



National
Defence

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CANADIAN
ARMED FORCES

STRONG SECURE ENGAGED

CANADA'S DEFENCE POLICY



Canada

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MESSAGE FROM THE MINISTER OF NATIONAL DEFENCE

It is my privilege to present this new defence policy on behalf of the Government of Canada. *Strong, Secure, Engaged* is a long-term, fully funded plan built around people. The women and men of the Canadian Armed Forces and the families that support them are at the heart of everything we do. Providing them the training, equipment and care they deserve is the most important objective of this policy.

Strong, Secure, Engaged was informed by the most open and transparent review Defence has ever undertaken. I would like to thank everyone who contributed: thousands of Canadians who engaged online and in townhall meetings organized by Members of Parliament, experts who participated in roundtables across the country, members of the House of Commons and Senate committees who produced detailed reports, senior officials representing our key allies, the many dedicated members of the Defence team who worked tirelessly, and our partner departments and agencies in the federal government. I would also like to thank the four members of the Minister's Advisory Panel, whose analysis and advice was instrumental.

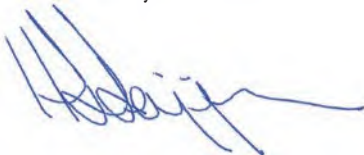
The pages that follow detail a new vision for the Defence team for the coming decades. It is about our contribution to a Canada that is strong at home, secure in North America, and engaged in the world. In a rapidly changing and less predictable world, we recognize that the distinction between domestic and international threats is becoming less relevant. Therefore, we cannot be strong at home unless we are also engaged in the world.

The policy also includes a new framework for *how* we will implement that vision. "Anticipate, Adapt and Act," sets out a way of operating that addresses the challenges we face today, and the ones that will emerge tomorrow.

Canadians take pride in their Armed Forces, and its members serve their country admirably every day. Whether it is responding to natural disasters, providing expert search and rescue, defending our sovereignty, or contributing to greater peace and security in the world, our military answers the call wherever and whenever it occurs.

Strong, Secure, Engaged is all about serving our women and men in uniform better than in the past. Looking to the future, Canadians can be confident that the policies and investments set out here will deliver what they need to get the job done.

Yours sincerely,



The Honourable Harjit S. Sajjan, PC, OMM, MSM, CD, MP



MESSAGE FROM THE MINISTER OF FOREIGN AFFAIRS

Canadians' security and prosperity go hand-in-hand. Today, we are connected to – and affected by – everything that happens internationally, and we want to be part of solutions to complex global challenges. Canadians rightly expect our government and country to play a positive and constructive role.

As the Prime Minister has outlined, our objective is to restore constructive Canadian leadership in the world and to promote Canada's interests and values; serve our security and economic interests; and contribute to a more peaceful and prosperous world.

In order to do so, we must build a closer link between our foreign, defence, humanitarian, development, and trade policies. Combined with our upcoming International Assistance Policy and progressive, feminist foreign policy, this defence policy will help accomplish our shared objectives.

Canadians have always been ready to share the burden and responsibility of making the world a safer place. We have a long history of working collaboratively with partners to prevent and respond to conflicts and crises abroad, including our support for peace and stabilization operations. The same applies to policy and advocacy that strengthen global norms on peace and security. Our commitment to collective security is reflected in our long-standing support for our core alliances, NATO and NORAD, and for the United Nations.

A highly capable, flexible military with the ability to operate closely with allies and partners is an invaluable instrument of Canada's foreign policy. This is why the Government's new defence policy will form an essential part of Canada's future international engagement. It will reinforce our relations with key partners and allies. And it will support our joint efforts to address global security threats, combat terrorism, and defend our continent.

This new policy has benefitted from extensive consultation with Canadians and our international partners. It provides a map and means to advance the Government's ambitious agenda. Our focus is to ensure that our foreign, defence, development, and trade policies reinforce one another and deliver results for the people we serve: Canadians.



The Honourable Chrystia Freeland, PC, MP



MESSAGE FROM THE MINISTER'S ADVISORY PANEL

It was a privilege to serve on the Minister's Advisory Panel for the Defence Policy Review. We were invited by the Minister of National Defence to provide him with our independent expert advice throughout the process of developing a new defence policy for Canada, and we valued the opportunity to contribute in this important way.

It was clear from the beginning of our work that the task of crafting a new defence policy would be challenging for the Department of National Defence and the Canadian Armed Forces, particularly in light of the profound changes in the international and domestic security environments since the last Canadian defence policy was articulated in 2008. In this regard, we agree with the underlying assessment in the new policy that, going forward, the Canadian Armed Forces will be operating in a global security environment defined by complexity, unpredictability and instability.

Throughout the policy review process, we enjoyed unfettered access to the Minister of National Defence and the senior leadership of the Department of National Defence and the Canadian Armed Forces, and we were given full opportunity to express our views. We received detailed briefings on all major strategic issues facing the institution, and we met with the senior leaders of the federal departments and agencies that work in partnership with our military at home and abroad. We also participated in expert roundtables across Canada, and consulted with key allies and partner organizations including NORAD, NATO, and the United Nations. The inputs we received throughout were comprehensive, insightful and strategically focused.

We were equally impressed by the quality and thoughtfulness of the hundreds of papers submitted by experts and interested Canadians, and by the initiative of defence- and security-focused institutes and associations to organize specific events concentrated on Canada's new defence policy. We found many recurring policy-relevant themes, enormous support for the women and men of the Canadian Armed Forces, and strong support among Canadians for a modernized military force capable of meeting domestic, continental and international defence and security challenges well into the future. This policy is aligned with that perspective.

We commend the depth and quality of the analysis that underpins *Strong, Secure, Engaged*, the frank discussion of areas requiring attention, and the effort to share as much information as possible with Canadians about current and future contributions and capabilities of the Canadian Armed Forces – at home, in North America and internationally. By way of example, we note that the policy gives significant attention to critical emerging areas such as the cyber and space domains, the shifts affecting Arctic security, the influence of non-state actors, and the changing nature of peace operations. In addition, it fully reflects Canadian values when it comes to the challenges to the international humanitarian law governing armed conflict and the uncharted legal territory surrounding the use of autonomous vehicles and cyber threats. At the same time, it recognizes the dynamic changes in the social environment and the urgent need to address issues affecting the recruitment, training, retention, health and wellness of Regular and Reserve Force personnel, as well as support to military families. It also acknowledges the importance of post-military life care and services for all Canadian Armed Forces Veterans.

Overall, we were impressed by the professionalism and rigour of the methodology applied to the development of the new defence policy, and we have every confidence in the solid foundation upon which it is built and the credibility of its capability planning and costing frameworks. Importantly, this policy is supported by long-term funding commitments appropriate for its implementation.

In closing, we would like to acknowledge the unwavering efforts of the Minister of National Defence and the entire Defence team in the development of this new defence policy over the last year. The breadth and depth of the review, including consultation with the public, Parliamentarians and our key allies, has significantly enhanced the outcome and credibility of the process, and resulted in a world-class new defence policy for Canada.

The Minister's Advisory Panel



A handwritten signature in black ink.

The Honourable Louise Arbour, former Justice of the Supreme Court of Canada and a member of the Advisory Board of the Coalition for the International Criminal Court.



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General (Retired) Raymond R. Henault, former Chief of the Defence Staff, and past Chairman of the NATO Military Committee.



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The Honourable Bill Graham, former Minister of Foreign Affairs, and former Minister of National Defence.



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Margaret Purdy, former Deputy Secretary to the Cabinet (Security and Intelligence) in the Privy Council Office, and former Associate Deputy Minister of National Defence.



EXECUTIVE SUMMARY

Strong, Secure, Engaged presents a new vision and approach to defence by the Government of Canada.

This policy is deliberately ambitious and focuses, first and foremost, on the heart of the Canadian Armed Forces – the brave women and men who wear the uniform. Canada cannot meet its defence needs at home and abroad without the dedicated, motivated and highly skilled people who work tirelessly to defend Canada and promote Canadian values and interests abroad.

This new defence policy provides unprecedented support to our people and their families. We ask a great deal of our people, from deploying on peace operations to responding to humanitarian crises.

The first step in ensuring that our women and men in uniform are prepared and equipped to succeed on operations, and that they are fully supported from recruitment through retirement and beyond, is to give them the resources they need to do their job.

This is the most rigorously costed Canadian defence policy ever developed. It is transparent and fully funded. To meet Canada's defence needs at home and abroad, the Government will grow defence spending over the next 10 years from \$18.9 billion in 2016-17 to **\$32.7 billion** in 2026-27.

The long-term funding commitment that underpins this policy will provide the Canadian Armed Forces with the force size and equipment required to achieve excellence across the full spectrum of military operations, from humanitarian assistance and disaster relief, to peacekeeping, to combat.

This policy includes long-term investments to enhance the Canadian Armed Forces' capabilities and capacity.

Because of the sacrifices that our military personnel make every day, Canada remains among the safest and most secure countries in the world. However, the international landscape is shifting under tremendous pressures, and the current security environment presents a variety of threats, many that transcend national borders.

In the context of this complex, unpredictable security environment, this policy provides a bold new vision and approach to defend Canada and contribute to a more peaceful world.

Strong, Secure, Engaged offers clear direction on Canadian defence priorities over a 20-year horizon. It increases the size of the Canadian Armed Forces, affirms Canada's unwavering commitment to its long-standing alliances and partnerships, and provides vital new investments to ensure our women and men in uniform have the modern tools they need to succeed in – and return home safely from – operations. This policy transforms how we care for Canada's military members and their families, from the time of recruitment to retirement and beyond. We believe this is critical to Canada's security.



WELL-SUPPORTED, DIVERSE, RESILIENT PEOPLE AND FAMILIES

We have placed an unprecedented focus on ensuring our people and their families are well-supported, diverse and resilient – physically, psychologically and socially. This starts from the moment military members join the Canadian Armed Forces, continues throughout their careers, and extends to that crucial time of transition when members step out of the uniform. Offering steadfast support to our people not only builds a strong and agile defence organization, but also acknowledges the sacred obligation the Government of Canada has to our military personnel, Veterans, and their families. Military families make an incredible contribution to the operational effectiveness of the Forces – they are the strength behind the uniform.

Tax Relief for Deployed International Operations

Canadians know that when our women and men in uniform deploy, they, and their families, make great sacrifices on behalf of their country. With this in mind, in order to ensure that Canadian Armed Forces members are treated equally on deployment, all troops deployed on any named international operations¹ will be exempted from paying federal income tax on their salary to the level of Lieutenant-Colonel.² This is in addition to the allowances awarded to compensate for hardship and risk.



1 The Chief of the Defence Staff is the authority to designate named operations.

2 This measure, which also applies to police, will be retroactive to January 1, 2017.

The change requires an amendment be made to the *Income Tax Act*. Notice of this intent has already been given.

Diversity and Inclusion

To support the women and men of the Canadian Armed Forces, we will substantially improve recruitment, retention, and training of personnel. We will better forecast occupational requirements and engage in more targeted recruiting, including capitalizing on the unique talents and skill-sets of Canada's diverse population. The Canadian Armed Forces will increase the proportion of women in the military by 1 percent annually, to move from the current 15 percent to 25 percent representation by 2026.

\$144.8 million to Support Military Family Resource Centres

We will ensure that military members and their families are well supported, from the moment they join, throughout their careers, and as they transition out of the military. We are committed to providing more flexible, tailored benefits and support that are personalized to the unique circumstances and needs of each member throughout this journey. This includes the implementation of specific initiatives to help minimize the disruptions associated with frequent relocation.

\$198.2 million for new Total Health and Wellness Strategy

We will favour a more comprehensive approach to care – known as “Total Health and Wellness” – and will consider psychosocial well-being in the workplace, the physical environment, and the personal health of members (including physical, mental, spiritual, and familial).

Reinvention of Canadian Armed Forces Transition

We will transform the way the Canadian Armed Forces supports the transition of personnel, whether returning to active duty or transitioning seamlessly to post-military life and the services of Veterans Affairs Canada. And, we will create a new Canadian Armed Forces Transition Group that represents a fundamental reinvention of the way transition is managed. This Group – composed of 1,200 personnel, including specialized staff and holding positions for ill and injured – will work in collaboration with Veterans Affairs Canada to provide our people with the individualized care they need and deserve.



DEFENCE FUNDING AND CAPABILITY INVESTMENT

To meet Canada's defence needs at home and abroad, the Government will grow annual defence spending over the next 10 years from \$17.1 billion in 2016-17 to \$24.6 billion in 2026-27 on an *accrual basis*. This translates to a rise in annual defence spending on a *cash basis* from \$18.9 billion in 2016-17 to **\$32.7 billion** in 2026-27.

Increase defence budget to \$32.7 billion by 2026-27

This level of funding is affordable, achievable, and has been informed by a rigorous, evidence-based analysis of Canada's defence needs and the resources required to effectively deliver upon them over a 20-year horizon.

To deliver on the Government's commitment to transparency, results, and accountability, we will publish the next Defence Investment Plan publicly.

Long-term Capability Investment

These investments will allow long-term investment in Canadian Armed Forces capabilities. Funding will be provided to the Royal Canadian Navy (RCN) to acquire the full complement of 15 Canadian Surface Combatant ships required to replace its existing frigates and retired destroyers – one of the largest acquisitions in Canadian shipbuilding history. The Canadian Army (CA) will undergo a recapitalization of much of its land combat capabilities and its aging vehicle fleets, while modernizing its command and control systems. Additionally, it will expand its light forces capability which will allow it to be more agile and effective in complex operational theatres, such as peace operations. The Royal Canadian Air Force (RCAF) will acquire 88 advanced fighter aircraft to enforce



Canada's sovereignty and to meet Canada's North American Aerospace Defense Command (NORAD) and North Atlantic Treaty Organization (NATO) commitments while recapitalizing many of its aircraft fleets such as the CP-140 Aurora anti-submarine warfare and surveillance aircraft. Finally, the Canadian Special Operations Forces Command (CANSOFCOM) will expand its operational capacity and invest in capabilities that enable rapidly deployable and agile Special Operations Forces (SOF) to provide their unique skills both at home and abroad.

71,500 Total Regular Force Size

The Regular Force will grow by 3,500 (to 71,500) military personnel. This growth will enable critical investments in important areas such as space and cyber, intelligence and targeting, and, most importantly, support to the health and welfare of military personnel. These investments will provide the necessary flexibility to enable the Canadian Armed Forces to operate across the spectrum of operations, and leverage new technologies to maintain Canadian Armed Forces interoperability with allies and an operational advantage over potential adversaries.

NEW VISION FOR DEFENCE:

STRONG at home, SECURE in North America, ENGAGED in the world.

Informed by the challenges and opportunities we see in the world around us, this policy defines how the Government of Canada will support and employ the Canadian Armed Forces to defend Canadian interests and contribute to a more secure and peaceful world.

This policy is grounded in a thorough assessment of the global security environment – one that is marked by the shifting balance of power, the changing nature of conflict, and the rapid evolution of technology. Increasingly, threats, such as global terrorism and those in the cyber domain, transcend national borders. These trends undermine the traditional security once provided by Canada's geography. Defending Canada and Canadian interests thus not only demands robust domestic defence but also requires active engagement abroad.

In recognition of this dynamic, Canada's defence policy presents a new strategic vision for defence: *Strong, Secure, Engaged*. This is a vision in which Canada is:

- **Strong at home**, its sovereignty well-defended by a Canadian Armed Forces also ready to assist in times of natural disaster, other emergencies, and search and rescue;
- **Secure in North America**, active in a renewed defence partnership in NORAD and with the United States;
- **Engaged in the world**, with the Canadian Armed Forces doing its part in Canada's contributions to a more stable, peaceful world, including through peace support operations and peacekeeping.

TO SUCCEED IN AN UNPREDICTABLE AND COMPLEX SECURITY ENVIRONMENT, DEFENCE WILL:

- Actively address threats abroad for stability at home;
- Field an agile, well-educated, flexible, diverse, combat-ready military;
- Develop sophisticated awareness of its operating environment to better predict and respond to crises;
- Act as a responsible, value-added partner with NORAD, NATO and Five-Eyes partners;
- Work with the United States to ensure that NORAD is modernized to meet existing and future challenges;
- Balance traditional relationships with the need to engage emerging powers;
- Field advanced capabilities to keep pace with allies and maintain an advantage over potential adversaries;
- Address the threat stemming from terrorism and the actions of violent extremist organizations, including in ungoverned spaces;
- Bolster its ability to respond to increasingly severe natural disasters at home and abroad; and
- Increase presence in the Arctic over the long-term and work cooperatively with Arctic partners.

In order to meet these objectives, Canada needs an agile, multi-purpose, combat-ready military, operated by highly trained, well-equipped women and men, secure in the knowledge that they have the full support of their government and their fellow Canadians.



A NEW APPROACH TO DEFENCE: ANTICIPATE. ADAPT. ACT.

To implement our new vision, Canada will also adopt a new approach to defence – one that values the ability to anticipate new challenges, adapt to changing circumstances, and act with exemplary capability and professionalism while supporting peace and security around the world.

ANTICIPATING emerging threats and challenges is fundamental to Canada's security. The Defence team will improve its ability to provide timely information to decision-makers, allowing the Government to identify and understand emerging events and crises, respond appropriately, and minimize the destructive effects of prolonged conflict.

Global satellite communications, including in the Arctic

The Canadian Armed Forces will acquire next generation surveillance aircraft, remotely piloted systems – commonly referred to as “drones” – and space-based surveillance assets to significantly expand its Joint Intelligence, Surveillance, and Reconnaissance capacity. These new platforms will be integrated with existing assets into a networked, joint system-of-systems that will enable the real-time flow of information that is so essential to operational success.

Increased defence intelligence expertise and capacity

This targeted investment in equipment will be accompanied by a significant new investment in the defence intelligence experts who collect, analyze, and disseminate information.

\$102.5 million investment in outreach to external experts

To complement our efforts to better understand the dynamic root causes of conflict – including social and economic factors – and complex geopolitical developments, the Defence team will also launch a revitalized partnership with external experts to capitalize on the extensive expertise of Canadians. This will include new support and funding for scholarship programs for Masters and Post-Doctoral students interested in defence and security, and engagements and events that promote dialogue in the defence community.



ADAPTING to the rapid pace of change in today's fluid security environment is fundamental to operational success. Canada's new approach to defence adopts new technologies and methods, and transforms the way people are managed and employed.

Expanded capabilities in space and cyber

Canada will modernize its space capabilities and will take steps to protect these critical assets against sophisticated threats, while continuing to promote the peaceful use of outer space. We will assume a more assertive posture in the cyber domain by hardening our defences, and by conducting active cyber operations against potential adversaries in the context of government-authorized military missions. Cyber operations will be subject to all applicable domestic law, international law, and proven checks and balances such as rules of engagement, targeting and collateral damage assessments.

Fleet of remotely piloted systems

Given the unique value provided by remotely piloted systems, the Canadian Armed Forces will also invest in an extensive range of new capabilities for the RCN, the CA, and the RCAF. This will include remotely piloted aerial systems. More fundamentally, the core capabilities

of the RCN, CA and RCAF will be placed on a fully modern, robust footing, with a procurement renewal plan buttressed by stable, consistent and transparent funding. This will keep Canada secure and our sailors, soldiers and airwomen and men properly cared for and supported – both during their time in service, and as they transition to post-military life.

\$313 million over five years for the Innovation for Defence Excellence and Security (IDEaS) Program

To promote a longer term culture of innovation, we will launch a new Innovation for Defence Excellence and Security (IDEaS) program to create clusters of defence innovators conducting leading-edge research and development in areas critical to future defence needs. The Defence team will foster a competitive environment and challenge innovators to develop solutions to emerging problems, allowing innovators to approach challenges from their own unique perspectives and remove artificial constraints that stifle creativity. New ideas will be supported through investment in research and flexible procurement arrangements. This will allow the Government to work in partnership with industry to develop and test new products to meet evolving capability needs while also positioning firms to pursue new export opportunities in the global market.

30,000-strong Reserve Force: Full-Time Capability, Part-Time Service

This policy enables the Reserve Force to achieve a full-time capability through part-time service. The size of the Reserve Force will be increased by 1,500 to 30,000. The Reserve Force will receive new operational roles and will become further integrated into the total force. The Canadian Armed Forces will also create a more agile model that supports the transition between full- and part-time service that meets the needs of the member and the institution.

\$225 million to reduce carbon footprint

The Government will make fundamental changes to the business of defence to improve management practices and reduce its greenhouse gas emissions. Canada will invest \$225 million by 2020 in a range of infrastructure projects to reduce its carbon footprint, including demolishing outdated buildings with limited operational value. All new construction and major recapitalization projects will be the Silver Leadership in Energy and Environmental Design (LEED) standard or equivalent. The Department



of National Defence will also transition part of the non-military fleets to hybrid and electric by 2020.

Over 80 percent of defence procurement contracts to be managed by Defence

The Defence team will introduce reforms to streamline the procurement process. These reforms will reduce departmental approval times by 50 percent, increase contracting authority to allow 80 percent of procurement contracts to be managed internally, align innovation in the Canadian defence industry to defence procurement needs, increase transparency with industry and the Canadian public, and strengthen the procurement workforce.

To **ACT** decisively with effective military capability is the ultimate goal of Canada's new approach to defence. The Government of Canada is making a long-term investment in the Canadian Armed Forces – the largest commitment of capital funding and modernization in decades. The Canadian Armed Forces will be prepared to renew Canada's strong commitment to NORAD and NATO, acting in multiple theatres simultaneously, while also bolstering disaster relief, search and rescue, contributions to peace operations and capacity building.

Strong, Secure, Engaged delivers on the Government of Canada's enduring commitment to defend Canada, work with the United States in the shared defence of North America, and be a credible and engaged international actor. This new vision and approach will improve the employment, support, and care of the Canadian Armed Forces and deliver results for all Canadians.

CANADIAN ARMED FORCES CORE MISSIONS

At any given time, the Government of Canada can call upon the Canadian Armed Forces to undertake missions for the protection of Canada and Canadians and the maintenance of international peace and stability. This policy ensures the Canadian Armed Forces will be prepared to:

- Detect, deter and defend against threats to or attacks on Canada;
- Detect, deter and defend against threats to or attacks on North America in partnership with the United States, including through NORAD;
- Lead and/or contribute forces to NATO and coalition efforts to deter and defeat adversaries, including terrorists, to support global stability;
- Lead and/or contribute to international peace operations and stabilization missions with the United Nations, NATO and other multilateral partners;
- Engage in capacity building to support the security of other nations and their ability to contribute to security abroad;
- Provide assistance to civil authorities and law enforcement, including counter-terrorism, in support of national security and the security of Canadians abroad;
- Provide assistance to civil authorities and non-governmental partners in responding to international and domestic disasters or major emergencies; and
- Conduct search and rescue operations.

CONCURRENT OPERATIONS

This policy ensures the Canadian Armed Forces will be prepared to simultaneously:

- Defend Canada, including responding concurrently to multiple domestic emergencies in support of civilian authorities;
- Meet its NORAD obligations, with new capacity in some areas;
- Meet commitments to NATO Allies under Article 5 of the North Atlantic Treaty;
- Contribute to international peace and stability through:
 - Two sustained deployments of ~500-1500 personnel, including one as a lead nation;
 - One time-limited deployment of ~500-1500 personnel (6-9 months duration);
 - Two sustained deployments of ~100-500 personnel;
 - Two time-limited deployments (6-9 months) of ~100-500 personnel;
 - One Disaster Assistance Response Team (DART) deployment, with scaleable additional support; and
 - One Non-Combatant Evacuation Operation, with scaleable additional support.

The process that culminated in this document began with the most comprehensive public consultations ever undertaken by the Department of National Defence and the Canadian Armed Forces. The Canadian public, defence experts, Parliamentarians, and our allies and partners around the world made substantive contributions. Canadians submitted more than 20,000 entries into an online consultation portal, and defence experts and stakeholders participated in nine roundtable events, including discussions dedicated to industry and innovation, gender perspectives, and indigenous affairs. Parliamentary committees in both the House of Commons and Senate conducted insightful studies and Parliamentarians from all parties held town hall meetings with Canadians across the country. Canadian defence officials also engaged counterparts around the world to exchange best practices. Thank you for your contributions.

This defence policy is informed by what we heard.





1 WELL-SUPPORTED, DIVERSE, RESILIENT PEOPLE AND FAMILIES

People are at the core of everything the Canadian Armed Forces does to deliver on its mandate. As we look to the future, we will also refocus our efforts on ensuring the entire Defence team has the care, services and support it requires. Doing so will be central to attracting and retaining the people we need to keep Canada strong, secure, and engaged in the world. Investing in our people is the single most important commitment we can make.

The Defence team is composed of Canadian Armed Forces members and defence civilians of the Department of National Defence. This integrated, civilian-military team works to deliver Defence objectives. The Canadian Armed Forces executes operations at home and abroad to defend Canada and Canadian interests, while defence civilians perform a number of critical enabling functions including intelligence, equipment procurement and maintenance, policy, communications support, infrastructure services, finance, human resources, information technology and scientific research and development. In order to meet the high ambition set out in this policy, the Canadian Armed Forces will increase its ranks by 3,500 Regular Force (to 71,500 total) and 1,500 Reserve Force members (to 30,000 total) and the Department of National Defence will hire an additional 1,150 defence civilians to support military operations in areas such as intelligence and procurement.

Some of the new initiatives to support our personnel in this policy, such as mental health initiatives and promoting a culture of healthy, respectful workplace behaviour, apply to the entire team, while others such as the foundational transformation of transition support are unique to our military members.

Military service is extremely rewarding, and military members and their families become stronger through the unique challenges and opportunities they face in their work. They become more resilient, discover and strengthen

PROFESSION OF ARMS

The profession of arms in Canada is composed of military members dedicated to the defence of Canada and its interests, as directed by the Government of Canada.

The profession of arms is distinguished by the concept of service before self, and the acceptance of the concept of unlimited liability.

Its members possess a systematic and specialized body of military knowledge and skills acquired through education, training and experience, and they apply this expertise competently and objectively in the accomplishment of their missions.

Members of the Canadian profession of arms share a set of core values and beliefs found in the military ethos that guides them in the performance of their duty and allows a special relationship of trust to be maintained with Canadian society.

their best attributes, and live meaningful, fulfilled lives, secure in the knowledge that they are serving their country, and that they are appreciated and will be taken care of throughout their service.

Military service is also inherently challenging. On operations, the potential for serious physical and mental injuries is a reality. Prolonged absence from loved ones can put strain on families and relationships. The Canadian Armed Forces must deliver on its responsibility to care and support our people when they encounter these challenges.

Delivering on our commitment to our people and their families is a sacred obligation and requires a comprehensive suite of initiatives that cover all aspects of how we recruit, lead, train and care for sailors, soldiers, airwomen and men, as well as all those who support them. As Canada

and Canadians change, so too must our approach to our people. To ensure they and their families thrive, we will continue to incorporate progressive best practices into our approach. Throughout, our actions must be underpinned by a sense of compassion and responsibility towards the women and men who wear the uniform, and their loved ones.

DEFENCE CIVILIANS

Defence civilians face different demands than many of their public service counterparts, and Defence is committed to meeting their needs accordingly.

Working at the Department of National Defence involves weighty decisions that can impact the lives of others, placing stress on employees that is unique across the public service. Defence civilians also form close bonds with their military co-workers and can be deeply affected by tragic losses associated with military operations.

Increasingly, defence civilians also have a role in supporting operations. Policy advisors and tradespeople deploy alongside the Canadian Armed Forces in expeditionary operations, facing similar challenges associated with prolonged absences from family and the stresses of high-tempo military operations in dangerous locations.



RECRUITMENT, TRAINING AND RETENTION

The operational success of the Canadian Armed Forces begins with a robust recruiting system that engages and attracts the best and brightest, communicates the unique opportunities and benefits of military service, and efficiently and effectively selects and enrolls new recruits. **The current system is too slow to compete in Canada's highly competitive labour market and does not effectively communicate the exciting and fulfilling employment opportunities offered by military service.** The Canadian Armed Forces offers more than 100 career options, many of which are unique to the military, and provides unparalleled professional and personal development opportunities.

