of housing has been improving, in part due to the implementation of lifecycle replacement, recapitalization, new constructions, and disposal projects. CFHA has received \$102.75M of National Defence's allotment of the Federal Infrastructure Investment Plan to be invested in improving housing at 10 specific sites over the next 2 years. At the same time, the CFHA is working to determine where excess or surplus housing stock exists. With this, the CFHA will be able to reduce inventory in areas where there is less demand for housing and potentially channel those resources to invest in locations where there is more demand and longer wait times. DND/CAF will also examine housing service delivery strategies tailored to local realities. The strategies will be focused on where the private sector can be leveraged or encouraged to support CAF accommodation requirements directly or through a number of alternative service options such as partnerships or service provision agreements.

While these efforts continue, the Auditor General will table a report in the coming months examining whether National Defence has managed military housing in a manner that supports requirements, is consistent with government policy and regulations and with due regard to economy. This report will once again focus attention on housing issues and will provide an opportunity to further examine current and future





potential initiatives to ensure the continued quality and availability of housing for CAF members.

### **Recruitment**

To ensure the CAF remains a first-class, modern military, the CAF must focus on recruiting a knowledge-based workforce that is able to adapt to evolving roles, missions, and tasks. This is particularly difficult in a tight labour market and is exacerbated by a number of internal challenges. In fact, the Auditor General Report of 2002 and follow-up audit of 2006 on Military Recruiting and Retention highlighted a number of areas for improvement, including addressing delays in the recruiting process and shortages in specific occupations, as well as a more strategic approach to manage attrition. The Auditor General has initiated work on a follow-up audit, to be released in the fall of 2016. As such, it is important to maintain momentum and continue to identify innovative ways to address these, and other, challenges.

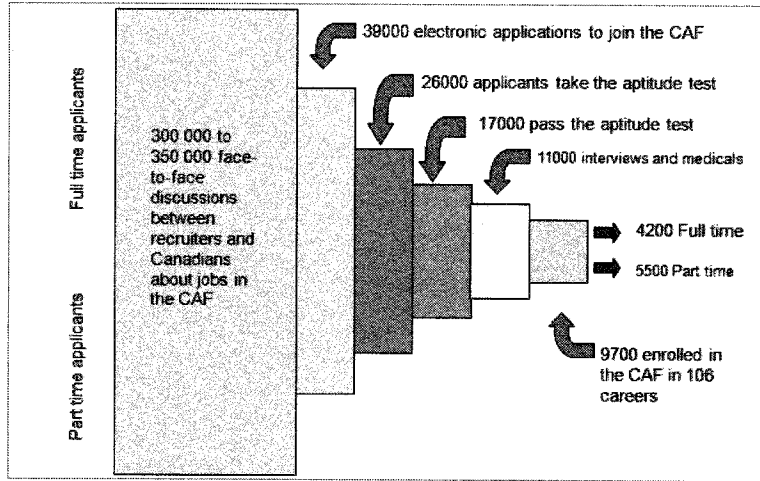
Attrition is a key driver in determining recruitment requirements. The attrition rate for Fiscal Year 2014/2015 was higher than anticipated at 7.9%. This was caused by a deliberate effort to clear a backlog of medical release files that had accumulated while CAF resources were diverted to support the mission in Afghanistan – attrition rates are expected to return to their historic average of 7% per year. Still, this increase meant that the CAF was required to recruit and train over 600 additional personnel to maintain its target strength. Data has also shown that attrition rates are higher in the early years of service as members are receiving initial training and are adjusting to the demands of military life, further compounding the challenges to the recruiting system as it seeks to take in the required personnel.

In fiscal year 2015/2016, the CAF will seek to recruit 4,200 new Regular Force (full-time) personnel and 5,500 Reserve Force personnel. These recruitment efforts focus on maintaining a skilled force across the broad range of tasks, as well as on targeting specific occupations that may be facing shortages, particularly in certain specialized occupations, such as medical officers (doctors), dentists, pharmacists, and social workers. Each of these occupations are all short at least 10% of their target Regular Force strength. CAF recruiting aims to focus on recruiting a range of skill sets, including in emerging domains such as cyber and space, and on recruiting a diverse workforce reflective of the Canadian population.