The military's personnel system must be more agile and responsible. It must be able to maintain a skilled force across a broad range of tasks while meeting requirements in critical occupations facing shortages, particularly those focused on caring for our personnel such as medical officers, dentists, pharmacists, and social workers. The Canadian Armed Forces must also attract Canadians with the aptitudes and skill-sets required to succeed in highly technical domains such as space and cyberspace and to operate and maintain increasingly sophisticated equipment, including remotely piloted systems.

Most importantly, the Canadian Armed Forces must reflect the diversity of the country we defend. **We need a military that looks like Canada.** In particular, we are

PROGRAMS FOR INDIGENOUS CANADIANS

The Canadian Armed Forces has a number of unique programs to provide Indigenous Peoples with an opportunity to learn about an exciting career with the military. Whether participants decide to join or not, these programs offer interesting opportunities to gain skills and knowledge about the Canadian Armed Forces.

Aboriginal Leadership Opportunities Year: Provides a one-year educational and leadership experience through the Royal Military College (RMC) of Canada. During the program, participants are enrolled as Officer Cadets and receive free tuition and books. Participants have the option to continue at RMC in a degree program with the Forces.

Bold Eagle, Raven, Black Bear: These three summer training programs combine military lifestyle with cultural awareness to give a six-week taste of military training with the option – but no commitment – to join the Canadian Armed Forces. Training is based on the Army Reserve Basic military qualification and covers topics such as weapons handling, navigation, first-aid, drill and survival skills. All three programs begin with a Culture Camp taught by Elders of different First Nations and Indigenous groups, to ease the transition from civilian to military lifestyle and to ground the training in common spiritual beliefs.

Canadian Armed Forces Aboriginal Entry Program: This special three-week program allows hands-on experience with military training, careers, and lifestyle with no obligation to join the Forces. Participants receive a stipend and a certificate of military achievement for completing the program. Transport, accommodation, food, clothing and equipment are provided for the duration of the course while participants learn about the long and proud history of Indigenous Canadians in the military and take part in exercises similar to basic training.

committed to attracting, recruiting and retaining more women in the Canadian Armed Forces across all ranks and promoting women into senior leadership positions. The Canadian Armed Forces is committed to gender equality and providing a work environment where women are welcomed, supported and respected.

Once recruited, the Canadian Armed Forces needs to follow through with modern, world-class training that will put new recruits on a solid foundation to succeed. This will require adapting training to meet the highly technical requirements of modern militaries, and the Canadian Armed Forces will also need to demonstrate to potential recruits that the military can offer competitive training and technical certifications on par with the standards of industry and the private sector. This includes maintaining the long tradition of providing the complete range of military education through proud institutions such as the Royal Military College of Canada, renewed Collège militaire royal in St-Jean, and the Canadian Forces College.

It is imperative that we protect our investment in the expertise and knowledge of our people. This policy includes a number of initiatives designed to help the Canadian Armed Forces retain the talented people it recruits.

The Canadian Armed Forces will keep remuneration and benefits of Regular and Reserve personnel under constant review, to ensure that military personnel receive fair compensation for their service to Canada. The Canadian Armed Forces' competitive compensation package goes



TAX RELIEF ON DEPLOYED OPERATIONS:

Currently, the tax relief benefit for military personnel on deployed operations is applied inconsistently. This benefit is meant to acknowledge the considerable sacrifices Canadian Armed Forces members and their families make in defence of Canada and its values, when deployed internationally. A more consistent application of this benefit will improve morale and recognize the burdens taken on by military members and their families in service of our country.

beyond an adequate salary and includes a wide range of benefits, recognition, care and support throughout military members' careers. Canadians know that when our women and men in uniform deploy, they, and their families, make great sacrifices on their behalf. From the moment they put on the uniform, members of the Canadian Armed Forces take on unlimited liability. In particular, when the Government of Canada calls upon members of the Canadian Armed Forces to deploy anywhere in the world, it is their duty to go. With this in mind, in order to ensure that Canadian Armed Forces members are treated equally on deployment, **all troops deployed on all named international operations³ will no longer pay federal income tax on their salary up to the level of Lieutenant-Colonel.⁴** This change in policy will not affect the assessment and awarding of existing hardship and risk allowances earned by Canadian Armed Forces personnel deployed abroad.

Furthermore, the Canadian Armed Forces will explore how to best enhance the flexibility of military careers. This includes making it easier to transition between full- and part-time military service in order to retain valuable military skills and accommodate changing career paths.

The Canadian Armed Forces will also introduce new measures that allow some military members who no longer meet universality of service – that is, the require-



ment that all Canadian Armed Forces personnel be fit for deployment – due to illness or injury incurred while serving in the military to continue to serve on a case-by-case basis. This will help retain valuable knowledge and skills in the Canadian Armed Forces to meet specific requirements.

In short, to be highly competitive in the labour market the Canadian Armed Forces will become more personalized in its administrative and leadership approach, and provide the career options, satisfaction, and support necessary for our people and their families to succeed.

NEW INITIATIVES

To ensure the effective recruitment, training and retention of the future work force, the Defence team will:

1. Reduce significantly the time to enroll in the Canadian Armed Forces by reforming all aspects of military recruiting.
2. Implement a recruitment campaign to promote the unique full- and part-time career opportunities offered by the Canadian Armed Forces, as well as to support key recruitment priorities, including hiring more women, increasing diversity, addressing priority occupations, and the requirements of the Reserve Force.
3. Restore the Collège militaire royal in St-Jean as a full degree-granting institution to help prepare the next generation of Canadian Armed Forces leaders.
4. Increase the capacity of the Canadian Armed Forces Leadership and Recruit School to accommodate the increased number of recruits associated with a larger force size.

5. Develop and implement a comprehensive Canadian Armed Forces Retention Strategy to keep our talented people in uniform with a welcoming and healthy work environment.
6. Undertake a comprehensive review of conditions of service and career paths to allow much more personalized career choices and flexibility.
7. Modernize the Canadian Armed Forces Honours and Awards system to ensure military members' service to Canada is recognized in a more timely and appropriate manner.
8. Implement the first-ever, integrated strategy for human resources to balance the optimal assignment of tasks between the military, defence civilians and the private sector.
9. Provide tax-free salary for all Canadian Armed Forces members deployed on all named international operations, up to the maximum rate of pay applied to a Lieutenant-Colonel. This would not impact hardship and risk pay or operational allowances regulated by the Military Foreign Service Instructions (MFSI), which will continue. This initiative is retroactive to January 2017.

³ The Chief of the Defence Staff is the authority to designate named operations.

⁴ This measure, which also applies to police, will be retroactive to January 1, 2017. The change requires an amendment be made to the *Income Tax Act*. Notice of this intent has already been given.

LEVERAGING CANADA'S DIVERSITY

The Canadian Armed Forces is committed to demonstrating leadership in reflecting Canadian ideals of diversity, respect and inclusion, including striving for gender equality and building a workforce that leverages the diversity of Canadian society. Canada's unique, diverse and multi-cultural population is one of its greatest strengths. While positive steps have been made towards greater diversity, inclusion and gender equality, we can do much more to reflect and harness the strength and diversity of the people we serve, in both military and civilian ranks.

We are fully committed to implementing our new comprehensive Diversity Strategy and Action Plan, which will promote an institution-wide culture that embraces diversity and inclusion. This includes reinforcing diversity in the identity of the Canadian Armed Forces and our doctrine, modernizing career management and all policies to support diversity and inclusion, and conducting targeted research to better understand diversity within the Department of National Defence.

Embracing diversity will enhance military operational effectiveness by drawing on all of the strengths of Canada's population. Building a Defence team composed of people with new perspectives and a broader range of cultural, linguistic, gender, age, and other unique attributes will contribute directly to efforts to develop a deeper understanding of our increasingly complex world, and to respond effectively to the challenges it presents.

Diversity and inclusion initiatives also support many of our objectives for personnel, including providing a positive work place and supporting total health and well-being.



WOMEN IN THE CANADIAN ARMED FORCES:

Currently, 15 percent of Canadian Armed Forces members are women. The NATO average for women in the military is 11 percent. The Canadian Armed Forces is committed to further increasing the representation of women in the military by 1 percent annually towards a goal of 25 percent in 10 years. This will not only contribute to positive Canadian Armed Forces culture change, but will also increase overall operational effectiveness.

NEW INITIATIVES

To fully leverage Canada's diversity, the Defence team will:

10. Promote diversity and inclusion as a core institutional value across the Defence team.
11. Appoint a Diversity Champion who will oversee the implementation of all aspects of the Diversity Strategy and Action plan including instituting mandatory diversity training across all phases of professional development.
12. Integrate Gender-Based Analysis Plus (GBA+) in all defence activities across the Canadian Armed Forces and the Department of National Defence, from the design and implementation of programs and services that support our personnel, to equipment procurement and operational planning.
13. Place a new focus on recruiting and retaining under-represented populations within the Canadian Armed Forces, including, but not limited to, women, Indigenous peoples, and members of visible minorities.
14. Aspire to be a leader in gender balance in the military by increasing the representation of women by 1 percent annually over the next 10 years to reach 25 percent of the overall force.



GBA+ is an analytical tool used to assess the potential impacts of policies, programs, services, and other initiatives on diverse groups of people, taking into account gender and a range of other identity factors. GBA+ is a critical tool in the decision-making process, and recognized as a key competency in support of the development of effective programs and policies for Canadians. It provides federal officials with the means to continually improve their work and attain better results for Canadians by being more responsive to specific needs and circumstances.

The Defence team is fully committed to using GBA+ in the development and execution of defence operations, policies and programs, and used GBA+ as an integral component of the analysis for the development of this new defence policy.

First and foremost, the Defence team will apply GBA+ analysis to the full range of programs and services that recruit, support and care for Canadian Armed Forces personnel. This will be critical to ensure that the Defence team can meet the needs of its diverse and multicultural workforce across Canada.

Training and education are at the core of Defence team's commitment to GBA+ as a means to advance gender equality in Canada. New programs and training are being instituted at all levels of Defence to ensure these important tools and knowledge are incorporated on a daily basis.

The Defence team will require members to undertake GBA+ training and all military personnel policies will be examined through a GBA+ lens and updated as needed.

The Defence team also recognizes that conflict, natural disasters, and humanitarian crises affect people differently. Accordingly, the Defence team is integrating GBA+ into the planning and execution of operations as a means to both improve operational effectiveness and meet the needs of those who are disproportionately affected by conflict and crisis. This includes the establishment of military gender advisor positions who will advise on gender in operational planning and doctrine, and modeling the value of diversity, inclusion and gender equality when working with other nations. Working to implement and advance the Women, Peace and Security agenda laid out in the United Nations Security Council's landmark Resolution 1325 and subsequent related resolutions, will be an important aspect of Canada's international military engagement, including our renewed commitment to United Nations peacekeeping.



TOTAL HEALTH AND CARE FOR OUR PEOPLE

The Defence team must ensure that the needs of its people – whether military members and their families, or defence civilians – are appropriately met. They are the heart and soul of everything we do.

For the Canadian Armed Forces, this means military members and their families are well-supported from the moment they join, throughout their careers, and as they transition out of the military. This includes keeping the door open to Veterans who want to return to service, or who later need support and assistance. Not only is this important to build a strong and agile defence organization, but the Canadian Armed Forces also has a fundamental moral obligation to care for those who have accepted unlimited liability in the service of their fellow citizens.

We are committed to providing more flexible, tailored service and support, personalized to the unique circumstances and needs of each member. The needs of members and their families will evolve throughout their careers and so too must the services and support on which they rely. To achieve success, the Government of Canada must be less risk averse in providing care and much more transparent and open in its communication. We will shed one-size fits all solutions in favour of more people-centred, compassionate, dependable and comprehensive services.

This new approach will also favour a more all-inclusive, comprehensive approach to care – known as Total Health and Wellness. This approach considers psychological well-being in the workplace, the physical work environment, and personal health, including physical, mental, spiritual

and familial aspects of members' lives. The well-being of our Canadian Armed Forces' current and former members and their families relies on health in all of these areas.

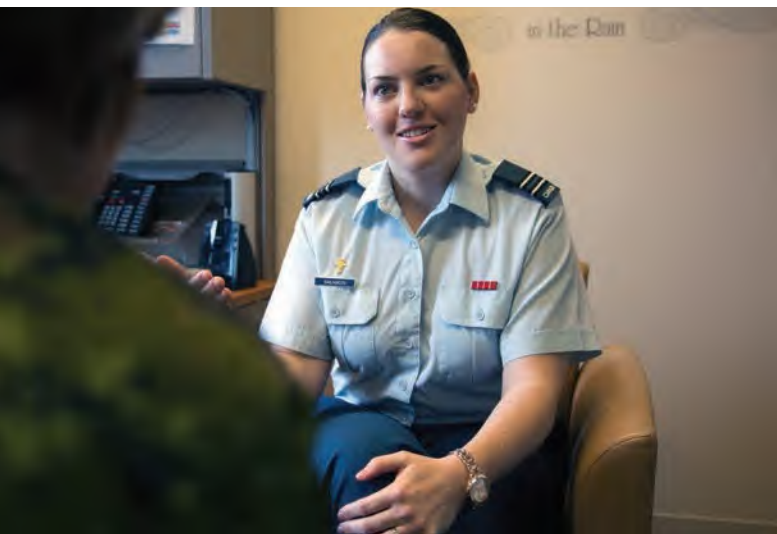
To provide appropriate support, care and services to ensure the total health and well-being of Canadian Armed Forces personnel, we will invest **\$198.2 million** over the course of this policy to implement the Total Health and Wellness Strategy. This strategy will expand wellness beyond the traditional health care model to include promotion, prevention, treatment and support, and provide a greater range of health and wellness services and programs. Of note, the strategy includes key initiatives to:

- support health and resilience;
- promote a culture of healthy behaviour; and
- support military families.

The Canadian Armed Forces will also continue to provide a full spectrum of safe, high-quality physical health services through a well-governed health care system that meets or exceeds Canadian standards, both in garrison and during operations.

The mental health and workplace well-being of defence civilians is also critical to the success of the Canadian Armed Forces, given the important roles they play as part of an integrated civilian-military Defence team. Civilians face challenges associated with being defence professionals not present in the rest of the public service and we are committed to providing them with a healthy, supportive workplace and the mental health and other support they require.





SUPPORTING HEALTH AND RESILIENCE

Serving in the Canadian Armed Forces is extremely rewarding but military service places unique demands and stresses on individual members - stresses that can have a profound impact on all aspects of health, from the psychological trauma that can be experienced on deployment to the strain that frequent relocation puts on individuals, families, personal relationships, finances and social networks.

Compared to the Canadian population, military personnel experience higher rates of depression and post-traumatic stress disorder. Suicide rates over recent years have also shown a worrying upward trend. Suicide usually includes an element of mental illness and other stressors that can be aggravated by the rigours of military service, particularly if appropriate supports and services are not sought or in place.

Mental health and suicide are complex issues that have no easy solutions. However, we are committed to continually improving our approach and providing the best possible care and support. Mental health is a critical aspect of overall health. This includes employing progressive, evidence-based practices and technology and forming cooperative relationships with world-class leaders in mental health to continue to improve care and deepen our knowledge and expertise in this important area. In particular, we must and will do a better job in providing adequate care and treatment for personnel suffering from critical stress response injuries, running the gamut from mild battle stress to Post-Traumatic Stress Disorder (PTSD).

Canadian Armed Forces members also face challenges with Operational Stress Injuries (OSI). This term is used

to describe any persistent psychological difficulty resulting from operational duties performed in the Canadian Armed Forces and can include a wide range of problems such as anxiety disorders, depression and PTSD, as well as other conditions that may be less severe but still interfere with daily life. OSIs are complex psychiatric conditions, many of which are not well understood. Recognizing this, the Canadian Armed Forces provides a wide range of programs and services focused on the prevention and treatment of mental health issues, including seven specialized operational trauma and stress support centres across Canada that provide evidence-based medical treatment for OSIs.

The Canadian Armed Forces has come a long way in changing internal attitudes to these injuries, removing the stigma and career stress that once dissuaded some from reporting them. But much more work needs to be done. That includes caring for those currently serving, and those who have served in the past and are now struggling to cope with the demands of civilian life.

Effective support and services will help the Canadian Armed Forces be more resilient in the face of challenges and enhance operational readiness. We are committed to modernizing the Canadian Armed Forces Health System, removing barriers to care including eliminating the stigma associated with getting help, and ensuring all necessary tools are in place to identify and provide appropriate care to those who need it.

NEW INITIATIVES

To improve the resilience and health of its members, the Canadian Armed Forces will:

15. Augment the Canadian Armed Forces Health System to ensure it meets the unique needs of our personnel with efficient and effective care, anywhere they serve in Canada or abroad. This includes growing the Medical Services Branch by 200 personnel.
16. Implement a joint National Defence and Veterans Affairs Suicide Prevention Strategy that hires additional mental health professionals and implements a joint framework focused on preventing suicide across the entire military and Veteran community.
17. Remove barriers to care, including creating an environment free from stigma where military members are encouraged to raise health concerns of any nature and seek appropriate help when they need it.

PROMOTING A CULTURE OF LEADERSHIP, RESPECT AND HONOUR

The Canadian Armed Forces is fully committed to providing a workplace free from harassment and discrimination. In addition to a range of gender, diversity and inclusion initiatives and the Total Health and Wellness Strategy, we will continue to fully implement the recommendations of the Deschamps Report on sexual misconduct in the military, in addition to continuing defence ethics and leadership programs, and other initiatives related to inclusivity, diversity and respect.

The progress achieved to date in meeting the recommendations of the Deschamps Report is a clear demonstration of the Canadian Armed Forces' commitment to eliminating and preventing harmful and inappropriate sexual behaviour and sexual offences within our ranks.

ENHANCED INVESTIGATION AND PROSECUTION OF SEXUAL OFFENCES

The Canadian Armed Forces is committed to improving the way it investigates and prosecutes sexual offences and has implemented a number of initiatives towards this end, including:

- the creation of Military Police Sexual Offence Response Teams. Members of these teams receive specialized training in investigating crimes of a sexual nature including the latest forensic and interviewing techniques;
- broader training to Military Police to help meet the needs of victims and survivors while also collecting the necessary evidence;
- measures to ensure that sensitive information collected during investigations is protected from unnecessary disclosure so that victims and survivors have the confidence to come forward;
- new direction from the Director of Military Prosecutions to military prosecutors to help minimize the trauma to victims and survivors during court proceedings and to ensure they are treated with the appropriate sensitivity; and
- ongoing training for military prosecutors to enhance the prosecution of sexual offences in line with leading best practices.

The Canadian Armed Forces is committed to effectively investigating and prosecuting these serious crimes and will continue to explore further initiatives to enhance its ability to support victims and survivors and bring perpetrators to justice.

This began with the unequivocal acknowledgement by senior military leadership that inappropriate sexual behaviour is a serious and unacceptable problem that exists in the Canadian Armed Forces. This policy affirms our commitment to work towards solutions that result in positive and enduring culture change.

Positive culture change requires a commitment to promoting the respect of all members as equal contributors to the Canadian Armed Forces community. Until this culture change is fully realized, the first priority will remain on taking better care of victims and survivors with responsive, individualized support. The Sexual Misconduct Response Centre has been established as the first-ever dedicated independent support centre for Canadian Armed Forces members and provides victims with options to reach out for information and support in a confidential manner. Resources across the Canadian Armed Forces – from health services, to chaplains, to the Ombudsman and senior leadership, as well as military police and the military justice system – have also been enhanced and more improvements are forthcoming.

To ensure that results are achieved, monitoring and measuring mechanisms have been put in place. The Defence team is providing regular updates on its progress in addressing this important issue. Adjustments will be made as necessary to ensure that a positive culture change is achieved.



OPERATION HONOUR: INSTITUTIONALIZED CULTURE CHANGE

In March 2015, Justice Marie Deschamps released the findings of her external review of Canadian Armed Forces policies, procedures, and programs in relation to sexual harassment and sexual assault, including the effectiveness with which these policies are currently being implemented. Her report included 10 recommendations to drive a culture change in the Canadian Armed Forces and address the situation. These recommendations were accepted in full by the Chief of the Defence Staff and their implementation has been institutionalized across the Defence team under Operation HONOUR.

Operation HONOUR is the Canadian Armed Forces mission to eliminate harmful and inappropriate sexual behaviour in the Canadian military that is based on the principles that:

- every woman and man who serves their country deserves to be treated with dignity and respect – anything less is simply unacceptable; and
- any attitudes or behaviours that undermine the camaraderie, cohesion and confidence of serving members threatens the Canadian Armed Forces' long-term operational success.

Operation HONOUR seeks to effect a positive institutional culture change in the Canadian Armed Forces through four lines of effort:

- *understanding* the issue of harmful and inappropriate sexual behaviour;
- *responding* more decisively to incidents;
- *supporting* victims more effectively; and
- *preventing* incidents from occurring.



NEW INITIATIVES

To eliminate harmful behaviours and ensure a work environment free from harassment and discrimination, the Defence team will:

18. Complete the full implementation of the 10 recommendations of the Deschamps Report through Operation HONOUR.
19. Provide a full range of victim and survivor support services to Canadian Armed Forces members.
20. Deal with harassment complaints in a clear and timely manner by simplifying formal harassment complaint procedures.
21. Be open and transparent with Canadians and members of the Canadian Armed Forces in communicating progress on this important issue.

SUPPORTING MILITARY FAMILIES

Military families are the strength behind the uniform. Family members of Canadian Armed Forces personnel share in the stresses and strains resulting from deployments of their loved ones into dangerous operational duty, and the prolonged separations they entail. They also make important sacrifices and face challenges associated with frequent relocation such as finding new family health care providers, re-establishing childcare, moving children between schools and education systems, professional licensing, and dealing with inconveniences such as changing drivers' and vehicles licences when moving between provinces. They must also deal with the financial instability resulting from frequent moves, whether it be the loss of employment, different tax systems or changes to post-living differentials.

Families are the major source of support and strength to Canadian Armed Forces members and integral to our military success. Military families make an incredible contribution to the operational effectiveness of the Forces and must have access to the support and services they deserve, to cope with the unique challenges and stresses of military family life. The implementation of a Comprehensive Military Family Plan will go a long way to minimizing the disruptions associated with frequent relocation.

The Canadian Armed Forces is committed to enhancing the support we provide to the families of military members, including through the front-line service provided by Military Family Resource Centres.



NEW INITIATIVES

To improve support and services offered for military family members, the Defence team will:

22. Implement teams at Wings and Bases across Canada, in partnership with Military Family Resource Centres, to prevent and respond to gender-based violence.
23. Improve access to psychological services through social workers and referrals to community programs and services.
24. Develop a Comprehensive Military Family Plan to help stabilize family life for Canadian Armed Forces members and their families who frequently have to relocate. This includes:
 - Providing an additional \$6 million per year to modernize Military Family Support Programs, such as Military Family Resource Centres, to provide better support to families when members are deploying or during periods of absence;
 - Establishing relocation expertise to help military families find and access the services they need in a new community; and
 - Working with federal, provincial and private sector partners to improve the coordination of services across provinces to ease the burden of moving.





REINVENTING TRANSITION

Life as a member of the Canadian Armed Forces is a process of continuous transition, from the moment a person steps into a recruitment centre to the day they take off the uniform, and beyond. Through their careers, military members will take on different jobs, get posted to various bases across the country, participate in training exercises, and deploy on operations at home and abroad. Putting service before self – the ethos of the Canadian Armed Forces – involves frequent life changes, which can place significant stress on our members and their families. These stresses are particularly acute for those who suffer illness or injury that prevents them getting back to active duty. That is why, when it comes to the transition out of uniform, we need to work with Veterans Affairs Canada to provide the best possible care and support to our military personnel.

While recruits receive a lot of personalized attention as they train and develop into sailors, soldiers, and airwomen and men, the same approach does not exist for members leaving the military. This defence policy is correcting this not only because it is the right thing to do, but also because caring for our own is critical to ensuring that we can attract and retain Canada's best and brightest.

This policy reinvents the way we approach transition. It ensures that members receive the professional, customized, and personalized support they need as they transition to post-military life. This will ease their adjustment, and help them continue to live productive, meaningful lives.

To deliver dedicated professional and personalized support to all Canadian Armed Forces members, including those in transition, the Canadian Armed Forces will re-establish a Personnel Administration Branch of experts in military human resources management. A new Canadian Armed Forces Transition Group, commanded by a General Officer, will be established. All military personnel will use the services of this group, where the professional staff will ensure that all pre-release and pension administration is completed, and benefits are in place, before the transition to post-military life. This group will also make sure that retired members are aware of and/or enrolled in career transition programs offered by the Defence team and Veterans Affairs Canada as well as third-party service providers, such as vocational rehabilitation, individual career counselling, job search placement, and financial literacy.

All retiring members require transition support, but the needs are most acute for our ill and injured. The Canadian Armed Forces Transition Group will look after ill and injured personnel with the goal of returning them to active duty. For those who cannot continue wearing the uniform, the Transition Group will provide personalized, guided support centred on the unique situation and needs of individual members. This is critical to the well-being of our personnel.

As we work to help those who are leaving military life, we are fully committed to collaborating with Veterans Affairs Canada to close any remaining gaps between the support and services offered by our respective organizations to ensure our members continue to receive the uninterrupted care and attention they need and deserve. Leaving the Canadian Armed Forces is a major life change and can be stressful for members and their loved ones. Working with the members and their families, the professional staff of the Canadian Armed Forces Transition Group will ensure they are ready for the changes ahead of them.



NEW INITIATIVES

To better meet the needs of all retiring personnel, including the ill and injured, the Defence team will:

25. Establish a Personnel Administration Branch of experts in military human resources and personnel administration to focus and improve military human resource services to all Canadian Armed Forces members.
26. Allocate some of the growth in the Medical Services Branch to support transition care.
27. Create a new Canadian Armed Forces Transition Group that provides support to all members to seamlessly transition to post-military life. This Group, commanded by a General Officer and staffed from experts in human resources and personnel administration, will be approximately 1,200 personnel strong and include specialized staff and holding positions for ill and injured who are preparing to return to duty or transition out of the Canadian Armed Forces. The Group will provide a fully engaged, personalized, guided support to transition all Canadian Armed Forces members, with special care and attention being provided to those who are ill or injured, including those with psychological or critical stress injuries.
28. Ensure that all benefits will be in place before a member transitions to post-military life.





2 LONG-TERM INVESTMENTS TO ENHANCE THE CANADIAN ARMED FORCES' CAPABILITIES AND CAPACITY TO SUPPORT PEACE AND SECURITY

The scale of our re-investment in the Canadian Armed Forces is significant. This long-term investment is meant to modernize, renew and restore this vital national institution and provide our women and men in uniform with the modern tools they need to succeed in – and return home safely from – operations.

In their valour, competence, compassion and humanitarianism, this country's sailors, soldiers, and airwomen and men exemplify the best of what it means to be Canadian. They bear the standard for our country abroad, in supporting peace and security, and at home, in times of natural disaster. They shoulder the interlinked burdens of keeping us safe, promoting our values, and helping make the world a better place.

For all these reasons, Canadians want a military that is agile, highly trained, superbly equipped, capable and professional. This policy delivers exactly that. To ensure the Canadian Armed Forces has the people and capabilities it needs to succeed, the Government of Canada is committed to the largest defence modernization effort in decades. This policy contains a comprehensive and funded plan to invest in key emerging domains while simultaneously recapitalizing the core capabilities of the Royal Canadian Navy, the Canadian Army, and the Royal Canadian Air Force.

The Canadian Armed Forces will grow by 3,500 (to 71,500 total) military personnel. This will allow us to expand in important areas such as space and cyber, intelligence and targeting, and support to the health and welfare of military personnel. These investments will provide the necessary flexibility to enable the Canadian Armed Forces to operate across the spectrum of conflict, enable interoperability with Canada's allies, and maintain an operational advantage over the threats of today and tomorrow.

The investments in equipment and materiel necessary to underwrite Canada's future force will match the significant investment in its personnel. The Royal Canadian Navy will acquire 15 Canadian Surface Combatant ships to replace its existing frigates and retired destroyers. This policy now provides the full funding for all 15 ships; this will be one of the largest acquisitions in Canadian shipbuilding history and makes up a core part of the National Shipbuilding Strategy (NSS).

The Canadian Army will undergo a recapitalization of much of its land combat capabilities and its aging vehicle fleets while modernizing its command and control systems. Additionally, it will expand its light forces capability which will allow it to be more adaptable in complex operational theatres.



The Royal Canadian Air Force will acquire 88 future fighter aircraft to enforce Canada's sovereignty and to meet Canada's NORAD and NATO commitments, while recapitalizing many of its existing aircraft fleets such as the CP-140 Aurora anti-submarine warfare and surveillance aircraft.

Finally, the Canadian Special Operations Forces Command will expand its operational capacity and invest in capabilities that enable Canada's rapidly deployable and agile Special Forces to provide their unique skills both at home and abroad. In addition to these key investments, this defence policy identifies a number of capability areas in the Reserve Force which will also be funded.

The Canadian Armed Forces has taken great strides in recent years to improve the overall integration of Canada's military capabilities, as well as the interaction with other government departments, to ensure the security and defence of Canada. The Canadian Armed Forces will leverage the unique characteristics of naval, army, air, and special operations forces and better integrate them to ensure continued Canadian and allied military advantage. The continued integration of Primary Reserve training and equipment with the Regular Force has also contributed substantially to Canadian Armed Forces operations. As our capabilities evolve, the skills inherent in the Reserve Force will produce full-time capabilities through part-time service.

NATIONAL SHIPBUILDING STRATEGY

The National Shipbuilding Strategy is a long-term project to renew Canada's federal fleet of combat and non-combat vessels. Partnerships were formed with two Canadian shipyards to deliver much-needed vessels to the Royal Canadian Navy and the Canadian Coast Guard. The Strategy provides jobs and benefits to Canadians and rebuilds our country's industry.



ROYAL CANADIAN NAVY

Naval forces provide Canada with a responsive and agile means to respond across a wide spectrum of maritime situations, and serve as an instrument of national power on the international stage. Canada possesses a vast maritime estate – it has the world's longest coastline, the second largest continental shelf, and the fifth largest Exclusive Economic Zone in the world. This calls for naval forces that are designed and structured to operate in some of the most extreme ocean conditions. Further, since a large part of Canada's prosperity relies on the maintenance of free and open access to international waters for trade and commerce, Canada requires a Navy that is organized and sized to project power responsively and effectively far from Canada's shores.

This Blue Water Navy requires a balanced mix of platforms, including submarines, surface combatants, support ships and patrol vessels, in sufficient quantities to meet our domestic and international needs. A fleet built around an ability to deploy and sustain two naval task groups, each composed of up to four combatants and a joint support ship, provides Canada with a relevant contribution to any international mission while assuring the ability to monitor our own ocean estate and contribute to the security of North America. The Royal Canadian Navy's ability to establish persistent presence, be self-sustaining at sea, refocus rapidly from one type of mission to another, and interdict threats far from national territory and populated areas represents a vital component of Canada's prosperity, security, and defence.

The Royal Canadian Navy's flexibility, global reach, and staying power, allow it to succeed across a broad mission set: combat operations, rapid provision of humanitarian assistance and disaster relief to those in need, defence diplomacy, and collaborating with other government departments and agencies on a daily basis in support of domestic defence and security.

Underpinning this naval capability will be a continued emphasis on building and maintaining a picture of what is happening in our own waters and increasingly overseas – as a means to anticipate and respond to threats, in cooperation with other government departments and agencies as appropriate, as well as our allies. Armed with better awareness and understanding, the Royal Canadian Navy must be able to adapt to an ever-changing maritime environment. The Maritime Tactical Operations Group (MTOG) boarding team capability is an example of this adaptability – it provides an innovative response to the changing nature of threats associated with interdicting vessels at sea. In addition, as the complexity of naval



operations increases in the modern threat environment, the Navy will continue to pursue interoperability with allied capabilities. This will ensure that Canada's fleet can work seamlessly with allies and is positioned to directly leverage these capabilities, increasing its own effectiveness and bolstering credible joint and allied action.

With new investment, Canada's Navy will be capable of meeting the anticipated defence and security challenges of the coming decades. Principal among the challenges at home is the need to operate in the Arctic, alongside the Canadian Coast Guard, and alongside allied partners.

A NAVAL TASK GROUP

The Naval Task Group is the core Royal Canadian Navy operating concept. Composed of up to four surface combatants and a joint support ship, and supplemented where warranted by a submarine, it brings with it the full breadth of combat capability, force enablers, specialized teams, maritime helicopters, and remotely piloted systems. Configured and crewed to provide its own command and control, a Naval Task Group can lead allied or coalition forces for sustained periods, anywhere in the world.

With the Naval Task Group at its core, the Royal Canadian Navy will be structured to sustain a major international operation, while retaining sufficient combatant capacity for minor operations and/or response to maritime security taskings at home. In addition, the Royal Canadian Navy will have the capacity to maintain a routine presence in Canada's three oceans and contribute to operations in support of North American security, including in the Caribbean.

The fleet size of 15 Canadian Surface Combatants, complemented by two Joint Support Ships, and four Victoria-class submarines provides the necessary fleet mix and capacity to deploy forces responsively, prepare follow-on forces effectively, and conduct maintenance efficiently.

Key to this is the Arctic and Offshore Patrol Ship (AOPS) project, which is part of the National Shipbuilding Strategy and involves the delivery of five to six ice-capable ships to the Royal Canadian Navy. AOPS will provide armed, sea-borne surveillance of Canadian waters, including in the Arctic. They will enforce sovereignty, cooperating with partners, at home and abroad, and will provide the Government of Canada with awareness of activities in Canada's waters.

Beyond Canada's shores, the capability to undertake peace operations, including effectively rendering humanitarian assistance and relieving distress, will be a requirement for the Royal Canadian Navy. Canada's naval forces will also be positioned to contribute meaningfully to joint action ashore and support the sustainment of joint operations from sea, while preserving the ability to defend its own freedom of action through naval combat operations. The multi-purpose nature and versatility of this fleet, both independently and as part of an allied or coalition Task Force, allows Canada to rapidly deploy credible naval forces worldwide, on short notice.

INVESTMENTS IN THE ROYAL CANADIAN NAVY

29. Recapitalize the surface fleet through investments in 15 Canadian Surface Combatants and two Joint Support Ships.
30. Acquire five to six Arctic Offshore Patrol Ships.
31. Operate and modernize the four Victoria-class submarines.
32. Acquire new or enhanced naval intelligence, surveillance, and reconnaissance systems, upgraded armament, and additional systems for current and future platforms allowing for more effective offensive and defensive naval capabilities.
33. Upgrade lightweight torpedoes carried by surface ships, maritime helicopters and maritime patrol aircraft.



CANADIAN ARMY

The Canadian Army is a highly professional force consisting of a fully integrated Regular Force, Army Reserve, Canadian Rangers, and civilian personnel. Canadian soldiers train to maintain readiness and develop their high-end war-fighting skills. Experience shows that highly trained, versatile and well-equipped combat forces can rapidly adapt to humanitarian assistance, disaster relief or peace operations.

The Canadian Army is agile, scalable and responsive, providing the Government with a range of military capabilities on land. The Army can deploy as little as a single individual to perform tasks such as capacity building, and it has the depth to permanently shape the security environment through effective deterrence of threats and ultimately, with a critical mass of troops on the ground, to prevail in the most difficult circumstances – combat with an advanced adversary. The flexibility to support small missions while remaining ready to conduct large operations is made possible by the brigade group structure of the Army. It is only at this level that it is possible

to execute integrated joint operations with the rest of the Canadian Armed Forces, other government departments, NATO and other allies and partner forces, and non-governmental organizations.

The Army's operational effectiveness relies on realistic, challenging and regular training up to the brigade group-level. This ensures that deployed Army formations can succeed in any environment regardless of condition.

To adapt to the changing security environment, the Army's capabilities must allow for efficient and effective communication, command and control; intelligence, surveillance and reconnaissance; manoeuvre; the application of firepower; and sustainment. Maintaining the proper mix of combat capabilities, the ability to operate jointly with the rest of the Canadian military and in concert with key allies and partners is crucial for the Army's success.

Furthermore, each soldier is an integral component in any task-force, able to anticipate conditions on the ground, provide and receive information and intelligence to and from higher levels, and contribute to taking action at the right time and place in order to achieve mission objectives. All of these capabilities must be networked and integrated, starting with the individual systems carried by each soldier.

THE BRIGADE GROUP

The Army trains to fight at the brigade group-level. This is the minimum level at which it is possible to execute joint campaigns while integrating various components, be they from another service, government department, non-governmental organization, or coalition partner. The brigade group consists of approximately 4,800 soldiers, organized in eight major units generally including Artillery, Armour, Infantry, Engineer, and Combat Service Support organizations. Combinations of these units operate together in "battle groups" to provide the joint force with the requisite firepower, mobility, protection, sustainment, and command and control functions to effectively coordinate their employment.

Fundamental to future effectiveness as a combat-ready force, the Canadian Army will recapitalize many core capabilities, such as command, control and communications systems, weapons and soldier night vision systems, and logistic vehicle fleets. The Canadian Army will continue to pursue investment in war-fighting capabilities such as ground-based air defence, bridge and gap crossing equipment, anti-tank guided missile systems, and vehicles to better operate in Canada's north. These investments in the Canadian Army will further improve interoperability with the Royal Canadian Air Force, Royal Canadian Navy, Special Operations Forces, and Canada's allies and partners, while maintaining its operational advantage over potential adversaries.

INVESTMENTS IN THE CANADIAN ARMY

34. Acquire ground-based air defence systems and associated munitions capable of protecting all land-based force elements from enemy airborne weapons.
35. Modernize weapons effects simulation to better prepare soldiers for combat operations.
36. Replace the family of armoured combat support vehicles, which includes command vehicles, ambulances and mobile repair teams.
37. Modernize the fleet of Improvised Explosive Device Detection and Defeat capabilities.
38. Acquire communications, sustainment, and survivability equipment for the Army light forces, including improved light weight radios and soldier equipment.
39. Upgrade the light armoured vehicle fleet to improve mobility and survivability.
40. Modernize logistics vehicles, heavy engineer equipment and light utility vehicles.
41. Improve the Army's ability to operate in remote regions by investing in modernized communications, shelters, power generation, advanced water purification systems, and equipment for austere environments.
42. Modernize land-based command and control, intelligence, surveillance and reconnaissance systems.
43. Acquire all-terrain vehicles, snowmobiles and larger tracked semi-amphibious utility vehicles optimized for use in the Arctic environment.





ROYAL CANADIAN AIR FORCE

The Royal Canadian Air Force is an agile and integrated force whose reach and power is essential to Canadian Armed Forces operations at home and abroad. Given the vastness of Canada's territory, it is vitally important for the Canadian Armed Forces to be able to operate throughout Canada on very short notice – the Air Force makes this possible. This strategic reach is also a critical enabler of Canadian Armed Forces global expeditionary operations, enabling joint action through control of the air, force protection, surveillance and reconnaissance, air mobility, and air attack. As space-based capabilities become ever more important for security and defence, the Royal Canadian Air Force will take on an increasingly important role coordinating and overseeing the defence space program. The Air Force can be task tailored and integrated in a

networked force. Every Royal Canadian Air Force platform, be it piloted, remotely piloted or space-based, also acts as a sensor, ensuring that information and intelligence gets to decision-makers in a timely fashion.

The Royal Canadian Air Force generates space-based and aviation surveillance of Canadian territory and its approaches; maintains 24/7 aerial search and rescue response capabilities; and assists civil authorities in responding to a wide range of challenges and threats, from natural disasters to terrorist attacks. Through NORAD, the Royal Canadian Air Force makes substantial contributions to continental defence, generating the vital capabilities required to detect, deter, and defeat threats to both Canada and North America.

THE ROYAL CANADIAN AIR FORCE FIGHTER REPLACEMENT

In order to counter today's evolving threat environment and remain highly interoperable with its allies and key operational partners, Canada will procure a fighter capability of 88 jets to replace the aging CF-18 fleet.

Military threats across a range of systems such as advanced fighters and anti-access area denial (A2AD) surface-to-air missile systems, in addition to evolving cyber threats, are making the environment within which the Canadian Armed Forces operates more lethal and complex. As such, the Canadian Armed Forces requires a fighter fleet that is capable, upgradeable, resilient and interoperable with our allies and partners to ensure Canada continues to meet its NORAD and NATO commitments in the future. The fighter aircraft fleet is a critical Canadian Armed Forces capability necessary to enforce Canada's sovereignty, enable continental security, and contribute to international peace and stability.

In addition to the quality of the fighter capability required, the Royal Canadian Air Force requires sufficient numbers

of fighter aircraft to ensure control of Canada's vast airspace, while maintaining an ability to simultaneously contribute to international operations, conduct pilot training, and to allow for maintenance and repair. The fleet size of 88 fighter aircraft will provide the necessary number of aircraft to fulfill Canada's commitments, including maintenance and readiness training.

INTERIM FIGHTER CAPABILITY

At the time of publication, the Government of Canada is continuing to explore the potential acquisition of an interim aircraft to supplement the CF-18 fighter aircraft fleet until the completion of the transition to the permanent replacement aircraft (see above).

This interim capacity would reduce the risk associated with relying exclusively on the aging CF-18 fleet and could help mitigate the capability gap so that Canada can generate sufficient mission ready aircraft to meet its domestic and international obligations until the permanent replacement is fully operational.

The Royal Canadian Air Force also plays a large role in all Canadian deployed operations and is in high demand for NATO, United Nations (UN) peacekeeping, and other coalition missions contributing to international peace and security. Therefore, Royal Canadian Air Force space-based and aviation capabilities must be multi-purpose – equally relevant to domestic and international operations, capable of incorporating and adapting to the latest technology, integrated with all of the capabilities in the Canadian Armed Forces, and interoperable with core allies. These missions have often relied heavily on the strategic and tactical air transport capability provided by the C-17 and C-130J fleets.

In addition, conducting operations from its bases in Canada, the Royal Canadian Air Force will be able to operate from prepared or austere airfields anywhere in the world with an Air Task Force composed of a range of aircraft types.

To continue to meet Canada's defence needs, the Royal Canadian Air Force must increase interoperability with its key partners and core allies. It will need to sustain existing capacity and continue to acquire modern aerospace capabilities that have an operational advantage in relation to present and future potential adversaries. Future aerospace capabilities must provide for the seamless integration with partners and sharing of information. The Royal Canadian Air Force must be capable of contributing to and exploiting a system-of-systems approach that now defines most modern military forces.

Moreover, the effectiveness of the Royal Canadian Air Force requires continued investment in professional development and education programs focused on the theory and practical application of aerospace power, training programs and systems of the highest calibre, and an institutional culture placing the highest value on the maintenance of air safety and airworthiness standards. Taken together, this assures the agility and flexibility of the Air Force.



INVESTMENTS IN THE ROYAL CANADIAN AIR FORCE

44. Replace the CF-18 fleet with 88 advanced fighter aircraft to improve Canadian Armed Forces air control and air attack capability.
45. Acquire space capabilities meant to improve situational awareness and targeting, including: replacement of the current RADARSAT system to improve the identification and tracking of threats and improve situational awareness of routine traffic in and through Canadian territory; sensors capable of identifying and tracking debris in space that threatens Canadian and allied space-based systems (surveillance of space); and, space-based systems that will enhance and improve tactical narrow- and wide-band communications globally, including throughout Canada's Arctic region.
46. Acquire new Tactical Integrated Command, Control, and Communications, radio cryptography, and other necessary communications systems.
47. Recapitalize next generation strategic air-to-air tanker-transport capability (CC-150 Polaris replacement).
48. Replace utility transport aircraft (CC-138 Twin Otter replacement).
49. Acquire next generation multi-mission aircraft (CP-140 Aurora maritime patrol aircraft replacement).
50. Invest in medium altitude remotely piloted systems.
51. Modernize short-range air-to-air missiles (fighter aircraft armament).
52. Upgrade air navigation, management, and control systems.
53. Acquire aircrew training systems.
54. Recapitalize or life-extend existing capabilities in advance of the arrival of next generation platforms.
55. Sustain domestic search and rescue capability, to include life extension of existing systems, acquisition of new platforms, and greater integration with internal and external partners.
56. Operationalize the newly acquired Fixed-Wing Search and Rescue aircraft fleet.



CANADIAN SPECIAL OPERATIONS FORCES COMMAND

Special Operations Forces are small, highly skilled, adaptable, multi-purpose forces held at very high readiness levels. Special Operations Forces are employed in situations that pose an imminent threat to national interests, where the use of larger military forces is inappropriate or undesirable, in operational environments where access is limited, and against high-value targets.

These situations benefit from small, well-planned or precision tactical operations. Such activities include: domestic and international counter-terrorist response, discrete intelligence collection, surveillance and reconnaissance activities, specialized capacity building to assist allied host nation forces, and immediate reaction in response to emergent or imminent threats. Flexible, scalable Special Operations Task Forces often play a role in longer-term military missions but the limited numbers of highly skilled individuals at the heart of such forces typically deploy for limited durations of time.

Canada's Special Operations Forces structure is lean. It consists of a headquarters commanding Joint Task Force 2 (JTF 2) – Canada's military counter-terrorism unit; the Canadian Joint Incident Response Unit (CJIRU) – Canada's military Chemical, Biological, Radiological and Nuclear detection and response unit; the Canadian Special Operations Regiment; the Special Operations Aviation Squadron; and the Canadian Special Operations Training Centre.

At its core, Canada's Special Operations Forces are focused on a cooperative joint, inter-agency, and multi-national approach to operations. In order to meet future challenges, the Canadian Special Operations Forces Command will continue this cooperation to support government decision-making in security situations, including counter-terrorism efforts. Additionally, the Canadian Special Operations Forces Command will support international peace and security missions, and contribute to and harness the 'Global Special Operations



Forces Network' consisting of allied Special Operations Forces.

The lean nature and unique characteristics of Canada's Special Operations Forces require sustained and tailored investment to ensure continuity and effectiveness over the long-term.

INVESTMENTS IN SPECIAL OPERATIONS FORCES

57. Acquire airborne Intelligence, Surveillance and Reconnaissance platforms.
58. Recapitalize existing commercial pattern, SUV-type armoured vehicles.
59. Modernize and enhance Special Operations Forces Command, Control and Communications information systems, and computer defence networks.
60. Enhance next generation Special Operations Forces integrated soldier system equipment, land mobility, and maritime mobility platforms and fighting vehicle platforms.
61. Increase Special Operations Forces by 605 personnel.



CANADIAN ARMED FORCES JOINT CAPABILITIES

Joint capabilities are generally those that facilitate the enhanced command and control of deployed Canadian Armed Forces elements and are fundamental to the Canadian Armed Forces' ability to anticipate, adapt and act in response to Government of Canada priorities.

The uncertainty and volatility of the security environment, the evolution of technology, and the time required for the development of the people, equipment, systems, and methods that comprise military capability require consistent, sustained, predictable investment. The capa-

bility investments outlined in this policy will ensure the Canadian Armed Forces' preparedness for the future through the development, sustainment and enhancement of the core combat and critical enabling capabilities necessary for an integrated, innovative, flexible, adaptable, and interoperable force.

These investments will provide the Government of Canada and Canadians with a capable, adaptable military able to promote and protect Canadian interests and values at home and abroad.



INVESTMENTS IN JOINT CAPABILITIES

62. Acquire joint command and control systems and equipment, specifically for integrated information technology and communications.
63. Acquire joint signals intelligence capabilities that improve the military's ability to collect and exploit electronic signals intelligence on expeditionary operations.
64. Improve the capabilities of the Joint Deployable Headquarters and Signals Regiment, including the portable structures that house the headquarters when deployed and the equipment employed by that headquarters for command, control, and communications.
65. Improve cryptographic capabilities, information operations capabilities, and cyber capabilities to include: cyber security and situational awareness projects, cyber threat identification and response, and the development of military-specific information operations and offensive cyber operations capabilities able to target, exploit, influence, and attack in support of military operations.
66. Improve Chemical, Biological, Radiological, Nuclear, and Explosive detection and response capabilities.



3 FIXING DEFENCE FUNDING

STABLE, PREDICTABLE, REALISTIC FUNDING

The vision and new initiatives set out in *Strong, Secure, Engaged* are backed by a long-term funding commitment and model that fully provide the resources for implementation.

To meet Canada's defence needs at home and abroad, the Government will grow annual defence spending over the next 10 years from \$17.1 billion in 2016-17 to \$24.6 billion in 2026-27 on an accrual basis. This translates to a rise in annual defence spending on a cash basis from \$18.9 billion in 2016-17 to **\$32.7 billion** in 2026-27, an increase of over 70 percent. The total funding available to Defence over the next 20 years will be \$497.0 billion on an accrual basis, or \$553.0 billion on a cash basis (Table 1). Total forecasted defence spending as a percentage of gross domestic product is expected to reach 1.40 percent by 2024-25. This level of funding is affordable, achievable, and has been informed by a rigorous, evidence-based analysis of Canada's defence needs and the resources required to effectively deliver upon them over a 20-year horizon.

Over the next 20 years, *Strong, Secure, Engaged* includes new funding for defence of **\$48.9 billion** on an accrual basis, or **\$62.3 billion** on a cash basis.

Defence investments will no longer be only planned in theory, then partially implemented or not implemented at all, because of imprecise or changing cost estimates. For

the first time, this model is transparent, rigorously costed, and fully funded, including not just acquisition costs, but also operating and sustainment costs of new equipment. In accordance with long-standing practice, the Government of Canada will take the funding decisions necessary for future military deployments as well as decisions related to continental defence and NORAD modernization. Additional funding may be approved in the future in order to ensure the Canadian Armed Forces can continue to fulfill its mandate in an evolving environment.

The Canadian Armed Forces must be able to plan well into the future. This policy ensures it can.

This funding is realistic and will provide the stability and certainty required to make defence investments that meet today's needs while also planning for the future.

Accrual Basis: the cost of acquiring an asset is **spread over its useful life**, rather than being recorded at the time the bills are paid. Operating funding for the asset is recorded in the year that the expenditure is made.

Cash Basis: funding for cash payments related to the acquisition of capital assets and operating funding is allocated **in the year in which the expenditure is made** (immediately).

See Annex B for a more in-depth exploration of the difference between Accrual and Cash accounting.

Table 1: Defence Funding (\$ millions)*

	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Accrual Basis	17,148	17,174	17,636	18,677	19,464	20,015
Cash Basis	18,908	20,683	21,428	21,714	24,276	25,315

	2022-23	2023-24	2024-25	2025-26	2026-27	Total 10yrs	Total 20yrs
	20,870	22,092	23,278	23,899	24,551	207,654	497,012
	26,048	29,879	31,741	31,931	32,673	265,688	553,003

*Not including future mission costs

INVESTING IN DEFENCE

The funding commitment is composed of two separate components, capital investments and operating funding, further sub-categorized as follows:

- Capital Investments – Acquisition – Costs related to the procurement of capital assets. Capital assets include equipment, infrastructure and information management/information technology-related equipment.
- Operating Funding – Operating and Sustainment – Costs include: personnel (Regular, Reserve and defence civilians); operating, including operating and sustainment costs for capital assets, both those currently in service and future acquisitions (training, domestic and deployed operations and other activities); and infrastructure (including maintenance, utilities and Payment in Lieu of Taxes (PILT)).
- Operating Funding – Additional Personnel – The incremental salary and operating costs attributed to the planned growth of 3,500 Regular Force personnel, 1,500 Reserve Force personnel and 1,150 defence civilians.
- Operating Funding – New Initiatives – Each initiative had a unique cost model created based on existing Defence costing frameworks and procedures. Four specific initiatives have been included in this policy: Defence Engagement Program Expansion; the Innovation for Defence Excellence and Security (IDEaS) initiative; Reserves – Enhanced Roles, Capability and Benefits; and the Total Health and Wellness Strategy.



ENSURING EFFECTIVE MANAGEMENT OF THE DEFENCE BUDGET

National Defence is responsible for the largest capital budget of any federal institution and its budget process is complex. As a vestige of history, National Defence effectively had two separate budgets.

1. Like all federal departments, National Defence is allocated funding on a cash basis through the Parliamentary Estimates process. While National Defence does have visibility on the level of funding that it would receive in the future, this budget could be affected based on yearly budget decisions, the level and number of international military missions, and changes to costs and timing of equipment acquisitions. This funding was used to pay annual operating costs (salaries, administration, building costs), the purchase of some capital equipment and infrastructure, and the costs of operating and maintaining this equipment.
2. In 2005-06, a new and separate part of National Defence's budget was created using the accrual basis of accounting – a standard and accepted accounting method for the management of capital assets. This new source of funds was intended to be the long-term, predictable source of funds to be used for the acquisition and operation and maintenance of major new equipment, as well as force expansion.

Under this old model, the planning of the capital program was managed on both a cash and accrual basis. Further, some operating costs were covered by the cash budget, while others were sourced from the accrual budget. This introduced significant complexity in planning for major equipment projects, which was a fundamental challenge of large procurements of the past. Funding was announced for the purchase of new equipment such as aircraft and ships, but the life-cycle costs, including operating costs, were not adequately planned for in the procurement of equipment.

This new policy introduces some important changes to how the defence budget is managed to ensure that the Defence team has the flexibility to effectively manage key investments in defence capability. With this change, the Defence team and Canadians will have a full 20-year view of capital investments under a single, consolidated defence budget. A simplified process will be put into effect for the management and planning of capital expenditures. For the first time, the management of all funding related to the acquisition of all capital assets will be on a purely accrual basis, which accounts for the project development and acquisition cost of the equipment over the expected life of the asset. In addition, the operating and sustainment

costs for the equipment will be earmarked as part of the planning process. This will enable better long-term planning of defence capabilities and help enhance the transparency of defence fiscal planning with Parliament.

In total, *Strong, Secure, Engaged* will invest an additional \$48.9 billion over the next 20 years on an accrual basis – \$33.8 billion for the acquisition of capital assets and \$15.1 billion for operating requirements. Over this time period (2017-18 to 2036-37) total defence funding on an accrual basis is estimated to be \$497.0 billion not including the costs of military operations (Figure 1).

Specifically, this additional funding will be coupled with four reforms:

1. Transformation of the defence funding model that clearly and transparently identifies the investments required to acquire new assets (capital budget) and those funds required to conduct the business of defence (operating budget).
2. Reform of Canada's procurement model and adoption of life-cycle costing to ensure the Department of National Defence has not only the funding to procure new equipment, but also the funding to maintain and operate new equipment.
3. Implementation of rigorous costing of major equipment, including through Third-Party Reviews.
4. Publication of the next Defence Investment Plan in 2018, and further installments every three years thereafter, to ensure Canadians can clearly understand

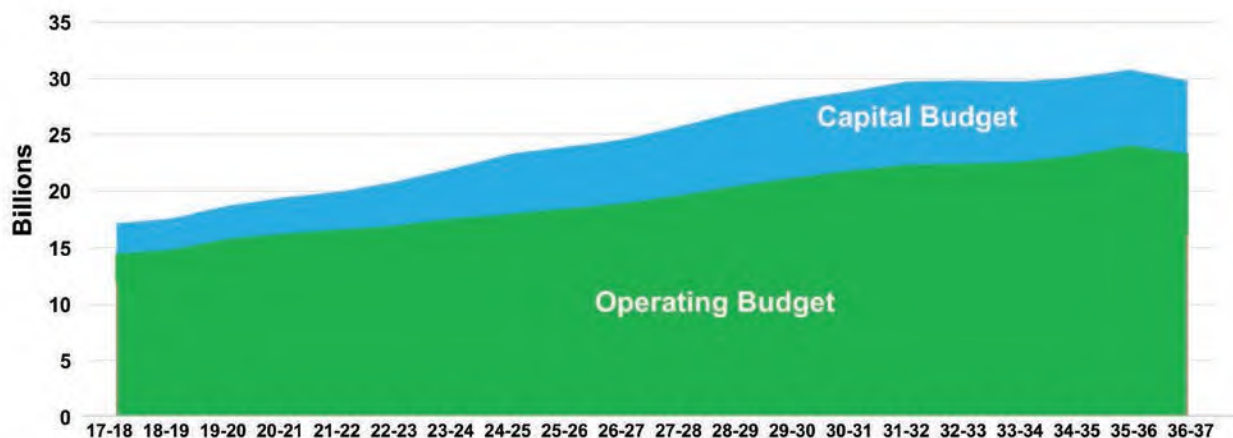


future changes to the budget and to deliver on the Government's commitment to transparency, results, and accountability.