Meeting these needs and achieving the target strength of the CAF requires a robust recruiting system which allows the CAF to process the high volume of applications it receives each year and to introduce high caliber recruits into the ranks. In fact, although the CAF receives approximately 35,000 to 40,000 applications each year through recruiting detachments located in communities across Canada or through online applications, only about 9,700 will be enrolled in the Regular and Reserve Force after undergoing a series of medical, physical, aptitude, and other screening tests to ensure the quality of the applicant.







As indicated by the Auditor General, however, there are a number of internal systemic challenges that result in long processing times and, during this period, many recruits lose interest or find other jobs.

The Canadian Forces Recruitment Group (CFRG) plays an integral role in ensuring CAF recruitment needs are met, exercising an important centralizing function that helps ensure common standards are maintained. CFRG is currently conducting a review of the recruitment process to identify where steps can be eliminated, combined or reversed to establish a more streamlined and standardized recruiting framework. Regarding Reserve Force recruiting, they have also devolved some tasks to individual units or local recruiting centres to improve responsiveness. This is expected to result in reduced timelines and increased throughput.

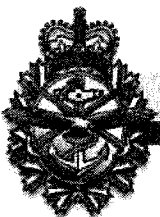
Further supporting these efforts, as part of National Defence's commitment to continual improvement and to modernize the CAF recruiting process, CFRG has introduced, as part of Defence Renewal efforts, improved tools for online applications, and is leveraging social media to better communicate opportunities across the country. A new recruiting information management system has improved file management and significantly reduced processing times, and enables recruiters to select the best candidates for service.

**NEXT STEPS**





National Defence remains committed and will continue to provide CAF personnel with the comprehensive support and care they require to fulfill their mandate in an evolving security environment, and to afford a rewarding military career to CAF members.





**FACT SHEET: MILITARY PERSONNEL MANAGEMENT BY THE NUMBERS**

**Regular Force Total Strength Snapshot (As of June 2015)**

<b>Regular Force Snapshot (As at June 2015)</b>	
Royal Canadian Navy	9,012
Canadian Army	22,822
Royal Canadian Air Force	13,625
Others	20,322
<b>Total</b>	<b>65,781</b>

**Reserve Average Paid Strength Snapshot (As of August 2015)**

<b>Primary Reserve Strength (As of August 2015)</b>	
Naval Reserve	2,746
Army Reserve	15,270
Air Reserve	1,848
Other	1,682
<b>Total</b>	<b>21,546</b>
<b>Other Reserve Force Elements (As at August 2015)</b>	
Supplementary Reserve	15,586
Cadets Organizations Administration and Training Service (COATS)	8,083
Canadian Rangers	5,282

**CAF Health Care System**

- 37 primary care clinics and detachments (of which 31 have specialized mental health services)
- 44 dental clinics, seven Operational Trauma Stress Support Centres
- 32 Military Family Resource Centres (although outside of the system, the MFRCs play a critical role in caring for and supporting CAF personnel and their families)
- 24 Integrated Personnel Support Centers

**Authorities and Structure**

The Chief of Military Personnel (CMP) provides functional direction and guidance to the CAF on all military personnel management matters and monitors compliance with CAF personnel management policies. Responding to the diverse needs of both Regular and Reserve Force members, CMP develops strategies, policies, and programs that foster and maintain the profession of arms as an honourable and desirable career. As part of this function, CMP is responsible for the effective management of the CAF personnel management system, ensuring that it is operationally-focused, reactive to CAF members' requirements, and reflective of the priorities of the organization. The system focuses on five lines of effort, namely, to Recruit, Train and Educate, Prepare, Support, and Honour and Recognize CAF personnel.

More specifically, the system is designed to optimize recruitment, training, and professional development for the CAF by ensuring the efficient selection of the best candidates by ensuring that the right person is in the right position at the right time and with the right skills. The system also provides care to military personnel and their families, in collaboration with partners and stakeholders, by providing programs and service to members and families that ensure a rewarding and fulfilling career and help them transition to civilian life after service. Overall, the personnel management system works to recognize service and sacrifice by providing the spectrum of care that is compassionate, agile, and responsive to the needs of CAF members.

While CMP retains the functional authority for all personnel management issues, the organization does not work in isolation. Various other organizations within the Defence Team play a significant role in various aspects of the personnel management system in efforts to provide the best support possible to CAF personnel.