Strong, Secure, Engaged integrates additional funding flexibilities with respect to mission costs. While some operations are manageable from within the existing defence budget, for others National Defence will seek additional funding. This will help preserve the integrity of the defence budget, and ensure that other important priorities such as investments in defence capability and caring for our people and their families are not compromised by the costs of operations.

Moreover, additional funding will be provided for salary increases related to the renegotiation of collective agreements for civilian personnel and Treasury Board approved salary increases for military personnel.

Figure 1: Defence Funding – Accrual Basis*



*Not including future mission costs

REPORTING OF DEFENCE SPENDING - NATO

This policy highlights significant additional investments by the Government of Canada. This is consistent with the NATO trend of reversing declining expenditures to meet the commitments agreed to in the Defence Investment Pledge. While defence spending is an important part of ensuring appropriate defence capability, it is not the most effective measure of fair burden sharing. Within the Alliance, Canada continues to place a premium on tangible operational contributions, as well as demonstrating a commitment and capacity to deploy and sustain personnel in support of the Alliance.

As part of the Defence Policy Review, Defence conducted a study to ensure that the methodologies used by Canada to report defence spending as a percentage of gross domestic product to NATO were consistent with the eligibility criteria established by NATO and with those currently being utilized and reported by our Allies.



The study revealed that Canada has been under-reporting its defence spending. The key factor related to the under-reporting has been the exclusion of defence spending that has been incurred by other government departments. Recent consultations with NATO staff and our Allies have resulted in a clearer understanding of Canada's defence spending. Future reporting will now include defence spending from other government departments, such as:

- payments made directly to veterans;
- peacekeeping and humanitarian operations;
- direct information technology support to defence;
- centrally funded defence personnel costs; and
- direct program support to defence.

It should be noted that additional expenses related to services provided by Veterans Affairs Canada are not currently included. Canada will continue to consult with NATO officials to ensure that costs reported going forward are reflective of defence spending in support of NATO.

The investments in *Strong, Secure, Engaged* decisively reverse Canada's declining defence spending in recent years. Total forecasted defence spending under this policy is expected to reach 1.40 percent of gross domestic product by 2024-25. It will also position Canada to exceed NATO's target to spend 20 percent of defence expenditure on major equipment, which under this policy is forecasted to reach 32.2 percent in 2024-25.

Table 2 identifies the revised defence spending forecast as a percentage of gross domestic product and major equipment spending as a percentage of defence spending.

Table 2: Forecasted Defence Spending as a Percentage of Gross Domestic Product (Cash Basis)

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
National Defence Spending	1.30%	1.30%	1.39%	1.16%	1.23%	1.10%	0.99%	1.01%		
Defence Spending - Other Departments	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Forecasted Defence Spending	1.30%	1.30%	1.39%	1.16%	1.23%	1.10%	0.99%	1.01%		
Major Equipment as a Percentage of Defence Spending	14.80%	13.00%	12.80%	13.80%	9.70%	8.31%	11.16%	13.03%		
	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
National Defence Spending	0.96%	0.97%	0.94%	0.98%	0.93%	0.91%	0.87%	0.85%	0.82%	0.79%
Defence Spending - Other Departments	0.24%	0.22%	0.26%	0.22%	0.20%	0.19%	0.19%	0.18%	0.18%	0.17%
Sub-Total	1.20%	1.19%	1.20%	1.20%	1.13%	1.10%	1.05%	1.04%	1.00%	0.97%
Changes to Defence Policy	0.00%	0.00%	0.11%	0.06%	0.09%	0.19%	0.23%	0.24%	0.37%	0.43%
Forecasted Defence Spending	1.20%	1.19%	1.31%	1.26%	1.22%	1.29%	1.29%	1.27%	1.37%	1.40%
Major Equipment as a Percentage of Defence Spending	10.50%	10.84%	19.42%	19.77%	16.80%	21.83%	23.70%	23.15%	29.38%	32.17%



RIGOROUS COSTING AND THIRD-PARTY REVIEW

The stable, realistic defence funding presented in this policy rests on the foundation of a rigorous, multi-stage, externally validated, costing process. National Defence worked with external global defence costing experts from Deloitte, who brought their expertise gained from defence reviews in allied nations, to provide advice and support to this unprecedented process. All costing methodologies to support the vision of *Strong, Secure, Engaged* also underwent a third-party review conducted by five external accounting firms. A life-cycle approach was used for both current and future major equipment requirements to take into account the full costs of use over the expected life of the equipment, such as supporting infrastructure, training, maintenance and operating costs.

ENSURING TRANSPARENCY OF THE DEFENCE BUDGET

To deliver on the Government's commitment to transparency, results and accountability, the Government of Canada will publish the next Defence Investment Plan in 2018, and further plans thereafter. It will provide important planning direction to guide the major investments that provide the Canadian Armed Forces with the core capability to carry out its mandate. In particular, the Defence Investment

Plan identifies major capital equipment and infrastructure spending and investments over \$20 million for goods and services over a five-year period. This will provide a more transparent and important mechanism to demonstrate prudent stewardship of public resources. Further information on how the Defence team plans to ensure the transparency of the defence budget is provided at Annex A.





4 GLOBAL CONTEXT

KEY TRENDS

Canada has a long-standing, honourable tradition of robust engagement in support of global stability, peace and prosperity. We are uniquely positioned now to further this role. Arguably, our engagement has never been more necessary, or valued by our international allies and partners.

We live in a time when economic growth has lifted billions from poverty. But fragile and conflict-affected states have been excluded from many of these gains. Economic inequality is rising, worldwide. This has brought with it rising instability.

Canada is not immune from these concerns, and we must be part of the solution – a force for security, stability, prosperity and social justice in the world.

Violent extremism is a global scourge that, left unchecked, can undermine civil society and destabilize entire regions. It must be steadfastly opposed through concerted action spanning intelligence, counter-radicalization, development, and the use of hard power. In the face of hateful ideologies and attacks on our values and way of life, Canada will respond with unwavering strength.

Social media and smart technology have transformed every aspect of daily life, conferring great benefits on the people it connects, worldwide. But much greater access to communications technology has simultaneously fostered new vulnerabilities, which we are called to address.

When large populations flee their homes in a desperate search for a better life, mass migration can undermine states and lead to humanitarian emergencies. But when managed properly, emigration and immigration are forces for diversity, for economic growth and vitality in the host countries. We Canadians know this first-hand.

Climate change threatens to disrupt the lives and livelihoods of millions around the world. It also presents us with an urgent call to innovate, to foster collective action, to work hand-in-hand with like-minded partners around the world to meet this threat and beat it, rather than stand passively by.



In short, Canada – by virtue of our geography, our history, our diversity and our natural wealth – is called to leadership. We have the capacity to help those who live under the threat of violence, or have been consigned to protracted refugee status. We can reach out to those who suffer from weak governance. We can be a force for stability in the world.

And that is why Canada's ability to field a highly trained, professional, well-equipped military is so vital. Meeting these enormous collective challenges requires coordinated action across the whole-of-government – military capabilities working hand in hand with diplomacy and development. The right hand supports the left – and vice-versa.

We have often heard the world needs more Canada. This policy puts us in a position to make this a reality.

Within this broader context, three key security trends will continue to shape events: **the evolving balance of power, the changing nature of conflict, and the rapid evolution of technology.**

EVOLVING BALANCE OF POWER

Trends in global economic development are shifting the relative power of states, from the West to the East, and – to a lesser extent – from the North to the South, creating a more diffuse environment in which an increasing number of state and non-state actors exercise influence. This shift supports positive global change, such as the alleviation of poverty, and the democratization and empowerment that often accompany economic development. However, this shift has also been accompanied by weak governance and increasing uncertainty. In this era of growing multipolarity, the United States is still unquestionably the only superpower. China is a rising economic power with an increasing ability to project influence globally. Russia has proven its willingness to test the international security environment. A degree of major power competition has returned to the international system.

There are also a number of rising regional powers that are gaining greater influence in international affairs, particularly as economies in Latin America, Asia, and Africa continue to grow at a relatively rapid pace. Canada has a strong interest in supporting the international system it helped to build, including by fostering new partnerships, engaging with emerging powers and promoting peace around the globe.

STATE COMPETITION

As a trading nation and influential member of the G7, G20, NATO and United Nations, Canada benefits from global stability underpinned by a rules-based international order. Recent years have witnessed several challenges. Russia's illegal annexation of Crimea is an example that has carried grave consequences. Activities in the South China Sea highlight the need for all states in the region to peacefully manage and resolve disputes in accordance with international law, and avoid coercion and other actions that could escalate tension.

The re-emergence of major power competition has reminded Canada and its allies of the importance of deterrence. At its core, deterrence is about discouraging a potential adversary from doing something harmful before they do it. A credible military deterrent serves as a diplomatic tool to help prevent conflict and should be accompanied by dialogue. NATO Allies and other like-minded states have been re-examining how to deter a wide spectrum of challenges to the international order by maintaining advanced conventional military capabilities that could be used in the event of a conflict with a “near-peer.” Deterrence has traditionally focused on conventional and nuclear capabilities, but the concept is also increasingly relevant to the space and cyber domains.

THE RE-EMERGENCE OF DETERRENCE

Changes in the international environment demand a new understanding of how and when to lawfully use or threaten to use military force in support of diplomatic engagement to manage and shape conflict and international relations.

The return of major power rivalry, new threats from non-state actors, and challenges in the space and cyber domains have returned deterrence to the centre of defence thinking.

Canada benefits from the deterrent effect provided by its alliances (e.g., NATO and NORAD), and takes seriously its responsibility to contribute to efforts to deter aggression by potential adversaries in all domains.

A CHANGING ARCTIC

The Arctic region represents an important international crossroads where issues of climate change, international trade, and global security meet. Eight states – Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States – have territory north of 60°, while five of these states border the Arctic Ocean. Arctic states have long cooperated on economic, environmental, and safety issues, particularly through the Arctic Council, the premier body for cooperation in the region. All Arctic states have an enduring interest in continuing this productive collaboration.





Climate change, combined with advancements in technology, is leading to an increasingly accessible Arctic. A decade ago, few states or firms had the ability to operate in the Arctic. Today, state and commercial actors from around the world seek to share in the longer term benefits of an accessible Arctic. Over time, this interest is expected to generate a corresponding rise in commercial interest, research and tourism in and around Canada's northern territory. This rise in activity will also bring increased safety and security demands related to search and rescue and natural or man-made disasters to which Canada must be ready to respond.

INFLUENCE OF NON-STATE ACTORS

The evolving balance of power has created a more diffuse environment in which an increasing number of actors can exercise varying degrees of influence. While states will remain the most important entities on the global landscape, a diverse range of non-state actors add complexity to the operating environment and can change the scope and nature of military operations.

Many of these non-state actors, such as non-governmental organizations, philanthropic foundations, responsible corporations, cities, and religious communities play positive roles that promote peace and address the needs of vulnerable populations. These actors have helped to address global health crises, support implementation of the United Nations' Sustainable Development goals to increase vaccinations against preventable disease and empower women and girls. The International Campaign to Ban Landmines is a good example of the progress that can be made when states and non-state actors unite in common purpose. States must learn to better partner with and leverage the benefits these entities can bring to international affairs.

Other non-state actors have a destructive influence. Terrorist and violent extremist organizations, organized

crime cartels and hacker groups exhibit behaviour that cannot be easily addressed through the frameworks and mechanisms that govern state-to-state interaction. Adding to the more complex security environment, terrorist and extremist organizations in some regions of the world have been able to embed themselves in local communities, blurring the lines between the organizations and the civilian population. In some cases, those organizations are viewed by locals as more legitimate than the state, thus further complicating and impeding state authority. This dynamic demands that states seek new ways of addressing borderless threats and mitigating their negative effects.

GLOBAL GOVERNANCE

As the relative power of states shifts and new voices gain importance, existing international institutions need to adapt to new realities. The efficacy of the international system rests largely on active engagement by all states. Ensuring cohesion and maintaining accountability will be vitally important as new groupings are integrated into the international system. It is in Canada's interest that existing global governance mechanisms, including multi-lateral organizations and negotiation processes, work well, remain flexible and adapt to accommodate new perspectives.

Global governance is undermined when rules are ignored or norms flouted. North Korea's ongoing efforts to advance its nuclear weapons and ballistic missile programs, including two nuclear tests in 2016 and numerous ballistic missile tests, show clear disregard for multiple United Nations Security Council resolutions, and further demonstrate that North Korea poses a serious and increasing threat to both regional stability and international peace and security. Syria's abhorrent use of weapons of mass destruction against innocent civilians – in strict violation of international law and universally accepted values – remains of grave concern.



THE CHANGING NATURE OF CONFLICT

The characteristics of conflict have changed significantly over the last 10 years – from the underlying causes to the actors involved and their methods of warfare. During this period, both state and non-state actors have shown greater willingness to use violence to achieve political ends, taking a particular toll on civilians. The Middle East is currently the most violent region in the world, primarily as a result of the ongoing conflicts in Syria and Iraq. The thousands of deaths from the conflict in Ukraine mean that organized violence has returned to Europe. While many African states have made impressive progress, others continue to struggle with conflict and fragility. Demands on United Nations peace operations have reached historic highs.

GROWING COMPLEXITY

A variety of interrelated conditions can trigger or influence conflicts in unexpected ways. Economic inequality, for example, can create social unrest with potentially significant consequences, including in the West. Large populations of unemployed youth in particular have been at the root of instability historically and in today's environment they can provide fertile recruiting grounds for violent

extremists. Demographic change overall can have destabilizing effects. Population growth, particularly when combined with large-scale transition from rural to urban living, continues to add strain on the world's cities and increases competition for resources.

The number of migrants worldwide fleeing economic, environmental, or conflict-related causes has reached its highest levels since the Second World War. Such rapid and forced displacement can strain institutions and test the resilience of host populations. These factors also tend to exacerbate the negative consequences of inequality and marginalization.

In addition to these underlying root causes of conflict, the effects of climate change can aggravate existing vulnerabilities, such as weak governance, and exacerbate sources of tension, such as resource scarcity. The effects of climate change must therefore be considered through a security lens.

Climate change has emerged as a security challenge that knows no borders.

The increased frequency, severity and magnitude of extreme weather events all over the world – one of the most immediate and visible results of climate change – will likely continue to generate humanitarian crises.

The effects of climate change can also aggravate existing vulnerabilities, such as weak governance, and increase resource scarcity, which in turn heightens tensions and forces migrations.

In Canada, climate change is transforming the Northern landscape, bringing an evolving set of safety and security challenges, from greater demand for search and rescue to increased international attention and military activity.



THE GREY ZONE AND HYBRID WARFARE

State and non-state actors are increasingly pursuing their agendas using hybrid methods in the “grey zone” that exists just below the threshold of armed conflict. Hybrid methods involve the coordinated application of diplomatic, informational, cyber, military and economic instruments to achieve strategic or operational objectives. They often rely on the deliberate spread of misinformation to sow confusion and discord in the international community, create ambiguity and maintain deniability. The use of hybrid methods increases the potential for misperception and miscalculation. Hybrid methods are frequently used to undermine the credibility and legitimacy of a national government or international alliance. By staying in the fog of the grey zone, states can influence events in their favour without triggering outright armed conflict. The use of hybrid methods presents challenges in terms of detection, attribution and response for Canada and its allies, including the understanding and application of NATO’s Article 5.

LINKAGES BETWEEN INTER- AND INTRA-STATE CONFLICT

The distinction between inter-and intra-state conflict is becoming less relevant in terms of intensity. Intra-state conflicts are increasingly playing out in high threat, high intensity environments with well-armed, organized groups. With states using proxies to commit violence on their behalf, there has been a rise in the last five years in the number of active intra-state conflicts with external troop involvement. The conflicts in Syria, Iraq, and eastern Ukraine involve state-backed militias acting either as reinforcements to conventional forces or as a method of employing force with deniability. These conflicts demonstrate how the injection of state-backed resources can increase the complexity and intensity of intra-state conflicts.

GLOBAL TERRORISM

Terrorism is not a new threat, but it has evolved significantly and presents a challenge that cannot be met through military means alone. The global death toll from terrorism has more than doubled in the last 20 years, demonstrating the willingness of non-state actors to employ violence in the pursuit of their objectives. While this trend reflects chronic violence largely concentrated in the Middle East and parts of Africa, events in the past year show that terrorist groups are extending their reach, sponsoring or inspiring attacks in major European and North American centres. Terrorist and violent extremist organizations, notably al-Qaida and Daesh, are also intent on targeting Western interests through terrorist attacks and kidnappings.

Successfully disrupting terrorist networks requires a multi-faceted approach, including efforts to stop the flow of terrorist financing and counter the communication strategies employed by violent extremists. The potential of terrorist groups to spread into ungoverned spaces and exploit information technology to form alliances and far-flung trans-regional networks also poses a security challenge. Countries, like Canada, that are committed to combating terrorism will require sound intelligence on potential threats. Traditional concepts of deterrence may also not apply to non-state actors who calculate risks and rewards in radically different ways and do not ascribe to the universal values enshrined in the United Nations Charter.

At home, Canada remains the target of direct threats by groups such as Daesh and al-Qaida, and by a small number of individuals inspired by the violent extremist ideologies of these groups. Some have engaged in terrorism-related activities such as promoting violence online, radicalizing peers, recruiting and fundraising. Others may consider travelling abroad to join a terrorist group or conduct an attack themselves. As part of a broader strategy, counter-radicalization efforts and meaningful community outreach will be essential to diminish the appeal that violent extremist ideologies have for a small number of individuals.





WEAPONS PROLIFERATION

The risk of proliferation of weapons of mass destruction – chemical, biological, radiological and nuclear-remains troubling. The proliferation of ballistic missile technology as a means to deliver these weapons is also a source of concern. The number of countries with access to ballistic missile technology, including some with the potential to reach North America or target Canadian and allied deployed forces, has increased and is expected to grow and become more sophisticated. North Korea's frequent nuclear and missile tests underscore this point. Diplomatic efforts have successfully restrained Iran's nuclear program through the joint Comprehensive Plan of Action, but Iran also possesses a considerable number of short and medium-range ballistic missiles which can pose a

significant threat. The unlawful use of chemical weapons against civilian and military populations is also a source of significant concern. The Joint Investigative Mechanism created by the United Nations and the Organization for the Prohibition of Chemical Weapons has attributed the use of chlorine and sulphur mustard weapons in Syria to both non-state and state actors, including the Syrian Government. As well, North Korea continues to maintain a chemical and biological weapon program.

Finally, because of their low cost and accessibility, the majority of armed conflicts continue to be fought with small arms and light weapons. An estimated 300,000 to half a million deaths per year are caused by these weapons, upwards of 90 percent of victims of armed conflict. Over 1,000 companies from 100 countries produce some aspect of these arms and though most are transferred legally, the lack of regulation and controls in many regions where conflict is occurring has resulted in the development of illicit markets, making it challenging to stem their proliferation. Canada will reinforce its export controls and help strengthen international controls on conventional arms by joining the Arms Trade Treaty.



THE CHANGING NATURE OF PEACE OPERATIONS

The violence and instability created by fragile states and transnational threats have led to horrific human rights abuses and humanitarian tragedies. In this context, UN peace operations are an important tool for the international community to collectively promote peace and security, including by increasing efforts to prevent conflict in the first place and by helping countries emerging from conflict achieve enduring peace.

The evolution of UN peace operations over the last three decades reflects the changing nature of the conflicts to which these operations respond. The majority of UN missions are being deployed into complex political and security environments. They operate in difficult conditions and with robust, multi-dimensional mandates. Indeed, two-thirds of peacekeepers now operate in active conflict zones. As such, peace operations are now regularly tasked with using force to protect populations at risk and helping to bring about the conditions necessary for ending conflict.

Operating in this context has brought new challenges. UN missions too often lack the means required to deliver on their mandates. Canada is well-placed to help fill these gaps. Our specialized capabilities and expertise can play a critical role in strengthening the effectiveness of missions on the ground, supporting peace processes and post-conflict peacebuilding, and improving the training available to other contributing countries. Canada can also help improve the overall management of peace operations by enhancing the UN's capacity to provide senior leadership and direction from headquarters.

UN peace operations also advance Canadian values and interests. They play a critical role in advancing democracy, upholding human rights, and delivering support to the vulnerable and marginalized communities that need it most. As part of a feminist approach to international policy, Canada is committed to working with the UN to end conflict-related sexual violence and the use of child soldiers. This includes advancing the implementation of United Nations Security Council Resolution 1325 on Women, Peace and Security, and ensuring UN peacekeepers are held accountable for meeting the highest standards of conduct.

RAPID EVOLUTION OF TECHNOLOGY

The information revolution is one of the key drivers of many of the most exciting opportunities in the world. Modern militaries rely on networks and data to plan and carry out missions. Much of what gives Western forces their technological and tactical advantage stems from space-enabled systems, and agile information management and technology tools to aggregate and manipulate large quantities of data.

Technological developments point to a future of defence that is expected to be vastly different than today, with a greater emphasis on information technologies, data analytics, deep learning, autonomous systems, advancements in the electromagnetic and cyber domains, as well as a range of transformative technologies, from quantum computing to synthetic biology. Any number of these advances has the potential to change the fundamental nature of military operations. The rapid pace of technological change will also require that domestic and international legal and governance systems adapt in an effective and timely manner.

Canada is committed to employing new technological capabilities in a manner that rigorously respects all applicable domestic and international law, is subject to proven checks and balances, and ensures full oversight and accountability. As a country that has led several successful efforts to advance human rights and establish new international norms, Canada is also well-placed to advocate among international partners for the highest standards for the use of cyber, space, and remotely piloted systems.





THE CYBER DOMAIN

The internet was not originally designed with security in mind, but as an open system to allow for the rapid exchange of data. Technological advances have opened the cyber domain to a variety of state and non-state actors. Terrorist networks, for example, are already using cyberspace to support their recruitment, fundraising, and propaganda activities, and are simultaneously seeking to exploit Western dependence on cyber systems.

The most sophisticated cyber threats come from the intelligence and military services of foreign states. Technologically-advanced governments, their militaries, and private businesses are vulnerable to state-sponsored cyber espionage and disruptive cyber operations. This threat can be expected to grow in the coming years. Addressing the threat is complicated by the difficulties involved in identifying the source of cyber attacks with certainty and the jurisdictional challenges caused by the possible remoteness of cyber attacks.

In the military context, while the use of cyberspace has become crucial to operations, potential adversaries, including state proxies and non-state actors, are rapidly developing cyber means to exploit the vulnerabilities inherent in the C4ISR systems (command, control, communications, computers, intelligence, surveillance, reconnaissance) on which militaries depend, as well as other operational technologies, such as weapons systems.

THE SPACE DOMAIN

Satellites underpin an increasing range of daily activities, including by providing the “time stamp” function for ATMs and stock exchanges, coordinating air traffic control and “just in time” delivery of goods, and supporting the operation of cell phones and television. Space-based assets are critical for modern militaries. Satellites provide support across all operations – from humanitarian assistance and disaster response, to peace support, and combat. They are instrumental for navigation, communications and intelligence.

The evolving space environment is often characterized as being congested, competitive, and contested.

Increasing congestion means that the risk of collision between satellites and other orbiting spacecraft or debris continues to rise, as more objects are launched into orbit. Space is now congested to the point where orbital debris poses a real and increasing hazard to day-to-day operations in space, and this problem only stands to increase with the proliferation of micro and small satellites being launched

by commercial space actors. The rigours of operating in the space environment present their own challenges, including harmful radiation and adverse space weather, which can degrade satellite functionality over time.

Outer space is increasingly competitive. In addition to the growing number of state-sponsored space programs, the commercial space industry has grown exponentially over the last several years. While this has contributed significantly to the congestion of outer space, it also presents exciting opportunities for mutually beneficial collaboration between the public and private sectors.

Finally, space is an increasingly contested environment. While Canada remains fully committed to the peaceful use of space, our assets have become potential targets, with some states developing a range of anti-satellite weapons (ASATs) that could potentially threaten access to the space domain. Some countries already have an ability to temporarily disrupt space-based services, such as the Global Positioning System (GPS) or satellite communications, and a smaller number have the ability – or have stated an interest in the ability – to cause more permanent effects, including the destruction of satellites. Space-related challenges are magnified by the fact that the international legal framework governing outer space continues to evolve in

response to rapid developments. Canada can demonstrate leadership by promoting the military and civilian norms of responsible behaviour in space required to ensure the peaceful use of outer space.



IMPLICATIONS FOR CANADA OF A CHANGING SECURITY ENVIRONMENT

- The global security environment transcends national borders, requiring Canada to help promote peace and stability abroad in order to maintain security at home.
- In a global security environment defined by complexity and unpredictability, Canada requires an agile, well-educated, flexible, diverse, and combat-ready military capable of conducting a wide range of operations at home and internationally.
- The interrelated nature of global security challenges puts a premium on deep knowledge and understanding. Using a range of analytical tools, Canada must develop sophisticated awareness of the information and operating environment and the human dimension of conflict to better predict and respond to crises.
- To keep pace, Canada must develop advanced space and cyber capabilities, and expand cutting-edge research and development.
- Canada must continue to be a responsible partner that adds value to traditional alliances, including NORAD, NATO, and the Five-Eyes community.
- Canada must balance these fundamental relationships with the need to engage with emerging powers, particularly in the Asia-Pacific region.
- Canada must address the threat stemming from terrorism and the actions of violent extremist organizations, including in ungoverned spaces.
- Recognizing the devastating effects of climate change, Canada must bolster its ability to respond to severe weather events and other natural disasters, both at home and abroad.
- Acknowledging rising international interest in the Arctic, Canada must enhance its ability to operate in the North and work closely with allies and partners.
- Canada and the United States must work closely together on NORAD Modernization in order to defend North America.



5 STRONG, SECURE, ENGAGED – ARTICULATING A NEW VISION FOR DEFENCE

People are at the core of Canada's new vision for Defence. Ensuring that our women and men in uniform are prepared and equipped to succeed on operations, and that they are fully supported from recruitment through retirement and beyond, is fundamental to our success.

When they put on the uniform, members of the Canadian Armed Forces take on an unlimited liability. Because of the sacrifices that they make day in and day out, Canada remains among the safest and most secure countries in the world.

However, the international landscape is shifting under tremendous pressures, and the current security environment presents a variety of threats, many that transcend national borders. Increasingly, instability abroad can have direct manifestation in Canada.

Thus, defending Canada and Canadian interests not only demands robust domestic defence but also requires active engagement abroad.

In recognition of this dynamic, Canada's defence policy presents a new strategic vision for defence: *Strong, Secure, Engaged*. This is a vision in which Canada is:

- **Strong at home**, its sovereignty well defended by a Canadian Armed Forces also ready to assist in times of natural disaster, other emergencies and search and rescue;
- **Secure in North America**, active in a renewed defence partnership in NORAD and with the United States; and
- **Engaged in the world**, with the Canadian Armed Forces doing its part in Canada's contributions to a more stable, peaceful world, including through peace support operations and peacekeeping.

Canada must have a responsive and capable military. As an instrument of national power, the military is an

important and unique capability that the Government of Canada can use to advance national interests, promote Canadian values, and demonstrate leadership in the world.

Most often, Canada's military action will be applied as part of a coherent, coordinated, whole-of-government effort in concert with diplomatic engagement, humanitarian and development aid, and other measures. At other times, the military may be uniquely called upon to act in Canada's interests. In all cases, Canadian Armed Forces activities will comply with domestic and international law.

CANADIAN STRATEGIC INTERESTS

Above all else, **Canadian security and prosperity** remain Canada's primary strategic interests. These interests support the Canadian way of life and are critical to ensuring that Canadians can flourish and go about their daily lives without fear.

Importantly, other factors, including **global stability**, the **primacy of the rules-based international order**, and the **principle of collective defence** underpin Canadian security and prosperity.

Canada must therefore also promote and protect these interests to ensure that Canada can remain secure, continue to prosper, and exert positive influence on the international stage.





STRONG at Home

The Government has no higher obligation than the safety and security of the Canadian people. Our new strategic vision for defence reaffirms this overarching priority of the Canadian Armed Forces: defending Canada and protecting Canadians.

The Forces will maintain an effective deterrent and prevent conventional military threats from reaching our shores. We will ensure that new challenges in the space and cyber domains do not threaten Canadian defence and security objectives and strategic interests, including the economy.

As described above, we will also maintain a robust capacity to respond to a range of domestic emergencies, including by providing military support to civilian organizations on national security and law enforcement matters when called upon, engaging in rapid disaster response, and contributing to effective search and rescue operations.

We will have improved mobility and reach in Canada's northernmost territories, and pursue a greater presence in the Arctic over the longer-term.

Being strong at home is also about leveraging the strengths of all Canadians. Canada has a world-leading, highly innovative high-technology defence sector that can contribute significantly to Canada's defence and security. We will work in closer partnership with Canadian companies and universities to ensure the Canadian Armed Forces has the advanced capabilities it requires to meet emerging challenges. This closer partnership will also benefit the Canadian economy in the form of high-value jobs and greater export opportunities for Canadian companies.

Canadians can be confident that the Canadian Armed Forces will remain ready to act in the service of Canadians – from coast to coast to coast – and sustain a continuous watch over Canada's land mass and air and sea approaches, an area of more than 10 million square kilometers, ensuring timely and effective response to crises.



SECURE in North America

Canada's defence partnership with the United States remains integral to continental security and the United States continues to be Canada's most important military ally.

Canada takes its responsibility to defend against threats to the continent seriously. The Defence team will

expand Canada's capacity to meet NORAD commitments by improving aerospace and maritime domain awareness and response and enhancing satellite communications. Canada will also procure an advanced fighter capability and will remain highly interoperable with our American allies.

Canada will work closely with the United States to ensure NORAD is fully prepared to confront rapidly evolving threats, including by exploring new roles for the command, taking into account the full range of threats.



ENGAGED in the World

Canada cannot be strong at home without being engaged in the world.

As a G7 country and founding member of NATO, Canada has a strong interest in global stability and open trade, and we will continue to do our part on the international stage to protect our interests and support our allies. Canada's engagement in the world is also guided by values of **inclusion, compassion, accountable governance, and respect for diversity and human rights**.

As a result of this policy, the Canadian Armed Forces will be prepared and equipped to advance Canadian international security objectives – from conducting expeditionary operations to engaging in capacity building with partners – and to support our allies where our shared interests are at stake.

Canada will pursue leadership roles and will prioritize interoperability in its planning and capability development to ensure seamless cooperation with allies and partners, particularly NATO.

The Canadian Armed Forces will be prepared to make concrete contributions to Canada's role as a responsible international actor, particularly through participation in United Nations peace operations. We will be able to support conflict prevention, mediation, and post-conflict reconstruction, with an emphasis on human rights and, in particular, gender equality.

We will maintain the capacity to provide protection and relief to the world's most vulnerable populations, creating the stability necessary for development and sustainable peace to take root. We will also foster world-class expertise for building the capacity and resiliency of others, and delivering tangible results in those areas.

CANADIAN VALUES

Canadian international engagement will be guided by the core Canadian values of **inclusion, compassion, accountable governance, and respect for diversity and human rights**.

The goal of gender equality permeates all of these core values. These values are consistent with the Canadian Charter of Rights and Freedoms and international law.

The Canadian military is guided in all of its actions by these values, from the treatment of its personnel to the conduct of operations abroad.

The Canadian Armed Forces may be employed to protect these values when threatened and to promote them through their actions, including by training partners and capacity building.



6 A NEW CANADIAN APPROACH TO DEFENCE: ANTICIPATE. ADAPT. ACT.

Being strong, secure and engaged in the context of an extraordinarily complex security environment requires a fundamentally new, agile, modern and responsible approach to defence. To deliver tangible results for Canada at home and abroad, we will launch a range of initiatives that will allow us to:

ANTICIPATE and better understand potential threats to Canada and Canadian interests so as to enhance our ability to identify, prevent or prepare for, and respond to a wide range of contingencies;

ADAPT proactively to emerging challenges by harnessing new technologies, fostering a resilient workforce, and leveraging innovation, knowledge, and new ways of doing business; and

ACT with decisive military capability across the spectrum of operations to defend Canada, protect Canadian interests and values, and contribute to global stability.

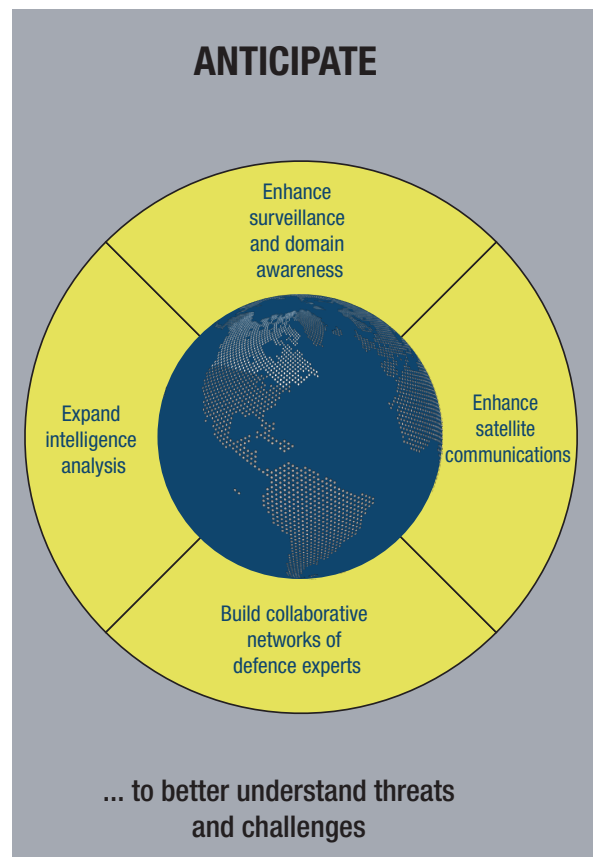
ANTICIPATE

Accurate, timely information is a critical commodity for the Defence team and the other federal departments with which it works. The ability to collect, understand and disseminate relevant information and intelligence has become fundamental to the military's ability to succeed on operations. This provides earlier warning of threats, allowing the Government to identify emerging events and crises, intervene earlier in the conflict cycle if necessary, and minimize the destructive effects of prolonged conflict.

Better situational awareness and intelligence will make Canada, and Canadian Armed Forces personnel deployed on operations, more secure, and will allow us to tailor our contributions to global security in a way that maximizes effectiveness. Strengthened collaboration with other government departments and agencies working on the frontlines of Canadian national security will also assist in identifying risks and threats to Canadian interests.

In order to better **anticipate** threats, challenges and opportunities, the Defence team will take a number of concrete steps to:

- prioritize investments in Joint Intelligence, Surveillance and Reconnaissance capabilities;
- enhance its intelligence collection, analysis and fusion capabilities; and
- support and leverage the expertise of Canada's defence and security academic community.





PRIORITIZING JOINT INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE

The Joint (or “all service”) Intelligence, Surveillance and Reconnaissance concept seeks to bring the capabilities of distinct military assets together in a way that provides operational decision-makers with a clear, comprehensive picture of the environment in which they are operating.

Joint Intelligence, Surveillance and Reconnaissance is composed of interconnected intelligence collection platforms – including aircraft, remotely piloted systems, land vehicles, ships, submarines, people, and satellites – that have the ability to capture data on points of intelligence interest and exchange data in near real-time. Data is relayed through space and ground-based technology to a targeting or command centre to enable the fusion of data for the ongoing development of the intelligence picture. The Joint Intelligence, Surveillance and Reconnaissance concept is often referred to as a ‘system-of-systems.’

From a defence perspective, a robust Joint Intelligence, Surveillance and Reconnaissance capability is critically important to the full range of operations the military may be asked to undertake at home and abroad.

At home, Joint Intelligence, Surveillance and Reconnaissance provides a clear picture of Canadian air and maritime approaches, which is critical to identifying potential threats to Canadian security and sovereignty, including in the Arctic. It helps us support other government departments in fulfilling their mandates, such as international drug interdiction operations and disaster relief. Effective Joint Intelligence, Surveillance and Reconnaissance is also a vital element of Canada’s shared responsibility to help defend North America.

In North America, Arctic surveillance poses particular challenges. In addition to being a vast, sparsely populated area, satellite coverage at extreme northern latitudes and the nature of the polar ionosphere create unique issues for sensor and communications capabilities. We need Joint Intelligence, Surveillance and Reconnaissance solutions that are specifically tailored to the Arctic environment.

Internationally, Joint Intelligence, Surveillance and Reconnaissance provides critical support to all military missions, from combat operations to humanitarian assistance to peace operations. It can also provide early warning of developing crises to enable the analytical planning and strategy development required for conflict prevention.

Canadian security and defence preparedness benefits tremendously from connectivity with our closest allies, particularly the Five-Eyes network, which includes Canada, the United States, the United Kingdom, Australia, and New Zealand. This partnership, in which Five-Eyes partners share much of the information collected by their respective military assets, enhances Canada’s ability to understand existing conflict zones and predict future ones, and allows cost-saving and burden-sharing among partner nations.

Similarly, NATO considers Joint Intelligence, Surveillance and Reconnaissance essential for operations and it is a standing task for Allied military forces. Joint Intelligence, Surveillance and Reconnaissance provides information and intelligence to key decision-makers, helping them make well-informed, timely and accurate decisions. Canada will strongly support NATO efforts in this area as a way to improve interoperability among Allies.

In 2018, Canada will launch an expanded constellation of RADARSAT satellites that can be used day and night and in all weather. This enhanced capability will allow us to track maritime traffic over much larger swathes of ocean and provide for more timely identification of vessels that may require further scrutiny.

The modernized CP-140 Aurora Long-Range Maritime Patrol Aircraft is another vital Canadian Joint Intelligence, Surveillance and Reconnaissance platform given its cutting-edge anti-submarine warfare and long-range surveillance capabilities. This aircraft is used extensively by the Canadian Armed Forces, both in the Arctic and abroad, and will be replaced in the early 2030s with the Canadian Multi-Mission Aircraft. In addition, an airborne Intelligence, Surveillance and Reconnaissance platform will be acquired for the Special Operations Forces.

Similarly, Canada's Victoria-Class submarines, which conduct sub-surface surveillance, will be a key element of the system-of-systems approach to maritime domain awareness. Working together with surface and air surveillance capabilities, they will play an important role in sovereignty operations and continental defence. The Victoria-Class submarines will undergo incremental modernization in the mid-2020s, which will ensure their continued effectiveness out to the mid-2030s.

Given the critical role Joint Intelligence, Surveillance and Reconnaissance plays in anticipating threats to Canada and making informed operational decisions, we will prioritize further capability development in this area, both for domestic and expeditionary purposes.

NEW INITIATIVES

To enhance its Joint Intelligence, Surveillance and Reconnaissance capabilities, the Defence team will:

67. Invest in Joint Intelligence, Surveillance and Reconnaissance platforms, including next generation surveillance aircraft, remotely piloted systems, and space-based surveillance assets (see pages 38-40).
68. Integrate existing and future assets into a networked, joint system-of-systems that will enable the flow of information among multiple, interconnected platforms and operational headquarters.
69. Prioritize Arctic Joint Intelligence, Surveillance and Reconnaissance as a defence research and development priority to produce innovative solutions to surveillance challenges in the North.



ENHANCING DEFENCE INTELLIGENCE

Intelligence is Canada's first line of defence. The defence of Canada, the ability to operate effectively overseas, and the capacity to engage internationally are heavily dependent on the systematic collection, coordination, fusion, production, and dissemination of defence intelligence.

No ship goes to sea, no aircraft takes flight, and no boots hit the ground anywhere in the world without the input of specialists from the defence intelligence community. Given the increasing complexity of the security environment, reliable intelligence in expeditionary operations is crucial to effective targeting that minimizes collateral damage and civilian casualties.

Canadian intelligence capacities and expertise – including those within the Canadian Armed Forces – can also contribute to a deeper understanding of the origins of conflict, the best ways to prevent it, and the locations where capacity building will have the greatest impact. The Canadian Forces Intelligence Command (CFINTCOM) is the only entity within the Government of Canada that employs the full spectrum of intelligence collection capabilities while providing multi-source analysis. CFINTCOM provides credible, timely and integrated defence intelligence capabilities, products and services to support Canada's defence and national security objectives.

The Five-Eyes network of partners contributes greatly to Canada's understanding of the global security environment. Similar arrangements with other allies, such as NATO, are crucial to mission success. Canada will continue to foster and strengthen intelligence sharing relationships in a spirit of reciprocity. These relationships are integral to ensuring that we are prepared for and can anticipate challenges to domestic and global security.

The Canadian Armed Forces will always ensure that the collection, analysis and use of information is done in accordance with the law, and recognizes the importance of civilian review of national security and intelligence activities, including through the new National Security and Intelligence Committee of Parliamentarians.

The Defence team will increase its intelligence capacity, and will examine its capabilities to understand and operate in the information environment, in support of the conduct of information and influence operations.

THE TARGETING PROCESS

Targeting is a formal, deliberate process used by military commanders to determine courses of action during operations. It governs military action by providing a framework for selecting and prioritizing targets and determining the most effective way to deal with them, whether through lethal or non-lethal means, considering operational requirements and capabilities. The targeting process seeks to minimize collateral damage and civilian casualties, and is undertaken in accordance with the Law of Armed Conflict.

Given the complexity of this process, close coordination is required between all involved and strong, reliable intelligence is vital.

The targeting process enables operational decision-making, optimizes the use of military capabilities, and ensures the use of the right military tool against a specific target.

NEW INITIATIVES

In order to address the demand for defence intelligence internally, across the Government of Canada, and among our allies, the Defence team will:

70. Establish up to 120 new military intelligence positions, some of which will be filled by Reservists, and add up to 180 new civilian intelligence personnel.
71. Build CFINTCOM's capacity to provide more advanced intelligence support to operations, including through an enhanced ability to forecast flashpoints and emerging threats, better support next generation platforms, and understand rapid developments in space, cyber, information and other emerging domains.
72. Establish a Canadian Armed Forces targeting capability to better leverage intelligence capabilities to support military operations.





BOLSTERING ACADEMIC OUTREACH

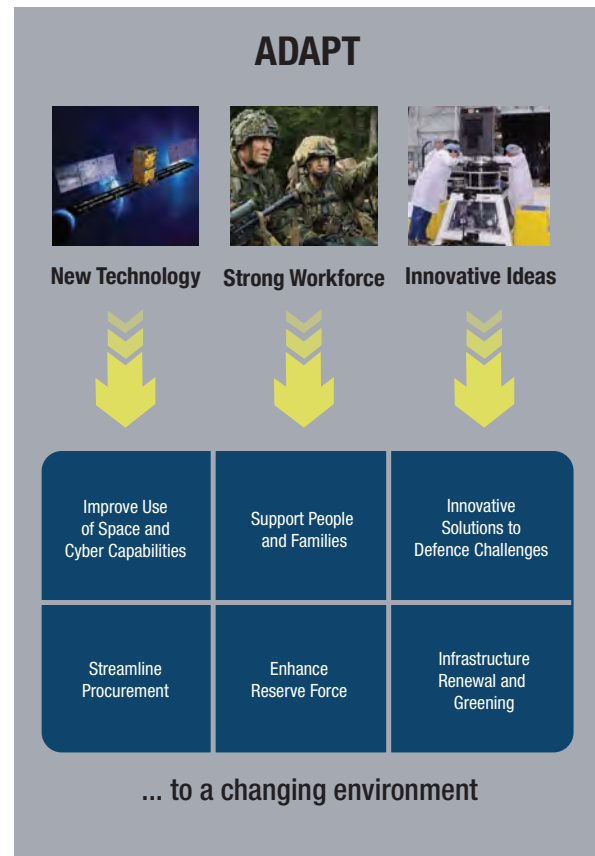
The Defence Policy Review consultations underscored the importance and value of informed discussion of defence issues. They also highlighted the key role that the Canadian academic community and external experts can play in the ongoing examination of defence issues. The Canadian Armed Forces has worked with academia for many years and derives significant benefit from stimulating and leveraging the rich intellectual capacity resident in this community. Continuing to do so will deepen the Government's understanding of global threats and the complexity of modern conflict while also fostering an ongoing discussion of defence issues.

Collaboration with academia and other experts not only strengthens the foundation of evidence-based defence policy-making, but it will also help drive innovation and develop future thought leaders. The development of collaborative networks of academic and analytic communities across Canada will increase and broaden the diversity of the pool of experts that we can draw upon, and advance informed dialogue on complex defence and security issues. As we seek to stimulate increased research on defence and security issues in Canada, we are mindful of the need for a diverse spectrum of voices contributing to the conversation in this field.

NEW INITIATIVES

To enhance its relationship with and derive greater benefit from Canada's rich academic and analytic community, the Defence team will:

73. Increase investment in academic outreach to \$4.5 million per year in a revamped and expanded defence engagement program, including:
 - collaborative networks of experts;
 - a new scholarship program for Masters and Post-Doctoral fellows; and
 - an expansion of the existing expert briefing series and engagement grant program.



ADAPT

Canada's military must be agile, flexible and responsive in meeting the challenges and capturing the opportunities of our rapidly evolving world.

A NEW VISION FOR THE RESERVE FORCE

The Reserve Force is an integral component of the Canadian Armed Forces. Ninety-seven percent of Canadians live within a 45 minute drive of a Reserve unit. Reservists come from all walks of life including students, civil servants, labourers, business people, academics and former members of the Regular Force. These are, truly, citizen soldiers.

While the Reserve Force has a long history of making important contributions to the Canadian Armed Forces across the spectrum of operations, most recently during the Afghan conflict, fundamental changes are necessary for the Reserve Force to meet its full operational potential.

To this end, we will implement a new vision for the Reserve Force that will:

- enable Reserve Force units and formations to provide full-time capability through part-time service;



- ensure Reservists are a well integrated component of the total force; and
- appropriately train, prepare and equip Reservists in sufficient numbers to be ready to contribute to operations at home and abroad.

Whether a task or duty is conducted by a Regular or Reserve Force member, the result will be indistinguishable operational excellence. Progress towards this goal is already underway but must be broadened across the military to ensure a truly integrated Canadian Armed Forces that provides effective operational output.

The Canadian Armed Forces' ability to meet Canada's defence needs, now and into the future, will rely upon a Reserve Force that can generate **full-time capability through part-time service**. To achieve this objective,

FULL-TIME CAPABILITY THROUGH PART-TIME SERVICE

Reserve duties and schedules vary from person to person. While some contribute a few days per month, others are on full-time service. This flexibility allows Canadians to serve their country according to their personal circumstances. Full-time capability with a part-time service will require Reserve Force units and formations to bring together the contributions of these various part-time Canadian Armed Forces members to provide 24/7 defined readiness capability according to the new and enhanced roles assigned to them. This construct will allow Reservists to balance a vibrant civilian life and occupation with meaningful, part-time military service while enhancing the overall Canadian Armed Forces effectiveness.

Reserve Force units and formations will be tasked to perform specific full-time roles, some of which will be provided exclusively by the Reserves. A number of these roles will be new, such as cyber operators and Light Urban Search and Rescue, while others will build on previous success, such as information operations (including influence activities) and naval intelligence.

To maximize the operational output of the Canadian Armed Forces, **Reservists will be further integrated into the total force**. This includes providing more opportunities for Regular and Reserve Force members to train and operate together in Her Majesty's Canadian Ships, Battle Groups, Wings and deployed Joint Task Forces, in Canada and around the globe.

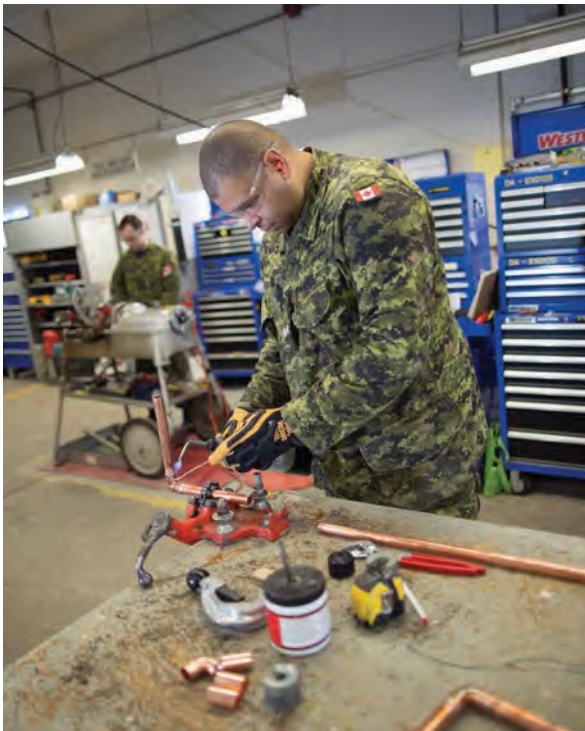
In recent decades, the Reserve Force has also been an integral component of deployed operations and has gained a wealth of experience conducting expeditionary duties. As part of the new vision the **Reserve Force will be tasked to deliver upon select deployed missions in a primary role**. This will include conducting missions that would benefit from their unique skills and strengths such as capacity building efforts.

To ensure that the Reserve Force can continue to provide Canadian citizen soldiers with flexible opportunities to serve their country, the **Reserve Force service model will be modernized**, including alignment with job protection legislation. Military members must have the flexibility to transition between the full- and part-time service as well as the ability to pursue training and opportunities that suit their career in the Canadian Armed Forces, whether participating in deployed operations or serving on week-ends and during the summer at the local Reserve Unit. Rigorous, targeted training also contributes to enhanced interoperability between the Regular and Reserve Force and ensures an integrated, deployable total force.

In recognition of these new roles and responsibilities, **Primary Reserve Force remuneration and benefits will be better aligned** with those of the Regular Force where the demands of service are similar. This will ensure Reserve Force members receive fair compensation for their service to Canada.

The Canadian Armed Forces is greatly enhanced by being able to employ the varied backgrounds and skills of Reservists. The prevalence of Reserve units across Canada, including in major urban centres, makes them extremely valuable as a means to tap into Canadian diversity, capitalizing on different ways of thinking and problem solving, and accessing the deep cultural knowledge resident in Canadian communities. Reservists bring a wealth of experience from their primary occupations that has allowed the Canadian Armed Forces to access in-demand skills and trades such as linguists and cyber professionals that would otherwise take years to develop in the Regular Force.

To continue to benefit from all the strengths of Canadian society and be successful in a highly competitive labour market, the **Reserve Force will dramatically improve the recruitment process** to ensure it is agile, flexible and responsive in meeting the needs of those who serve Canada through the Reserves. The Special Operations Forces will also examine establishing a Reserve sub-unit in a metropolitan area to access the valuable skills resident in large population centres that are well-suited to enhance the output of the military.



NEW INITIATIVES

To enhance the role and capabilities of the Reserve Force, the Canadian Armed Forces will:

74. Increase the size of the Primary Reserve Force to 30,000 (an increase of 1,500) and dramatically reduce the initial recruitment process from a number of months to a matter of weeks.
75. Assign Reserve Force units and formations new roles that provide full-time capability to the Canadian Armed Forces through part-time service, including:
 - Light Urban Search and Rescue;
 - Chemical, Biological, Radiological and Nuclear Defence;
 - Combat capabilities such as direct fire, mortar and pioneer platoons;
 - Cyber Operators;
 - Intelligence Operators;
 - Naval Security Teams; and
 - Linguists.
76. Enhance existing roles assigned to Reserve Force units and formations, including:
 - Information Operations (including Influence Activities);
 - Combat Support and Combat Service Support; and
 - Air Operations Support Technicians.
77. Employ the Reserve Force to deliver select expeditionary missions in a primary role such as Canadian Armed Forces capacity building.
78. Create an agile service model that supports transition between full- and part-time service and provides the flexibility to cater to differing Reserve career paths.
79. Align Primary Reserve Force remuneration and benefits with those of the Regular Force where the demands of service are similar.
80. Revise annuitant employment regulations to attract and retain more former Regular Force personnel to the Reserves.
81. Offer full-time summer employment to Reservists in their first four years with the Reserves commencing in 2018.
82. Work with partners in the federal government to align federal acts governing job protection legislation. Subsequently, we will work with provinces and territories to harmonize job protection for Reserves at that level.

STRENGTHENING CANADIAN COMMUNITIES BY INVESTING IN YOUTH

National Defence has a long and proud history of supporting youth through the Cadet and Junior Canadian Rangers Programs. The Cadet and Junior Canadian Rangers are the largest federally-sponsored youth programs in Canada and provide young Canadians aged 12 to 18 with an opportunity to participate in a variety of fun, challenging and rewarding activities while learning about the Canadian Armed Forces.

Cadets and Junior Canadian Rangers are encouraged to become active, responsible members of their communities and make valuable contributions to Canadian society through their environmental, citizenship and community activities. They also learn valuable life and work skills such as teamwork, leadership, citizenship, and values and ethics. These programs embrace Canada's multiculturalism and diversity and allow young Canadians opportunities to interact with a wide range of other youth across Canada and the world through international visits and exchanges. Focused on Indigenous youth across Canada, the Junior Canadian Rangers also incorporate the traditional knowledge and culture of their communities, including skills related to hunting, fishing, local languages, as well as music, dance, cooking and spiritual ceremonies.

Ultimately, the Cadet and Junior Canadian Rangers Programs offer Canadian youth a physically challenging, mentally stimulating, structured environment that promotes community and environmental responsibility as well as personal health and well-being. The Cadet and Junior Canadian Rangers programs are an important investment in our youth – many Cadets and Junior Canadian Rangers are high achieving students that go on to become Canada's future leaders. That is why National Defence is committed to expanding the reach of these important programs so more Canadian youth can experience these tremendous and positive youth development opportunities and continue to strengthen communities across Canada.

KEEPING PACE WITH TECHNOLOGICAL DEVELOPMENTS

Technology is a critical enabler of modern militaries and fundamental to every type of operation the Canadian Armed Forces is expected to conduct. That includes everything from search and rescue, humanitarian assistance, disaster relief, and peace support, to combat. We must keep pace with the rapid evolution of technology to ensure continued operational relevance, both to address threats from potential adversaries and to maintain our ability to operate alongside key allies.

Three categories of capabilities have become particularly critical to modern military operations – space, cyber and remotely piloted systems. While each provides important benefits on its own, they provide far more capability when used jointly as a system-of-systems, and properly integrated within the full suite of military capabilities.

SPACE CAPABILITIES

Space capabilities are critical to national security, sovereignty and defence. They have become an essential bulwark for Canadian Armed Forces operations. In concert with allies and partners, under the leadership of the Royal Canadian Air Force, Canada has built a robust program that contributes significantly to success in a wide range of missions.





THE RESPONSIBLE USE OF SPACE

Defence's development and use of space capabilities is carried out in accordance with domestic legislation, such as the *National Defence Act*, the *Remote Sensing Space Systems Act*, and the *Canadian Space Agency Act*, as well as relevant international law, including the Outer Space Treaty, the Limited Test Ban Treaty, and the Law of Armed Conflict.

We actively support Global Affairs Canada's participation in international diplomatic efforts to ensure that space does not become an arena of conflict.

For example, the Canadian Armed Forces uses the United States' Global Positioning System for navigation, to accurately select targets, and to help locate people in distress. Satellite communications are essential for the command and control of military operations, both in remote regions in Canada, and around the world. Intelligence, Surveillance and Reconnaissance satellites provide incredibly detailed images of otherwise inaccessible areas, including in the Arctic, in support of information and situational awareness requirements. Indeed, Intelligence, Surveillance and Reconnaissance satellites are vital to the Canadian Armed Forces' ability to monitor and control Canada's maritime approaches. Our space surveillance satellite, Sapphire, looks out into space to track debris and other threats to critical space assets. It contributes to the United States' Space Surveillance Network, which benefits all Canadians by reducing the risk of collisions that could take satellites offline.

As the importance of, and interest in, space has increased, new challenges have arisen. For example, the

risk of collision between satellites and other orbiting spacecraft or debris continues to increase as more objects are launched into space. This adds to the other rigours of operating in the space environment, such as harmful radiation, or space weather.

Moreover, largely due to the critical role space plays in enabling modern militaries, some states are developing a range of anti-satellite weapons (ASATs) that could potentially threaten our access to and use of space capabilities. These counter-space capabilities range from those having reversible effects, such as radio-frequency jammers, blinding lasers, and cyber operations, to those having permanent destructive effects such as earth-to-space missiles. Ground-based assets and infrastructure associated with satellites are also vulnerable to a variety of threats from physical or cyber attacks and jamming.

These threats do not necessarily mean that any state currently has the intention to attack Canadian space assets. However, it does mean that the Canadian Armed Forces must take its counter-space capabilities into account as it continues to develop the Canadian defence space program.

Space-related challenges are magnified by the fact that the international legal framework governing outer space continues to evolve. For instance, how close is too close when it comes to approaching military satellites? Should testing or using debris-causing counter-space capabilities be prohibited? Canada is providing leadership in promoting the peaceful use of space and fostering norms of responsible behaviour in space. The Defence team will continue to support the efforts of Global Affairs Canada in this important work.

Broad cooperation between Canada and the Five-Eyes community has been an enduring feature of Canada's space program. The Combined Space Operations Initiative (CSpO) is the centre of our allied efforts to enable and enhance cooperation. This initiative enables cooperation on military and defence space activities, with the aim of strengthening deterrence, improving the resilience of space systems on which Five-Eyes militaries rely, and optimizing resources across participating nations. Maintaining interoperability in space with key partners and allies is critically important to the success of our operations.

NEW INITIATIVES

To adapt to evolving challenges and opportunities in the space domain, the Defence team will:

83. Defend and protect military space capabilities, including by working closely with allies and partners to ensure a coordinated approach to assuring continuous access to the space domain and space assets.
84. Work with partners to promote Canada's national interests on space issues, promote the peaceful use of space and provide leadership in shaping international norms for responsible behaviour in space.
85. Invest in and employ a range of space capabilities, including space situational awareness, space-based earth observation and maritime domain awareness, and satellite communications that achieve global coverage, including in the Arctic. (For more detail on Defence investments in space capabilities, please see pages 38-39).
86. Conduct cutting-edge research and development on new space technologies in close collaboration with allies, industry, and academia to enhance the resilience of space capabilities and support the Canadian Armed Forces' space capability requirements and missions.

CYBER CAPABILITIES

Cyberspace is critical for the conduct of modern military operations, and is recognized as a domain of operations, like air, sea, land and space. The Canadian Armed Forces and other advanced militaries rely on secure networks to operate communications, intelligence and weapons systems. Modern information technology brings significant operational benefits, but also creates critical vulnerabilities.

The cyber threat environment is evolving rapidly. Our equipment platforms, from aircraft to armoured vehicles to ships, are highly networked. So are our personnel in the field. Potential adversaries see this as an opportunity. Strategic adversaries, both state and non-state, are constantly improving their ability to exploit our dependence on networks with increasingly sophisticated tools. And in cyberspace, significant effects can be achieved with relatively little investment.

Defence can be affected by cyber threats at home and abroad – from attempts to steal sensitive information from our internal networks, to cyber attacks on the Canadian Armed Forces on deployed operations, to the use of cyberspace by terrorist organizations to spread disinformation, recruit fighters and finance their operations. Indeed, there has been a steady increase in the number of state and non-state actors developing the capability to conduct disruptive cyber operations.

The Defence team works closely with the Communications Security Establishment, Public Safety Canada, Global Affairs Canada and Shared Services Canada on cyber issues. To date, this work has focused on strengthening the defence of important military systems, network monitoring and control, building the future cyber force, and integrating defensive cyber operations into broader military operations.

However, a purely defensive cyber posture is no longer sufficient. Accordingly, we will develop the capability to conduct active cyber operations focused on external threats to Canada in the context of government-authorized military missions. The employment of this capability will be approved by the Government on a mission-by-mission basis consistent with the employment of other military assets, and will be subject to the same rigour as other military uses of force. Cyber operations will be subject to all applicable domestic and international law, and proven checks and balances such as rules of engagement, targeting and collateral damage assessments.



NEW INITIATIVES

To better leverage cyber capabilities in support of military operations, the Defence team will:

87. Protect critical military networks and equipment from cyber attack by establishing a new Cyber Mission Assurance Program that will incorporate cyber security requirements into the procurement process.
88. Develop active cyber capabilities and employ them against potential adversaries in support of government-authorized military missions.
89. Grow and enhance the cyber force by creating a new Canadian Armed Forces Cyber Operator occupation to attract Canada's best and brightest talent and significantly increasing the number of military personnel dedicated to cyber functions.
90. Use Reservists with specialized skill-sets to fill elements of the Canadian Armed Forces cyber force.

REMOTELY PILOTED SYSTEMS

Remotely Piloted Systems, popularly known as drones – operating on land, in the air and under water – offer great potential in helping Canada meet its defence needs, at home and abroad. They are important tools that help remove humans from dangerous situations, and permit operations in severe and inhospitable environments. Remotely piloted systems can be used effectively for a wide range of military applications, from ground systems used as bomb disposal robots to undersea systems for conducting acoustic surveillance, mapping or the surveillance of 'choke-points', to naval mine countermeasures. Aerial systems can provide temporary communications relay during a disaster relief mission when regular networks have been damaged, enable long-range coastal and Northern surveillance, and provide a targeting and precision strike capability.

As the development of remotely piloted systems increases, this technology is proliferating among potential adversaries. Expanded proliferation, combined with technological advancement, will mean that Canada is faced with a variety of possible threats from remotely piloted systems. These range from non-state actors using unsophisticated and commercially available remotely piloted aerial systems to conduct reconnaissance, to advanced potential state adversaries developing high-end, weaponized systems. In response, Canada will require the appropriate capabilities to identify and defend against these burgeoning threats.



As with any technology used in operations, the Canadian Armed Forces will ensure that its use of remotely piloted systems is consistent with domestic and international law. Operations will be conducted in strict accordance with all the controls, procedures and rules of engagement that govern the use of force with any other weapon. We also recognize that the rapid evolution of technology has the potential to lead to increasing levels of autonomy in remotely piloted systems. We will continue to support Canada's engagement and leadership in international policy discussions on this issue in multilateral fora. The Canadian Armed Forces is committed to maintaining appropriate human involvement in the use of military capabilities that can exert lethal force.

NEW INITIATIVES

To better leverage the unique benefits associated with remotely piloted systems, the Defence team will:

91. Invest in a range of remotely piloted systems, including an armed aerial system capable of conducting surveillance and precision strikes (For more details on planned investments in remotely piloted systems, please see pages 38-39).
92. Conduct research and development of remotely piloted land, sea and aerial capabilities, in close collaboration with industry and academia.
93. Promote the development of international norms for the appropriate responsible and lawful use of remotely piloted systems, in support of Global Affairs Canada.

MODERNIZING THE BUSINESS OF DEFENCE

Whether meeting its environmental responsibilities, leveraging best management practices from the private sector or striving to continually improve efficiency and effectiveness, we will work tirelessly to modernize the business of defence. A modern “business of defence” maximizes operational output and ensures that every defence dollar is put to the best use in achieving our objectives. The Defence team is committed to continuous improvement and is on track to meet its goal to achieve \$750 million in efficiencies and enhanced productivity by 2019-20.

IMPROVING DEFENCE PROCUREMENT

Effective defence procurement is vital to ensuring the Canadian Armed Forces is equipped and ready to fulfill the important missions we ask of it. It is also essential for ensuring public trust.

We must get it right.

While 90 percent of projects are delivered within their planned scope and budget, defence procurement has undoubtedly faced challenges. In particular, a small segment of complex, high-value equipment projects have faced significant challenges. Cumbersome decision-making and approval processes have introduced undue delays. Accountability among departments has been diffuse and at times unclear. Procurement professionals would benefit from greater education, training and tools. Capability requirements have not always been clearly communicated to industry and Canadians. Early cost estimates have sometimes proven problematic, creating financial pressures and compromises to the final capability delivered. And perhaps most challenging, 70 percent of all projects have not been delivered on time.



Industry representatives should not have to deal with burdensome and excessively complicated approval processes that impact their ability to plan investments and effectively and efficiently respond to the Government’s requirements. It is also important for industry to have a more transparent relationship with government in order to deliver projects that meet shared expectations and respect project timelines.

The Government of Canada recognizes the challenges associated with military procurement and is working closely with partners across government and industry to examine every aspect of the procurement cycle in order to find solutions.

Despite recent improvements, the timely delivery of projects remains a significant issue and more must be done. There are a number of steps that can be taken immediately to help streamline defence procurement and build on recent measures to improve procurement across government. These measures will help keep us on track with planned budget profiles and deliver new capabilities when they are needed.

CANADIAN DEFENCE INDUSTRY

The Canadian defence industry is critical to the ability of the Canadian Armed Forces to deliver on the defence mandate. Industry provides the military with broad defence capabilities including satellites, a range of aerospace technologies, naval shipbuilding and various army vehicles. In addition to support services these contributions from industry directly enable the military to succeed in everything they do. Close cooperation between the Canadian Armed Forces and industry is also necessary to ensure that the Canadian Armed Forces has access to the advanced technologies and innovation that allows Canada to keep pace with allies and an operational advantage over adversaries.

Cooperation with industry not only enhances the Canadian Armed Forces’ ability to deliver on its mandate with core military capability, but provides Canadians with well-paying jobs, and firms with important export opportunities. The defence sector employs over 60,000 Canadians and contributes over \$10B annually to GDP. Defence industry employees’ average annual salaries are almost 60 percent above the average of other manufacturing sector employees and close to 60 percent of defence sector sales are exports. This vital sector also helps keep Canada’s economy vibrant and innovative with over 30 percent of defence occupations in innovation-relevant science and technology-related fields.

NEW INITIATIVES

To streamline defence procurement, better meet the needs of the military, and deliver projects in a more timely manner, the Defence team will:

94. Reduce project development and approval time in the Department of National Defence by at least 50 percent for low-risk and low-complexity projects through improved internal coordination, increased delegation and strengthened approval processes.
95. Work with partners to increase the Department of National Defence's contracting authorities for goods up to \$5 million by 2018, allowing over 80 percent of defence procurement contracts to be managed by Defence.
96. Use procurement to incentivize Canadian research and development in important and emerging technological areas.
97. Increase the transparency and timeliness of communication to the defence industry associations, including instituting meetings between the Department of National Defence and Canadian industry through the Defence Industry Advisory Group and other fora.
98. Grow and professionalize the defence procurement workforce in order to strengthen the capacity to manage the acquisition and support of today's complex military capabilities. This includes the addition of new procurement specialists and enhanced training and professional accreditation for defence procurement personnel.
99. Provide Canadians with regular updates on major project and programs to increase transparency, communicate challenges, and measure performance, including by publishing National Defence's Investment Plan.
100. Ensure that Canadian environmental standards are adhered to in all procurement projects.

GREENING DEFENCE

A clean environment and sustainable economy are priorities for the Government of Canada. The Defence team has a key role to play in helping advance these important objectives as one of the largest employers and maintainers of equipment and infrastructure. With the responsibility to manage more than two million hectares of land, thousands of buildings, jetties and training areas, the Defence team must be at the centre of the Government's commitment to be a responsible steward of the environment.

We work hard every day to be good stewards of the environment. Great progress has been made in remediating sites formerly contaminated by military activities and work is ongoing to proactively mitigate the environmental impacts of military activities going forward. The Defence team is also doing its part to protect species at risk on base lands, having signed a Memorandum of Understanding with Environment and Climate Change Canada and Parks Canada, and providing guidance to personnel on fulfilling the requirements of the *Species at Risk Act*.

The Defence team has a plan to reduce greenhouse gas emissions by 40 percent from the 2005 levels by 2030 in support of the Federal Sustainable Development Strategy

THE DEFENCE TEAM'S COMMITMENT TO ADDRESS CLIMATE CHANGE

National Defence represents more than half of the Government of Canada's greenhouse gas emissions. Consequently, it has a critical role to play in helping the Government of Canada meet its climate objectives.

National Defence is committed to meet its Federal Sustainable Development Strategy goal of reducing its emissions by 40 percent from the 2005 levels by 2030 (excluding military fleets).



goal of achieving a low-carbon government. This includes seeking out opportunities to purchase clean power such as in Alberta where, as of January 2017, 90 percent of electricity supplying our installations is now coming from renewable sources. We are also investing in Energy Performance Contracts, which enable the department to make use of private sector innovation and capital by allowing energy service providers to identify and implement energy efficiencies and get paid back through energy savings. The range of measures available through Energy Performance Contracts include lighting retrofits, modernized central heating plants, building upgrades as well as improved operating practices.

All of this important work is supported by improvements to how the Defence team measures and reports on its environmental performance. Effectively greening the Defence team depends on having an accurate, quantifiable picture of our footprint. Military operations and environmental protection and stewardship are not mutually exclusive – ensuring that the environmental impact of defence activities is minimized is paramount to the success of operations, whether at home or abroad.

NEW INITIATIVES

To ensure it supports the low-carbon government targets outlined in the Federal Sustainable Development Strategy, the Defence team will:

101. Reduce greenhouse gas emissions by 40 percent from the 2005 levels by 2030, including through the following measures:
 - Investing \$225 million by 2020 in a wide range of infrastructure projects across Canada to reduce our carbon footprint;
 - Transitioning 20 percent of non-military vehicle fleets to hybrid and electric by 2020;
 - Requiring new construction and major re-capitalization projects to meet industry-recognized standards for high performing buildings such as the Silver Leadership in Energy and Environmental Design (LEED) standard or equivalent;
 - Expanding the use of Energy Performance Contracts to implement energy efficiencies on bases and wings across Canada; and
 - Installing electric charging stations at new or retrofitted buildings for personnel to use with defence fleets and/or personal vehicles.
102. Examine alternative energy options and their potential use for operations.



MODERNIZING DEFENCE INFRASTRUCTURE

The Defence team manages the largest infrastructure portfolio in the federal government, including over 20,000 buildings, 5,500 kilometers of roads and 3,000 kilometers of water works. This infrastructure portfolio is worth roughly \$26 billion and the maintenance, operation and infrastructure workforce accounts for about 10 percent of the defence budget in any given year. The effective management of infrastructure is a critical enabler for Canadian Armed Forces operations, whether it be the bases and installations where the military train, prepare for and execute their important missions, the vast support network required to maintain and operate equipment, or housing for military personnel and their families.

Great progress has been made in improving the operation of defence infrastructure by consolidating the portfolio from nine individual operators to one. While this model has only been in place since April 2016, having a single point of responsibility and accountability has already reduced administrative burdens, increased efficiency, and enhanced responsiveness to operational needs. However, further progress can still be made to improve how we manage infrastructure, in order to better leverage innovative practices and maintain an affordable and sustainable portfolio supported by the right workforce.

We will continue to modernize our infrastructure to improve efficiency, reduce greenhouse gas emissions, and support military personnel. Efforts will be focused on properties that are operationally relevant and make effective use of space and land. The adoption of a centrally-managed approach provides us with a greater understanding and visibility of our infrastructure. We will therefore be in a better position to consolidate assets with a similar function and, as a result, accelerate the disposal of under-



used buildings that do not meet our needs. This will help us reduce operating costs and liabilities. All these efforts will provide opportunities for First Nations and local businesses to take part in construction contracts or demolition projects.

In order to meet the future infrastructure needs of the Canadian Armed Forces, we will explore opportunities to harness private sector innovation and expertise. This will include careful consideration of alternative delivery models, such as public-private-partnerships, where there is a strong business case and demonstrated value for Canadians. This will provide valuable access to the skills, capital, and best practices of the private sector, while allowing the Defence team to focus on its core functions. We will explore these opportunities on a case-by-case basis, in consultation with employees, stakeholders, local communities and public sector unions.

NEW INITIATIVES

To modernize the management of the real property portfolio to better serve defence and free up personnel to perform military tasks, the Defence team will:

103. Dispose of underutilized or obsolete buildings. This will improve the efficiency of the infrastructure portfolio, while at the same time help us accelerate the reduction of greenhouse gas emissions.
104. Improve infrastructure on bases and wings, including housing for Canadian Armed Forces personnel. In doing so, we will explore ways to partner with the private sector and will consult with public sector unions.

INNOVATION FOR DEFENCE EXCELLENCE AND SECURITY (IDEaS)

Innovative technology, knowledge, and problem solving are critical for Canada and its allies to mitigate new threats, stay ahead of potential adversaries, and meet evolving defence and security needs, while generating economic benefits for Canada.

In the past, defence innovation was often driven by government research labs. In today's knowledge economy, technological development and innovation are more often generated by the private sector and academia. Further, the nature of conflicts and threats is rapidly evolving.

In this new environment, Canada's military needs a fundamentally new approach to innovation that allows it to better tap into the extraordinary talent and ingenuity resident across the country. The Innovation for Defence Excellence and Security program, or IDEaS, will launch a number of coordinated new initiatives that will transform the way we generate solutions to complex problems.

IDEaS will establish research clusters to stimulate collaboration and the free flow of ideas that are so critical to innovation. These clusters will bring together academics, industry and other partners to form collaborative innovation networks. Areas for advanced research and development include surveillance, cyber tools for defence, space, alternative fuels, remotely piloted systems, data analytics, and counter-improvised explosive device solutions. A critical area for urgent research is the human dimension of our work, including treatments for mental health and operational stress injuries.

Competition is also an effective way to stimulate innovation. The Innovation for Defence Excellence and Security

program includes a new commitment to “compete the idea” and turn to innovators in the private sector or academia to seek viable solutions. This will allow innovators to approach challenges creatively from their own unique perspectives.

IDEaS will introduce flexible new procurement tools that allow Defence to commit early in the development process to being the first customer for promising new ideas. This will create an environment where risk is shared more equally between Defence and its innovation partners. The ability to develop and test solutions throughout their development will allow Canadian industry to field test their products with the Canadian Armed Forces to ensure that new capabilities or approaches meet the needs of the military and give Canadian companies the opportunity to participate in global markets.

The Defence team will work more closely with Innovation, Science and Economic Development Canada to align closely with Canada’s broader Inclusive Innovation Agenda, particularly as it relates to its objectives to grow companies and accelerate growth, encourage an entrepreneurial and creative society, leverage global scientific excellence, and establish world-leading research clusters.

NEW INITIATIVES

To transform defence innovation in Canada, the Defence team will:

105. Invest \$1.6 billion over the next 20 years to implement the new Innovation for Defence Excellence and Security (IDEaS) program, including:

- Creating clusters of defence innovators (academics, industry, and other partners) to conduct leading-edge research and development in areas critical to future defence needs;
- Holding competitions that invite innovators to present viable solutions to specific defence and security challenges; and
- Implementing flexible new procurement mechanisms that allow Defence to develop and test ideas and the ability to follow through on the most promising ones with procurement.





ENHANCING ARCTIC CAPABILITY

Spanning three Territories and stretching as far as the North Pole, Canada's North is a sprawling region, encompassing 75 percent of the country's national coastlines and 40 percent of its total land mass. The sheer expanse of Canada's North, coupled with its ice-filled seas, harsh climate, and more than 36,000 islands make for a challenging region to monitor – particularly as the North encompasses a significant portion of the air and maritime approaches to North America.

MODERNIZATION OF THE NORTH WARNING SYSTEM (NWS)

The NWS is a chain of unmanned radar stations within the Arctic that provides aerospace surveillance of Canadian and United States Northern approaches.

While the current NWS is approaching the end of its life expectancy from a technological and functional perspective, unfortunately the range of potential threats to the continent, such as that posed by adversarial cruise missiles and ballistic missiles, has become more complex and increasingly difficult to detect.

To this end, Canada and the United States have already launched bilateral collaboration to seek an innovative technological solution to continental defence challenges including early warning. Studies are ongoing to determine how best to replace this important capability as part of the overall NORAD modernization.

Although Canada's North is sparsely populated, the region is spotted with vibrant communities, many inhabited by Canada's Indigenous populations. These communities form an integral part of Canada's identity, and our history is intimately connected with the imagery and the character of the North. Economically, Northern Canada is also home to considerable natural resources, industries, and growing tourism – with the potential for further exploration, including transit through Canada's Arctic Archipelago.

The Defence team's extensive Northern footprint includes more than 800 buildings at over 60 sites. Joint Task Force North, headquartered in Yellowknife with detachments in Whitehorse and Iqaluit, anchors the Canadian Armed Forces' Northern presence. The Canadian Armed Forces, including through NORAD, operates from a number of locations in the North, including in Inuvik, Yellowknife, Rankin Inlet, Iqaluit, and Goose Bay, which also help support the Northern deployment of fighter aircraft. The Canadian Armed Forces also shares a number of facilities with federal partners, including a state-of-the-art cold weather training facility at Resolute Bay, a signals intelligence facility at Canadian Forces Station Alert – the northernmost permanently inhabited facility in the world – and a high Arctic weather station at Eureka. In addition, work is ongoing to complete the Nanisivik Naval Facility which will support operations of the new Arctic Offshore Patrol Ships, and other government maritime vessels.

Canada's contributions to regional Arctic security form a core part of the Canada-United States defence relationship. Nowhere is this more apparent than in joint efforts to renew the North Warning System (NWS) and modernize elements of NORAD. As the security dynamics in the Arctic evolve, Canada and the United States will continue to work side by side to secure our shared northern air and maritime approaches.

The Arctic is also becoming more relevant to the international community. Climate change is increasingly leading to a more accessible Arctic region. While operating in the region will remain a difficult challenge for the foreseeable future, Arctic and non-Arctic states alike are looking to benefit from the potential economic opportunities associated with new resource development and transportation routes.

NATO has also increased its attention to Russia's ability to project force from its Arctic territory into the North Atlantic, and its potential to challenge NATO's collective defence posture. Canada and its NATO Allies have been clear that the Alliance will be ready to deter and defend against any potential threats, including against sea lines



of communication and maritime approaches to Allied territory in the North Atlantic.

The Canadian Armed Forces, through NORAD, has a duty to monitor and control all of Canada's territory and approaches. In order to fully execute this mission and provide effective aerospace warning and control for all of North America, Canada will expand the Canadian Air Defence Identification Zone (CADIZ) to cover the entire Canadian Arctic archipelago. The current CADIZ is based on the capabilities of the Distant Early Warning (DEW) Line radars which were replaced in the late 1980s by the North Warning System. Despite this change to NORAD's surveillance capability, the CADIZ boundary remains unchanged. An expanded CADIZ will increase awareness of the air traffic approaching and operating in Canada's sovereign airspace in the Arctic.

The Canadian Armed Forces will also introduce a number of new Arctic-focused capabilities including naval vessels such as the Arctic Offshore Patrol Ships, space-based surveillance assets such as the RADARSAT Constellation Mission, polar satellite communications, Remotely Piloted Aerial Systems, operational support sites including the Nanisivik Naval Facility, and a family of new ground vehicles capable of navigating the harsh landscape of Canada's North. We will integrate these

capabilities into a 'system-of-systems' approach to Arctic surveillance, comprising air, land, sea, and space assets connected through modern technology.

While operating in Canada's North, we often work in close partnership with other federal, territorial, and local partners. As such, we will leverage our new capabilities to help build the capacity of whole-of-government partners to help them deliver their mandates in Canada's North, and support broader Government of Canada priorities in the Arctic region.

As Indigenous communities are at the heart of Canada's North, we will also work to expand and deepen our extensive relationships with these communities, particularly through the Canadian Rangers and Junior Canadian Rangers. This will also include engaging local populations as part of routine operations and exercises.

AIR DEFENCE IDENTIFICATION ZONES

Air Defence Identification Zones (ADIZ) are tools used by states to monitor and identify aircraft approaching their territory and assess possible threats to national security. An ADIZ typically begins at the edge of sovereign airspace and extends outward into international airspace.

The Canadian Air Defence Identification Zone (CADIZ) is part of a larger ADIZ surrounding the continent, and is used by NORAD to execute its primary mission of aerospace control and warning for North America.

The establishment of an ADIZ provides notice to aircraft that they may be intercepted if they do not notify Canadian authorities of their entry and exit through CADIZ.

NEW INITIATIVES:

To enhance the Canadian Armed Forces' ability to operate in the Arctic and adapt to a changed security environment, the Defence team will:

106. Enhance the mobility, reach and footprint of the Canadian Armed Forces in Canada's North to support operations, exercises, and the Canadian Armed Forces' ability to project force into the region.
107. Align the Canadian Air Defence Identification Zone (CADIZ) with our sovereign airspace.
108. Enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces.
109. Collaborate with the United States on the development of new technologies to improve Arctic surveillance and control, including the renewal of the North Warning System.
110. Conduct joint exercises with Arctic allies and partners and support the strengthening of situational awareness and information sharing in the Arctic, including with NATO.

ACT

Everything the Defence team does to better anticipate threats, understand the complex security environment and adapt to a rapidly changing world is done with a single objective in mind: ensuring the Canadian Armed Forces achieves success on operations. The Canadian Armed Forces is fundamentally focused on delivering results, whether it is battling through harsh conditions to save someone in distress in the Canadian Arctic, working with other Canadian government partners to help deliver life-saving assistance after a natural disaster at home or abroad, or engaging in combat to defeat potential adversaries or protect vulnerable populations from those seeking to harm them, in the context of United Nations or other peace operations.

Given the uncertainty and complexity of the global security environment, Canada will continue to invest in a multi-purpose, combat-ready force that is able to act decisively and deliver results across the full spectrum of operations. The roles and missions of the Canadian Armed Forces have traditionally been characterized in geographic terms, with distinct lines drawn between domestic, continental and international responsibilities. The Canadian Armed Forces' commitment to defending

Canada and the broader North American continent and contributing to international peace and security will be stronger than ever. However, making sharp distinctions among the missions that fulfill these roles is becoming less and less relevant in the new security environment. The rise of borderless challenges such as terrorism and cyber attacks, the increasingly strong connection between global stability and domestic security and prosperity, and the fact that the Canadian Armed Forces is as likely to support broader whole-of-government efforts abroad as it is at home, mean that its three traditional roles are becoming more and more intertwined.

CONCURRENT OPERATIONS

At any given time, the Government of Canada can call upon the Canadian Armed Forces to undertake missions for the protection of Canada and Canadians and the maintenance of international peace and stability. It will often call upon the Canadian Armed Forces to deploy on multiple operations at the same time. This policy ensures the Canadian Armed Forces will be prepared to simultaneously:

- defend Canada, including responding concurrently to multiple domestic emergencies in support of civilian authorities;
- meet its NORAD obligations, with new capacity in some areas;
- meet commitments to NATO Allies under Article 5 of the North Atlantic Treaty; and
- contribute to international peace and stability through:
 - o two sustained deployments of ~500-1500 personnel in two different theatres of operation, including one as a lead nation;
 - o one time-limited deployment of ~500-1500 personnel (6-9 months duration);
 - o two sustained deployments of ~100-500 personnel;
 - o two time-limited deployments (6-9 months) of ~100-500 personnel;
 - o one Disaster Assistance Response Team (DART) deployment, with scaleable additional support; and
 - o one Non-Combatant Evacuation Operation, with scaleable additional support.





CANADIAN ARMED FORCES CORE MISSIONS

The eight new core missions of the Canadian Armed Forces must reflect this reality. Instead of being simply divided geographically, they are now also plotted against the spectrum of military options. These missions are all critical to delivering on Canada's defence objectives, and are not listed in order of priority.

At one end of the spectrum are traditional defence tasks. This includes working with allies and partners to prevent potential adversaries from causing harm and to deter hostile actions against Canada and its allies. It also involves being prepared to engage in combat if prevention and deterrence fail.

At the other end of the spectrum are activities that we undertake in support of other government departments to respond to emergencies in which immediate or prompt action is required to save lives and reduce human suffering.

And between these two poles on the spectrum are a wide range of operations, including peace support, as well as those in support of other government departments – from responding to terrorist threats in Canada or supporting fisheries enforcement off our shores, to capacity building, to evacuating Canadians to remove them from danger far from home.

To ensure Canada remains strong at home, secure in North America and engaged in the world, the Canadian Armed Forces will:

Detect, deter and defend against threats to or attacks on Canada

Detect, deter and defend against threats to or attacks on North America in partnership with the United States, including through NORAD

Lead and/or contribute forces to NATO and coalition efforts to deter and defeat adversaries, including terrorists, to support global stability

Lead and/or contribute to international peace operations and stabilization missions with the United Nations, NATO and other multilateral partners

Engage in capacity building to support the security of other nations and their ability to contribute to security abroad

Provide assistance to civil authorities and law enforcement, including counter-terrorism, in support of national security and the security of Canadians abroad

Provide assistance to civil authorities and non-governmental partners in responding to international and domestic disasters or major emergencies

Conduct search and rescue operations



Detect, deter and defend against threats to or attacks on Canada

Defending Canada and Canadians is the Canadian Armed Forces' top priority. Above all else, the Canadian Armed Forces must ensure the defence and security of Canada. This begins with the surveillance and control of Canadian territory and approaches, with an increasing focus on the Arctic. The Canadian Armed Forces will provide constant monitoring of Canada's approaches and have high readiness assets available at all times to respond in the event potential threats are detected.

The Canadian Armed Forces will develop and maintain a robust capacity to respond concurrently to multiple domestic emergencies.

Detect, deter and defend against threats to or attacks on North America in partnership with the United States, including through NORAD

The Canadian Armed Forces will continue to work within NORAD to conduct continental operations to defend against shared continental threats and address common challenges. Canada will ensure it has the military capabilities required to meet its NORAD obligations, including sufficient mission-ready fighter aircraft, and enhance our capacity to provide continuous aerospace and maritime domain awareness and aerospace control.

Additionally, the Tri-Command Framework brings together NORAD and our two national commands – the Canadian Joint Operations Command (CJOC) and United States Northern Command – to strengthen North

American defence and security. Beyond that, Canadian and American services are well-integrated and interoperable, both from a materiel and doctrinal perspective. As Arctic states, Canada and the United States have a shared interest in ensuring the Arctic remains safe and stable. Canada will cooperate with the United States on Arctic security and will examine the requirements to meet all-perils threats to the continent through NORAD modernization. This will also involve working collaboratively to enhance shared situational awareness and early warning in the northern environment.

Lead and/or contribute forces to NATO and coalition efforts to deter and defeat adversaries, including terrorists, to support global stability

Combating threats to global stability reinforces security and prosperity at home. The Canadian Armed Forces will be prepared to operate with its close allies and partners to defeat armed adversaries and respond to instability, around the world and in international waters. The Canadian Armed Forces will work with allies to identify, confront and defeat trans-regional threats, including from violent extremist organizations.

As a founding member of NATO, Canada has enduring obligations to support and defend Allies who are threatened by any potential adversary and to contribute to continued security, while preserving stability in the Euro-Atlantic region. The Canadian Armed Forces will contribute actively to collective defence. In 2016, Canada embarked on a leadership role in the name of deterrence, acting as framework nation as part of NATO's enhanced Forward Presence in Central and Eastern Europe.



Lead and/or contribute to international peace operations and stabilization missions with the United Nations, NATO and other multilateral partners

Canada has made a firm commitment to increase its support to United Nations peace operations. Canada will focus on four core elements, undertaken as a whole-of-government effort, by:

- providing Canadian personnel and training for United Nations peace operations;
- strengthening Canadian support for conflict prevention, mediation, and peace building efforts;
- advancing the role of women and youth in the promotion of peace and security; and
- supporting United Nations reform efforts to make peace operations more effective.



Peace support efforts by the Canadian Armed Forces will be complementary to broader government objectives and whole-of-government efforts to prevent conflict, stabilize fragile situations and combat threats. The Canadian Armed Forces will collaborate closely with other relevant departments and agencies on a more integrated approach to operational-level planning of peace support and stabilization missions. The Canadian Armed Forces will be prepared to make tangible, value-added contributions to United Nations peace operations in all four core elements. This could include the deployment of leadership and ground troops, as well as the provision of critical enabling capabilities. To improve the performance and professional standards of United Nations peace operations, the Canadian Armed Forces will enhance the ability of others to contribute to peace operations through training and capacity building efforts and will contribute to key positions both at United Nations Headquarters and within peace operations to help effect change. Canada will also continue supporting the prevention of child soldiers.

The Canadian Armed Forces will develop stronger relationships with other multilateral partners, such as the European Union, regional actors, such as the African Union, and like-minded states, like those of the *Francophonie*, to further enhance global capacity to promote peace and stability.

For Canada, addressing challenges to international stability through United Nations-led or United Nations-sanctioned structures presents a number of advantages: It facilitates burden-sharing; diffuses risk; reinforces the rules-based international order; and allows Canada and other countries to contribute based on their particular strengths and capabilities for collective benefit.

CHILD SOLDIERS

The employment of Child Soldiers is a heart-breaking but persistent feature of modern conflict around the world. Although their use is considered a war crime, it is not a new trend.

Canada supports the prevention of child soldiers. This approach is necessarily multi-faceted and requires close coordination across government, as well as working with organizations such as the Roméo Dallaire Child Soldiers Initiative to respond to the unique implications of dealing with Child Soldiers.

In addressing this serious issue, the Canadian Armed Forces will be guided by six principles:

- Understanding the context for conducting military operations within Human Rights and International

Humanitarian Law, and determining and applying appropriate Rules of Engagement;

- The legal requirement for reporting the six grave violations (UNSCR 1261 (1999)) in respect of Child Soldiers;
- Determining the logistical implications and considerations of handling and treatment of Child Soldiers
- Ensuring proper physical and psychological preparation of Canadian Armed Forces personnel for operations that may involve dealing with Child Soldiers;
- Having an appropriate gender mix within the deployed force to facilitate the response to encountering Child Soldiers; and
- Ensuring the provision of early and accurate public information about all encounters with Child Soldiers.



WOMEN, PEACE AND SECURITY

The United Nations Security Council adopted its first resolution on women, peace and security in October 2000. United Nations Security Council Resolution (UNSCR) 1325 and the seven subsequent resolutions seek to address the disproportionate and unique impact of armed conflict on women and the key role they can play in conflict management, conflict resolution, and sustainable peace. The women, peace, and security framework rests on four pillars, namely: prevention of conflict and of violence against women, active and meaningful participation of women in peace and security activities, protection of women's and girls' human rights including against sexual violence, and women's involvement in, and access to, relief and recovery efforts. Women's participation is vital to achieving and sustaining peace, and has a tangible impact on the operational effectiveness of our forces. Women broaden the range of skills and capacities among all categories of personnel, improve the delivery of peace and security tasks, enhance situational awareness and early warning by facilitating outreach to women in communities, and improve a military force's accessibility, credibility and effectiveness in working among local populations. Lastly, when women are included, peace processes are more likely to be successful and peace agreements are more likely to endure.

Among our allies, the Canadian Armed Forces is regarded as a leader of military gender integration. The last occupation to be closed to women, that of submariner, was opened to both sexes in 2001 and women participate fully and meaningfully in all aspects of

domestic and international missions. The Canadian Armed Forces has developed and implemented policies of equal opportunity and is making considerable effort to attract greater numbers of qualified women, and to identify and address potential barriers to members of Defence. Although challenges remain in this regard, the Canadian Armed Forces is undertaking ongoing efforts to address them. As an example, the Canadian Armed Forces Diversity Strategy applies to all military members and key institutional processes including programs, policies, directives, procedures and doctrines that direct and influence the Canadian Armed Forces and its operations.

The Canadian Armed Forces will continue to integrate gender perspectives into the analysis, planning, execution and evaluation of all operations. These efforts are built upon UNSCR 1325 and its subsequent Resolutions. Incorporating gender perspectives into the preparation, conduct, and evaluation of missions enables the Canadian Armed Forces to increase operational effectiveness and enhance understanding of the challenges faced by populations at risk in areas of armed conflict or natural disaster. Military members receive continuing education and training to raise awareness of the differential impact of conflict, natural disasters and humanitarian emergencies on women, men, girls and boys. The Canadian Armed Forces also promotes the role of women in international peace and security within organizations such as NATO. Military members are taught from basic training onwards to adhere to the highest standards of ethical conduct in keeping with Canadian and international human rights.

Engage in capacity building to support the security of other nations and their ability to contribute to security abroad

Canada has a long history of providing expertise to help partner nations strengthen the professional capacity of their defence and security forces. The Canadian Armed Forces will leverage its world-class ability to train and assist foreign military forces and security partners to continue this tradition both in the field and here in Canada – at institutions such as the Peace Support Training Centre in Kingston, Ontario. Bolstering the capacity of others not only contributes to international stability, but also provides Canada with a valuable opportunity to exhibit leadership abroad and promote key Canadian values such as inclusion, accountable governance, gender equality and respect for diversity and human rights.

The scope of capacity building is determined on a mission-by-mission basis and can include training, advice, and assistance for partner forces including lethal and non-lethal aid. The Canadian Armed Forces will work with Global Affairs Canada to ensure capacity building efforts are always focused on trusted bilateral partners that have demonstrated a clear commitment to human rights and regional and global stability.

Provide assistance to civil authorities and law enforcement, including counter-terrorism, in support of national security and the security of Canadians abroad

The Canadian Armed Forces will be prepared to respond to requests from the government and to assist other government departments and law enforcement agencies in support of Canada's national security and the security of Canadians abroad. In Canada, this could include a range of operations, including responding to terrorist threats, providing security support to a major event, or responding to a Chemical, Biological, Radiological, Nuclear, and Explosive (CBRN-E) incident. The Canadian Armed Forces may also conduct such operations in an international context, such as engaging in counter-narcotics operations, counter-terrorism operations, and undertaking non-combatant evacuations. Fulfilling this core mission will be facilitated by an increase in the size and capabilities of Canadian Special Operations Forces.

Provide assistance to civil authorities and non-governmental partners in responding to international and domestic disasters or major emergencies

As natural disasters and weather-related emergencies grow in frequency and severity, they will bring with them an increasing need for Canadian Armed Forces support. At home, the Canadian Armed Forces stands ready to respond to requests from civil authorities in cases where their capacity to respond has been overwhelmed. Similarly, humanitarian assistance and disaster relief abroad remain a priority for the Government of Canada and the Canadian Armed Forces is ready to assist as required, supporting other government departments, international aid organizations, and local governments during international emergency response. The Canadian Armed Forces Disaster Assistance Response Team will be critical to this effort.

In addition to responding to natural disasters, the Canadian Armed Forces may be called upon to provide military support to civilian organizations in the wake of a major disruption to or attack on critical infrastructure, including a catastrophic cyber attack on vital networks.



THE DISASTER ASSISTANCE RESPONSE TEAM (DART)

The DART is a diverse, multidisciplinary military organization designed to deploy on short notice anywhere in the world in response to situations ranging from natural disasters to complex humanitarian emergencies. The DART is one component of the Government of Canada's toolkit for response to such crises abroad and deploys on advice from Global Affairs Canada in partnership with the Defence team.

The DART is equipped to conduct emergency relief operations for a limited period until national and international aid agencies are in a position to provide long-term help. The DART does not compete with these organizations; it complements their activities. The DART is not designed to provide first response services, such as search and rescue or emergency trauma care, but rather critical needs including: water purification, primary medical care and engineering help. DART personnel who belong to Canadian Armed Forces units across Canada, train together regularly and keep themselves ready to mobilize quickly. The DART also includes civilian advisors who provide critical civil-military liaison, policy and humanitarian advice.

The scalability and multidisciplinary nature of the DART is one of its greatest assets and will be maintained.



Conduct search and rescue (SAR) operations

The Canadian Armed Forces will conduct aeronautical search and rescue in support of people in distress within its area of responsibility, as well as help coordinate maritime search and rescue alongside the Canadian Coast Guard. Search and rescue is a shared responsibility across all levels of government and is delivered with the support of the private sector and thousands of volunteers – the Canadian Armed Forces plays a vital role within this broader team.

Additionally, the ongoing multi-year launch and operation of the Medium Earth Orbit Search and Rescue (MEOSAR) satellite capability, of which Canada is one of four key contributors, will greatly enhance the ability of the Canadian Armed Forces to locate people in distress. Defence will complete the acquisition of the new Fixed-Wing Search and Rescue Aircraft and also invest in its rotary wing Search and Rescue helicopters to ensure the reliability that Canadians depend upon in times of need.

SEARCH AND RESCUE BY THE NUMBERS

Canada has one of the world's largest areas of responsibility for search and rescue, covering 18 million square kilometres of land and water, more than 243,800 kilometres of coastline, three oceans, three million lakes, as well as the St. Lawrence River system.

Alongside the Canadian Coast Guard, the Canadian Armed Forces responds to more than 9,000 search and rescue calls annually, approximately 1,000 of which result in the launching of search and rescue air assets. Leveraging a multi-national search and rescue satellite constellation of which Canada is a founding member and one of four key contributors, successful search and rescue operations rely on highly skilled personnel trained to operate specialized equipment from locations strategically positioned around the country.

The Canadian Armed Forces devote approximately 950 personnel to deliver search and rescue services 24 hours a day, 365 days a year.



7 GLOBAL DEFENCE ENGAGEMENT

Addressing common security challenges requires the Canadian Armed Forces to operate regularly alongside and be interoperable with allied and partner militaries. Canada rarely operates alone, rather as a part of alliances and coalitions, typically as part of NORAD or under a United Nations and/or NATO mandate. Strong partnerships with allies, partners and regional and international organizations are critical to the effective execution of the defence mandate. Canada is committed to being a responsible international player that upholds universal values, contributes to peace building, and works together with partners to help enhance overall capacity and resiliency.

Cooperative defence relationships also support the advancement and promotion of broader government priorities – particularly national security, trade, international assistance, and foreign policy objectives. Defence contributes to this broader diplomatic activity in close cooperation with whole-of-government partners, including Global Affairs Canada, Public Safety and the organizations under its umbrella. The Defence team must be able to work together abroad with its whole-of-government partners, bringing all of the strengths of the Government of Canada to bear in a coordinated and coherent manner to address global issues. This may include working together with non-governmental organizations and civil authorities who regularly cooperate with the Government of Canada in the pursuit of common objectives.

Recognizing that Canada's strategic interests are engaged in different ways in various regions of the world, Defence will employ a tailored approach to global partnerships. This includes maintaining a network of defence partnerships that is flexible and adaptable.

Beyond deepening its engagement with long-standing, like-minded allies, Defence will also pursue stronger relationships with other key countries, including those facing instability and those whose policies and perspectives are not aligned with Canada's. Active engagement with other armed forces and defence ministries provides opportunities to build mutual understanding, enhance transparency, resolve differences, demonstrate leadership and promote Canadian values.



DEFENCE DIPLOMACY

Deep and meaningful relationships with international partners allow the Defence team to:

- build greater situational awareness through intelligence cooperation;
- enhance interoperability and operational effectiveness;
- extend mobility and reach through logistics and diplomatic arrangements;
- reinforce the capacity of partners;
- promote defence materiel cooperation and export opportunities for Canadian industry; and
- exchange lessons learned and best practices.

Most importantly, partnerships signal Canada's commitment to work together with allies, partners, and the broader international community to address common security challenges and contribute meaningfully to global security and stability.



CANADA'S GLOBAL DEFENCE PARTNERSHIPS

Canada is engaged worldwide. Our commitment to NORAD, NATO, and Five-Eyes is unwavering. Canada and the United States share an unparalleled defence relationship forged by shared geography, common values and interests, deep historical connections and our highly integrated economies. This relationship is critical to every aspect of Canada's defence interests and economic prosperity. NORAD was established in 1958 to deter and defend against aerospace threats to North America. Since then, the threats facing North America have evolved significantly in the air and maritime environment, as well as other emerging domains, and weapons technology, including ballistic and cruise missiles, has advanced tremendously. Canada's policy with respect to participation in ballistic missile defence has not changed. However, we intend to engage the United States to look broadly at emerging threats and perils to North America, across all domains, as part of NORAD modernization. As NORAD approaches its 60th anniversary in 2018, Canada will work with the United States to modernize the Command to meet these and other challenges to continental defence. This is a prudent, holistic approach that takes into account all perils. Canada and the United States will jointly examine options to renew the North Warning System and modernize the Command, which is integral to fulfilling the NORAD mandate of aerospace warning and control, as well as maritime warning.

NEW INITIATIVE

To ensure the continued security of North America, the Defence team will:

111. Modernize NORAD to meet existing challenges and evolving threats to North America, taking into account the full range of threats.

Beyond the continent, Canada will continue to collaborate internationally with the United States, consistent with Canadian interests and values, engaging in complementary activities that contribute to stability abroad, which in turn helps maintain security at home.

Canada remains committed to exercising the full extent of its sovereignty in Canada's North, and will continue to carefully monitor military activities in the region and conduct defence operations and exercises as required. Canada's renewed focus on the surveillance and control of the Canadian Arctic will be complemented by close collaboration with select Arctic partners, including the United States, Norway and Denmark, to increase surveillance and monitoring of the broader Arctic region.

While the Arctic eight (Canada, the United States, Denmark, Iceland, Norway, Sweden, Finland, and Russia) rightfully remain the primary actors in the Arctic, Canada recognizes the increasing interest of non-Arctic states and organizations and will work cooperatively with all willing partners to advance shared interests on safety and security.

NATO is the foundation of Canada's defence relations in **Europe**. Canada also enjoys a number of deep bilateral relationships with specific countries in the region based on shared interests and values. Foremost among these relationships is that which Canada shares with the **United Kingdom**, with whom Canada already enjoys deep and vibrant defence ties rooted in history, founded on shared values, and anchored by close cooperation across the defence enterprise. Similarly, Canada shares a strong historical and linguistic connection with **France**. Canada will nurture these relationships while seeking opportunities to further develop them.

Canada is also a Pacific nation. Given the increasing importance of the **Asia-Pacific** to Canadian security and prosperity, Canada is committed to being a reliable player in the region, through consistent engagement and strong

MULTILATERALISM IN ACTION

United Nations

Canada is fully committed to renewing its engagement with the United Nations and increasing its contribution to United Nations peace operations. The United Nations has a critical role to play in shaping the rules-based international order and makes important contributions to global stability, conflict prevention and the protection of civilians. Doing our part to contribute to United Nations' efforts to promote and sustain global peace and security directly serves Canadian interests. A more peaceful world is a safer and more prosperous world for Canada, too. National Defence will make important contributions of Canadian personnel and training for United Nations peace operations, increasing the number of personnel in United Nations Headquarters, and enhancing training and capacity building efforts. The United Nations has recognized the changing nature and complexity of peace operations, and Canada welcomes the United Nations' ongoing efforts to ensure that it, and member states, are able to adapt effectively. Canada recognizes that United Nations leadership of peace operations offers a number of important advantages: it endows interventions with legitimacy, facilitates burden-sharing, diffuses risk, and allows Canada and other countries to make contributions based on their particular strengths and capabilities.



North Atlantic Treaty Organization (NATO)

Canada was a founding member of NATO in 1949 and the Alliance has been a central pillar of Euro-Atlantic defence and a cornerstone of Canadian defence and security policy ever since. NATO provides significant benefits to Canada's security and its global interests. NATO membership also carries important obligations. Article 5 of the Washington Treaty guarantees that an armed attack against one or more Allies is considered an attack against all, which requires Canada to be prepared to respond. Membership in the Alliance – under Article 3 of the Treaty – also calls upon Allies to maintain their individual and collective capabilities to defend themselves and to resist attack. Article 3 underpins NATO's ability to respond to an attack. Canada has developed capabilities that are designed to defend our vast territory, including maritime forces, fighter aircraft, intelligence, surveillance and reconnaissance capabilities, air mobility, and air-to-air refueling. These capabilities are also critical to the Alliance.

While the crisis management activities of NATO have garnered much attention in recent years, collective defence and cooperative security remain core tasks of the Alliance, as does deterrence, which is becoming increasingly important in today's security environment. Defence will continue to demonstrate Canada's steadfast commitment to NATO by maintaining high-quality, interoperable, and expeditionary forces which Canada can deploy, as needed, to effectively contribute to NATO deterrence posture, operations, exercises and capacity building activities. Canada supports NATO efforts to ensure it is prepared to respond to a rapidly evolving security environment. Canada's contribution as a framework nation to NATO's enhanced Forward Presence in Central and Eastern Europe is a testament to this commitment. Arms control, disarmament and non-proliferation efforts also contribute directly to the achievement of the Alliance's core objectives, contributing to more secure, stable and predictable international relations.

Five Eyes Network

Building on our shared values and long history of operational cooperation, the Five-Eyes network of partners, including Canada, the United States, United Kingdom, Australia and New Zealand, is central to protecting Canada's interests and contributes directly to operational success. This partnership, which originated in intelligence sharing, continues to greatly enhance our ability to understand and react to the global security environment, and enhances our interoperability with allies. The Five-Eyes community is an increasingly important forum for consultation and coordination on a wider range of key policy and operational matters, including the military use of space and collaboration on research and development. National Defence will continue to deepen its relationship with Five-Eyes partners, particularly as it relates to further expanding cooperation on space and innovation.

partnerships. We will establish meaningful strategic dialogues with key regional powers to exchange views on regional security issues and threats to regional stability, such as territorial disputes and the situation in the Korean Peninsula. This will include a continued presence in the region through high-level visits and participation in regional exercises. We will work closely with long-standing partners, **Australia, New Zealand, and the United States** on Asia-Pacific security issues. We will seek to develop stronger relationships with other countries in the region, particularly **China**. We will also increase our engagement with the **Association of Southeast Asian Nations (ASEAN)**. As Canada pursues membership in the East Asia Summit, the Department of National Defence will in parallel seek membership in the ASEAN Defence Ministers Meeting – Plus. Membership in this important forum will help Canada understand and play a more active role in the region's security architecture. This will enhance our ability to contribute to stability and security in the Asia-Pacific. Additionally, we will continue to cooperate with our allies and partners in the region by enhancing our participation in the ASEAN Regional Forum (ARF).

In **Africa**, the Defence team will work within an integrated whole-of-government approach to advance Canada's objectives, notably by contributing to peace and security through re-engaging in United Nations peace operations, providing training, supporting development and empowering women and girls. Our approach to Africa will seek to make tangible contributions to the stability necessary to advance Sustainable Development Goals and create the conditions for peace. To be successful, Defence will need to build new bilateral relationships



in Africa, particularly with the African Union, given its leadership role in peacekeeping efforts in the region. Such relationships are an important avenue to address conflict prevention and help to stem the expansion of instability.

In the **Middle East**, Canada's primary strategic interests will be to continue to contribute to regional peace and stability, along with countering the proliferation of weapons of mass destruction and reducing the threat of terrorism. This requires strong relationships to ensure re-supply, material transshipment, aircraft over-flight and other diplomatic clearances for equipment and personnel in support of operations. The Defence team will continue to work with partners in the region to ensure stability, including through combined maritime operations, as well as to facilitate operational requirements through Defence Cooperation Arrangements and other diplomatic and logistics agreements of mutual interest. A strong focus on capacity building and participation in a wide range of operations will continue.

In the **Americas**, Canada will continue to work collaboratively with partners throughout the hemisphere to develop regional capabilities, encourage operational flexibility and foster military professionalization. Regular cooperation and engagement is critical to meeting the security and defence challenges of the region. Canada has an opportunity to demonstrate leadership in areas such as capacity building, gender mainstreaming – the routine consideration of gender in public policy development – as well as humanitarian assistance and disaster response. Canada will also continue to leverage its strong bilateral defence relationships in support of multilateral organizations such as the Conference of the Defence Ministers of the Americas and the Inter-American Defence Board, and maintain support for other government departments to counter the illegal movement of drugs, people, weapons, money and other transnational organized crime activity.





DEFENCE DIPLOMACY

A military cannot be engaged in the world unless it is present in the world, and this includes building and sustaining strong relationships with allies, partners, other militaries and multilateral institutions. These cooperative relationships enhance knowledge, understanding and interoperability, allow for the exchange of best practices, and ultimately contribute significantly to success on operations. This kind of continuous global military engagement is often referred to as defence diplomacy.

The Canadian Armed Forces' current defence diplomacy efforts are focused on three key streams: (1) exchanges and assignments with Canada's closest allies, particularly the United States and our Five-Eyes partners; (2) active and ongoing involvement in multilateral organizations, principally NATO and the United Nations; and (3) military representation in our diplomatic missions worldwide.

The positions across all three of these streams are filled through the Canadian Armed Forces' "outside of Canada establishment," or OUTCAN. This includes the Canadian component of NORAD headquarters and other formations in the United States, administrative staff and operational exchange officers, General Officers filling important leadership positions in United States and NATO headquarters, and Defence Attachés posted around the world.

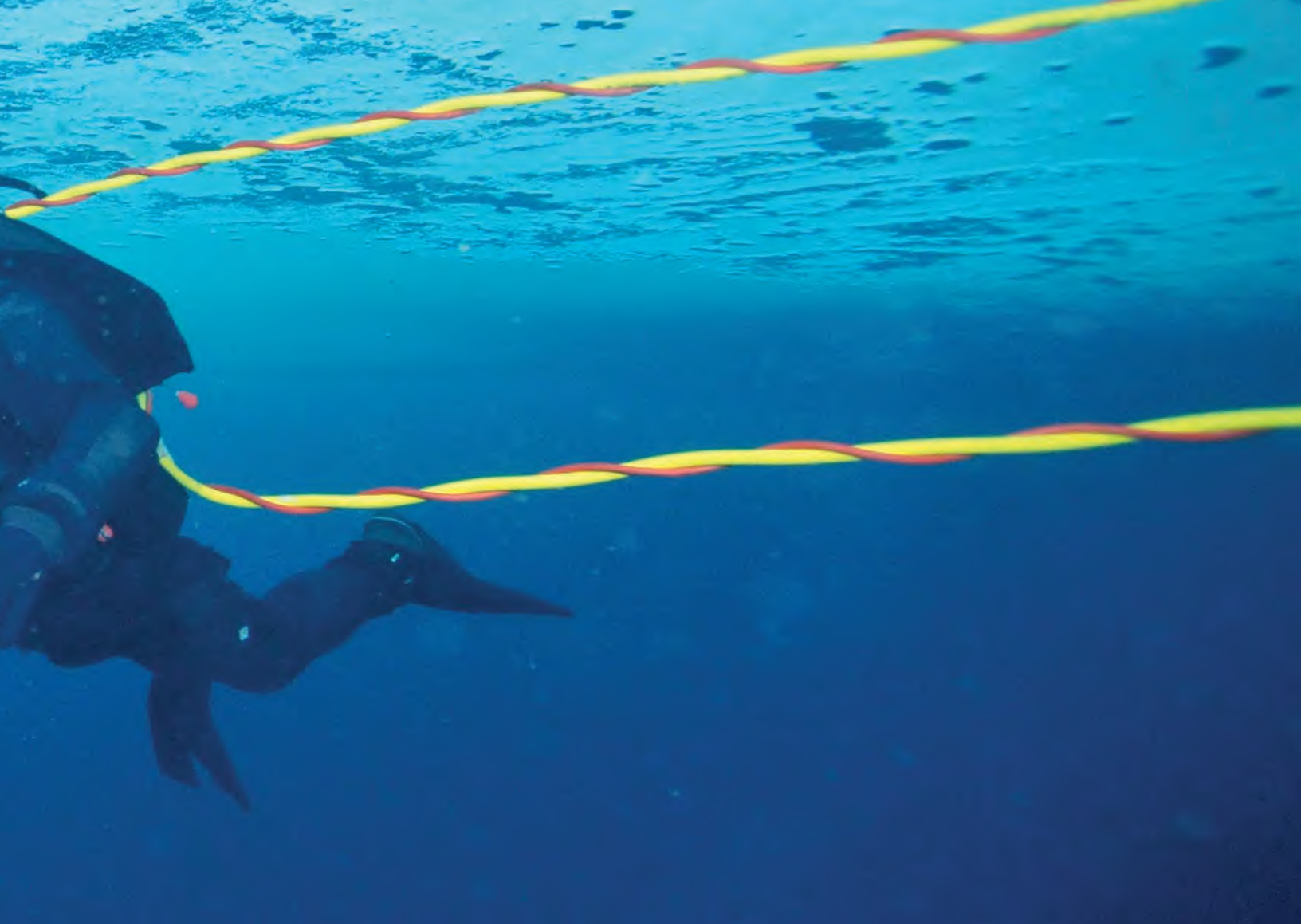
Defence diplomacy is critical to successful global engagement and better understanding our complex world. Through direct, daily contact with the military leadership of countries around the world, the Canadian Armed Forces' network of Defence Attachés helps develop a more sophisticated and nuanced understanding of the perspectives and motivations of global actors, and of regional security dynamics. Defence representation at Canada's diplomatic missions enhances local engagement

on a range of issues related to security and defence, and provides support to Canadian foreign policy and trade priorities. Perhaps most importantly, Defence Attachés build and sustain relationships that facilitate operational cooperation and communication, including in times of crisis.

To achieve these important objectives the Canadian Armed Forces will regularly assess the evolving security environment, foreign policy and operational priorities, and key capability development and training needs to determine the optimal placement of the OUTCAN footprint.







ANNEX A:

FINANCIAL TRANSPARENCY

Strong, Secure, Engaged, makes significant improvements to the financial transparency of the defence budget. These improvements not only bring greater clarity to how the defence budget is managed and spent – they are integral to ensuring that the resources provided to deliver the defence mandate achieve the results Canadians expect.

In the past, different parts of the defence budget were managed according to differing, complicated and sometimes arbitrary rules. This made it challenging to spend all of the resources provided to National Defence and even more difficult to manage the funding associated with complex, multi-year projects with long lead times. Not only did this prove challenging for National Defence, but the management and expenditure of the defence budget was difficult to explain to Canadians and Parliamentarians.

Processes within National Defence to manage and plan capital depreciation expenses have been aligned with fiscal forecasting by Finance Canada on an accrual basis. Managing capital assets on an accrual basis accounts for the acquisition costs of the equipment over the expected life of the asset. This enables better long-term planning and reduces the complexity of managing budgets year-to-year. As a result, Canadians and Parliament will be able

to better understand how defence funding is being spent, and National Defence will have the necessary flexibility to pursue the important investments that allow the Canadian Armed Forces to defend Canada and contribute to a safer, more prosperous world.

Some improvements have been made in the past to enhance transparency, including the publication of the Defence Acquisition Guide. The Guide illustrates both planned and potential capabilities being considered in both the short- and long-term and also provides notional estimates. This has provided some clarity on defence priorities but has lacked the transparency and precision necessary for Canadians to have confidence in how public resources are being spent, for industry to effectively position themselves to support defence needs, and for Parliament to provide the necessary oversight. To deliver on the Government's commitment to transparency, results and accountability, the Government of Canada will publish the next Defence Investment Plan in 2018, and those thereafter.

Defence manages its budget in two ways. It plans its capital investments on an accounting, or accrual basis, and its *funding* is managed on a cash basis.

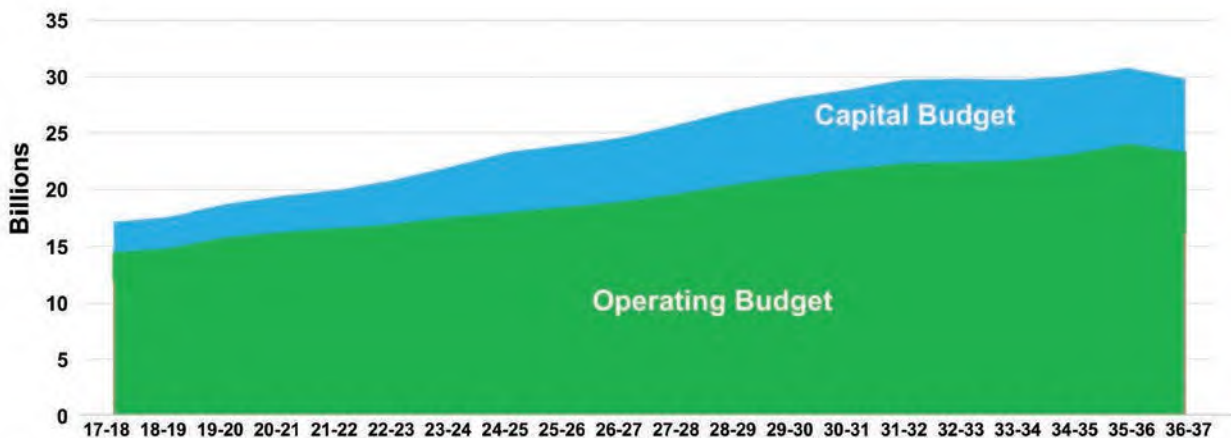
DEFENCE SPENDING – THE ACCRUAL VIEW

Defence's budget will now provide a complete, long-term picture of its resources, which will provide a greater ability to plan and manage. It is composed of two components: one for capital investments and one for operating budget requirements (refer to Figure 1). The portion of the accrual budget related to capital investments records the forecasted depreciation expense of capital assets, such as equipment and real property infrastructure, on an accounting basis. Under the accrual basis of accounting, and consistent with the Government of Canada's accounting practices, the cost of the asset is expensed starting when the asset is

put into service and it is spread over its useful life rather than being recorded at the time the bills are paid. The operating portion of the accrual budget is expensed in the year that the expenditure is made.

The capital funding provided to Defence is planned on an annual basis based on the department's updated Investment Plan. The plan is based on forecasts of when individual projects are expected to enter service, or when the depreciation related to the asset is expected to commence.

Figure 1: Defence Funding – Accrual Basis

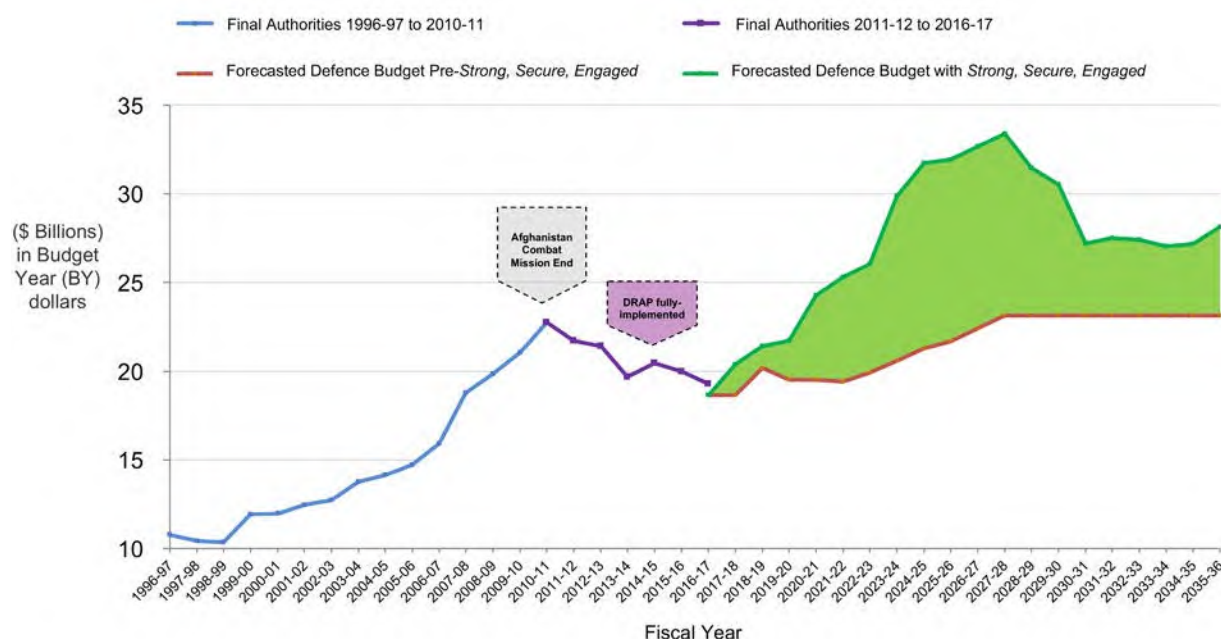


DEFENCE SPENDING – THE CASH VIEW

The department receives a cash appropriation from Parliament on an annual basis. The cash budget is approved initially through the Main Estimates and can be revised up to three times per year through Supplementary Estimates. The cash appropriation is used to make payments for salaries, operating and maintenance costs, grants and contributions, the purchase of capital equipment and the construction of real property infrastructure.

Figure 2 reflects the actual and forecasted Defence budget on a cash basis.

Figure 2: Actual and Forecasted Defence Budget (Cash Basis)



During recent years, a review of Defence appropriations reveals distinct trends:

- Budget increasing (blue line) to \$22.75 billion in 2010-11. In 2004-05, the Government implemented annual budget increases to the defence budget by nearly \$1.5 billion in successive years. After that, the budget grew incrementally, in large part, to cover the costs of the combat mission in Afghanistan until it ended in 2010-11.
- Between 2011-12 and today (purple line), budgets have decreased to \$18.7 billion. The decrease is due to the end of the combat mission in Afghanistan, two government deficit reduction programs: Strategic Review (\$1 billion per year) and the Deficit Reduction Action Plan (\$1 billion per year), and transfers of programs to other departments (approximately \$700 million per year), such as Shared Services Canada.

- Prior to the Defence Policy Review, the defence budget was projected to reach \$23.14 billion by 2027-28 with currently approved increases (orange line) and remain constant thereafter.
- Under *Strong, Secure, Engaged* (green line), funding, excluding the costs of major future missions, is forecasted to increase to \$33.4 billion by 2027-28. Cash funding begins to decrease in 2028-29 reflecting the completion of major capital projects.

There are, and will continue to be, periods in which Defence does not use all of the funds allocated in a given year. Lapses occur when the final cash expenditures for the year are less than the total cash authorities approved by Parliament. Contributing factors to the departmental lapse can include unused capital funding re-profiled into future years, unspent contingency funding related

to major capital and infrastructure projects and unused funding related to ongoing operations. Like other departments, Defence has the flexibility to transfer unused funding to the next fiscal year to a maximum of 2.5 percent of its authorized budget.

In order to reduce lapses, National Defence is improving its capital funding forecast to ensure that the department does not request more funding authorities from Parliament than required. Since 2015-16, the department has closely monitored in-year capital projects to identify slippages and delays earlier in the year in order to quantify the forecasted lapse. During the year, new projects may be approved, which would have new demands for capital funding. In order to reduce the lapse, National Defence

will fund these new projects from surplus in-year funding rather than request additional funding from Parliament.

National Defence has implemented similar measures to reduce the operating lapse. Principally, when the Government approves additional funding for military deployments, funding is requested later in the process to ensure only the required funding authorities are requested.

Grants and Contributions lapses are largely due to the funding provided directly to the NATO program and fluctuations in foreign exchange rates. Forecasted exchange rates will be closely monitored to better forecast their impact on funding estimates.

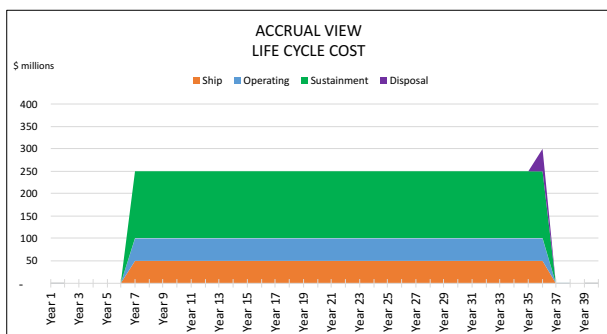
BUDGETING AND PLANNING FOR CAPITAL PROJECTS

Defence plans the acquisition of equipment and real property infrastructure on an accrual basis of accounting. This Defence funding model provides greater flexibility in managing the acquisition of large major acquisitions by allocating the cost to acquire the asset over its useful life.

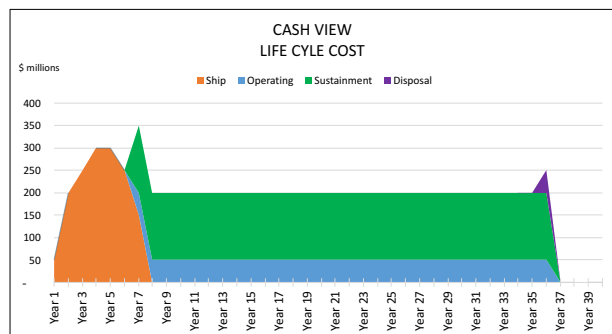
National Defence will complete a life-cycle cost estimate for all new major capital projects prior to their acquisition. A life-cycle cost estimate requires Defence to estimate all costs over the entire useful life of a capital asset; in some cases this can be 50 years or more. In completing a life-cycle cost estimate, Defence must forecast four types of costs, including 1) project development and acquisition; 2) operating; 3) sustainment; and, 4) disposal.

The following graphs illustrate how Defence manages its capital investments on an accounting basis (accrual) and a funding basis (cash). The scenario centres on the proposed procurement of a ship that will have a useful life of 30 years and a total cost of \$7.6 billion.

Graph A



Graph B



1) DEVELOPMENT AND ACQUISITION COSTS

Development costs are all expenses associated with the planning to acquire or build a capital asset, including costs to design and/or modify capital assets for a specific purpose. Acquisition expenses are all costs related to the purchase or building of a capital asset including ancillary costs such as the salaries for the project management staff.

In this scenario, the development and acquisition costs, identified in orange, are estimated at \$1.5 billion and it is anticipated that the ship will be put into service in year 7.

On an accrual basis, the full acquisition and development costs of \$1.5 billion are spread across the useful life of the ship. As detailed in graph A, the department will

incur an expense commencing in year 7, the year that the ship enters service, of approximately \$50 million per year for 30 years.

On a cash basis, cash payments are made as expenses are incurred in acquiring the ship, as detailed in graph B. The total development and acquisition costs of \$1.5 billion will be paid in the first 7 years of the procurement process.

2) OPERATING COSTS

Operating costs are all expenses associated with the operation of the ship and would include such expenses as the salary of the ship's crew and maintenance personnel, and fuel costs. For this scenario, as shown in blue, it is estimated that it will cost approximately \$50 million per year to operate the ship and this expense would start in year 7 when the ship is put into service and will continue until the ship reaches the end of its useful life. The total operating cost over the life of the ship would be \$1.5 billion. Operating expenditures are expensed in the year that the payment is made. Therefore, the accounting treatment for these expenditures is the same for both the accrual basis (graph A) and the cash basis (graph B).

3) SUSTAINMENT COSTS

Sustainment costs are all expenses associated with maintaining and repairing equipment over its useful life, including items such as planned maintenance, repairs and upgrades. For this scenario, as shown in green, it is estimated that the sustainment costs will be \$150 million per year starting in year 7 when the ship is put into service and will continue until the ship reaches the end of its useful life. The total cost over the life of the ship would be \$4.5 billion. Sustainment expenditures are expensed in the year that the payment is made. Therefore, the accounting treatment for these expenditures is the same for both the accrual basis (graph A) and the cash basis (graph B).

4) DISPOSAL COSTS

The disposal costs would include all expenses associated with the retirement and disposal of the ship. In this scenario, as shown in purple, it is estimated that it will cost \$50 million to dispose of the ship in year 37. The cost to dispose of the ship will also be expensed in the year that the payment is made. Therefore, the accounting treatment for this expenditure is the same for both the accrual basis (graph A) and the cash basis (graph B).

TOTAL COSTS

In the scenario, the total life-cycle cost for the ship over its useful life of 30 years is estimated to be \$7.6 billion.

On an accrual basis, graph A illustrates how defence plans, budgets, and accounts for the four components of the life-cycle cost. The department will account for the total life-cycle costs of \$7.6 billion over 30 years at a cost of approximately \$250 million per year.

On a cash basis, graph B illustrates when the funding to pay expenses for each of the four components of the life-cycle cost of \$7.6 billion will occur. The department will spend \$1.5 billion for development and acquisition in the first 7 years and then will spend the remaining \$6.1 billion over 30 years at a cost of approximately \$200 million per year.

DEFENCE SPENDING FLEXIBILITIES

With the changes made as part of *Strong, Secure, Engaged* Defence will now plan and budget all of its capital projects on an accrual basis. Flexibility is required to make adjustments to the accrual budget to reflect changes in major capital projects. Examples of changes to the plan that could result in the need to adjust, or re-profile, accrual funding include, but are not limited to:

- delays associated with contracting process and approval;
- slippages in contract performance and delivery;
- changes to planned project timelines (future planned projects);
- changes in scope of the project; and
- changes to the cost estimates as the project becomes more advanced and updated costing information becomes available, such as forecasted inflation, input prices (e.g., steel), and foreign exchange rates.

It is important to understand that changes to the accrual budget profile do not represent a “budget cut” but rather a realignment of accrual funding to account for the expenses over the life of the asset. For example, Budget 2017 announced that \$8.48 billion in accrual budget will be moved to later years. This amount included the realignment of \$3.72 billion announced in Budget 2016 plus an additional \$4.76 billion in accrual funding to align with the timing and delivery of key large-scale capital projects. The cash appropriation for these large-scale projects is not being withheld. The cash is available to the department, when it is needed and remains reserved for the exclusive use of National Defence.

ANNEX B:

OVERVIEW OF LONG-TERM FUNDING COMMITMENT TO CANADIAN ARMED FORCES CAPABILITIES

To ensure that the women and men of the Canadian Armed Forces have the capabilities required for Canada to be *Strong* at home, *Secure* in North America and *Engaged* in the world, this policy commits to significant long-term investment.

This includes \$33.8 billion for 52 critical new capital projects.

In addition, the policy provides \$74.2 billion for existing assets and previously planned equipment, infrastructure and information technology projects. As part of *Strong, Secure, Engaged*, these projects underwent a thorough costing review, which resulted in the provision of an additional \$5.9 billion over 20 years on top of what had previously been budgeted for these projects, to better reflect their true costs. In total, this new vision for defence provides \$108 billion for the development and acquisition of capital equipment over the next 20 years.

All of these projects have been costed and the costing methodologies used were independently verified by five external accounting firms. Throughout the process, Defence also worked with costing experts from Deloitte who brought expertise gained from its involvement in recent defence

reviews of close Canadian allies. This rigorous and unprecedented process ensures that the vision laid out in this policy is credible and realistic.

Table 1 reflects the planned use of the accrual budget over the 20-year horizon of this policy. It is important to note that this table does not represent the total cost of all planned equipment acquisitions. For example, the first new Canadian Surface Combatant is not scheduled to be delivered until 2026, followed by the remaining 14 ships. As these ships have an expected service life of 30 years, much of the accrual costs will be incurred outside the 20 years reflected in the table.

Furthermore, as these are 20-year estimates, there needs to be flexibility to adjust the accrual budget to reflect changes in major capital projects. The process to adjust or re-profile these estimates over time is through the investment planning process. Defence will publish the next Defence Investment Plan in 2018. The Defence Investment Plan will include all approved capital projects under the policy and will be updated every three years. This will help ensure that Parliament and Canadians can clearly understand future changes to the budget, and deliver on the Government's commitment to transparency, results, and accountability.

Table 1: 20-Year Accrual and Cash View of Planned Projects and New Investments (\$ billions)

Capability	20-Year - Accrual Basis			20-Year - Cash Basis
	Investments to Fully Fund and Complete Planned Projects (1)	New Investment <i>Strong, Secure, Engaged</i> (2)	Total Planned Projects and New Investments	Total Planned Projects and New Investments
Royal Canadian Navy	14.6	2.9	17.5	53.5
Canadian Army	10.1	8.8	18.9	23.2
Royal Canadian Air Force	26.4	20.1	46.4	64.4
Special Operations Forces	1.2	0.4	1.5	1.2
Joint/Emerging Domains	3.4	1.2	4.6	9.7
Infrastructure	4.5	0.4	4.9	12.0
Total Capabilities	60.1	33.8	93.9	164.0
Accrual Expenditure for Existing Equipment and Infrastructure (3)	14.1	-	14.1	-
20 Year Total (4)	74.2	33.8	108.0	164.0

- 1 *Strong, Secure, Engaged* commits \$74.2 billion over 20 years to fully fund 281 projects that were planned, but for which Defence had insufficient funding to acquire. Adequate funding has now been allocated to deliver these core equipment projects.
- 2 *Strong, Secure, Engaged* commits \$33.8 billion over the next 20 years to 52 new equipment, infrastructure, and information technology projects for the Canadian Armed Forces.
- 3 This amount (\$14.1 billion), on an accrual basis, represents previously acquired equipment and infrastructure. As they are already in service, there is no future cash requirement to purchase these assets.
- 4 Totals may not add up due to rounding.

Below is an overview of capital funding commitments in *Strong, Secure, Engaged*, described in terms of investments in the Royal Canadian Navy, Canadian Army, Royal Canadian Air Force, Special Operations Forces, Joint Capabilities and Infrastructure.

INVESTMENT IN THE ROYAL CANADIAN NAVY

The Government will provide \$17.5 billion to fund equipment projects for the Royal Canadian Navy over the next 20 years. This includes:

- \$2.9 billion over the next 20 years for two new equipment investments in the Royal Canadian Navy to replace obsolete components of current systems and improve the Royal Canadian Navy's ability to meet evolving underwater threats.
- \$14.6 billion over the next 20 years to fully fund planned equipment projects. For example, this policy includes sufficient funding to acquire the full complement of 15 Canadian Surface Combatants. It is important to note that Table 1 only captures a 20-year view of the equipment investments committed to in this policy. As the first ship is not scheduled to be delivered until 2026 and the fleet is expected to be in service for 30 years, there will be significant expenditures outside this timeframe.

INVESTMENT IN THE CANADIAN ARMY

The Government will provide \$18.9 billion for Canadian Army equipment projects over the next 20 years. This includes:

- \$8.8 billion over the next 20 years for 20 new equipment projects. As examples, this investment will replace existing light and heavy trucks for use in domestic and expeditionary operations. We will also improve the Canadian Army's ability to operate in Canada's North with a new family of Arctic-capable land vehicles, as well as close critical capability gaps such as the Canadian Army's lack of ground-based air defence equipment, which will allow it to defeat threats posed by airborne weapons such as remotely piloted vehicles and aircraft used by potential adversaries.
- \$10.1 billion over the next 20 years to fully fund planned equipment projects. For example, the upgrade of the Light Armoured Vehicle fleet will improve mobility and survivability.

INVESTMENT IN THE ROYAL CANADIAN AIR FORCE

The Government will provide \$46.4 billion to fund equipment projects for the Royal Canadian Air Force over the next 20 years. This includes:

- \$20.1 billion over the next 20 years for 17 new equipment projects for the Royal Canadian Air Force. For example, this will deliver a Canadian Multi-Mission Aircraft to replace the CP-140 Aurora Long Range Patrol Aircraft, allowing us to maintain our technological advantage over potential adversaries. Under the Royal Canadian Air Force's responsibility for space capabilities, portions of new investment will expand the Canadian Armed Forces' ability to use space-based assets in support of operations. This includes projects for enhanced communications in the North.
- \$26.4 billion to fully fund planned equipment projects. The new fighter program has been enhanced to ensure the Royal Canadian Air Force can acquire 88 new advanced fighters, which will allow us to deliver on NORAD and NATO commitments without compromise.

INVESTMENT IN SPECIAL OPERATIONS FORCES

The Government will provide \$1.5 billion to fund equipment projects for Canada's Special Operations Forces over the next 20 years. This includes:

- \$366 million over the next 20 years for four new projects. For example, integrated soldier system equipment will be modernized to enhance interoperability and maintain technological advantage against potential adversaries.
- \$1.2 billion over the next 20 years to fully fund planned equipment projects. As an example, we will acquire an airborne intelligence surveillance and reconnaissance platform that will enhance the ability of our Special Operations Forces to improve their understanding of the operational environment.

INVESTMENT IN JOINT CAPABILITIES

The Government will provide \$4.6 billion for joint capability projects in domains such as cyber, intelligence as well as joint command and control over the next 20 years. This includes:

- \$1.2 billion over the next 20 years for five new equipment projects and one information technology project. For example, the Combined Joint Intelligence

Modernization project will provide a modern deployable intelligence centre for land-based operations, building on the lessons learned in recent operations. Additionally, the Secure Radio Modernization project will upgrade encryption capability of radios to maintain security and interoperability with our Five-Eyes partners.

- \$3.4 billion over the next 20 years to fully fund planned equipment projects. For example, we will improve the capabilities of the Joint Deployable Headquarters and Signals Regiment. This will include the acquisition of portable structures to house the deployed headquarters and the equipment employed by its staff for command, control and communications.

INVESTMENT IN INFRASTRUCTURE

The Government will provide \$4.9 billion over the next 20 years to infrastructure projects across Canada in order to maintain the necessary portfolio of real property holdings. This includes:

- \$446 million over the next 20 years for three new infrastructure projects. For example, this funding will enable the construction of new buildings to house the expanded and enhanced Canadian Armed Forces Joint Incident Response Unit. This will ensure that the unit is able to provide chemical, biological, radiological, and nuclear defence support to the Canadian Special Operations Forces Command.
- \$4.5 billion to fully fund planned projects over the next 20 years.

ANNEX C:

GENDER-BASED ANALYSIS PLUS AND THE DEFENCE POLICY REVIEW

The Defence team has a significant presence across Canada. Its activities have global reach and influence and the defence workforce comprises more than 100,000 military personnel and 25,000 civilian employees. Given the depth and breadth of defence activities, our policies, programs, services and initiatives can have profound impacts on diverse groups of people, taking into account gender and a range of other identity factors. Gender-Based Analysis Plus (GBA+) is thus a valuable analytical tool that helps us attain better results for Canadians by ensuring our activities are more responsive to the specific needs and circumstances of diverse groups of people. Our application of GBA+ to the Defence Policy Review process helped us deliver on the Government of Canada's commitment to gender equality, inclusion and evidence-based policy development.

EXPERT INPUT

GBA+ has been an integral analytical tool throughout the development of this policy and has been applied at every stage of the Defence Policy Review process, beginning with our unprecedented public consultations.

In addition to ensuring that a diverse range of voices participated in all of the expert roundtables held across Canada in support of the Defence Policy Review, the Defence team convened a special roundtable discussion with gender and diversity experts and senior departmental officials to examine the key questions of the review through the lens of GBA+.

This discussion yielded valuable insights and new perspectives on important questions considered during the review, including methods for applying GBA+ in the planning of military operations, how to ensure a career with the Forces is appealing to all regardless of gender, and the ways in which the Canadian Armed Forces can promote human rights and gender equality on deployed operations. The recommendations provided by experts have contributed substantially to the formation of Canada's new defence policy.

GBA+ IN THE POLICY

We applied valuable input from the public consultation process, along with our own GBA+ analysis, directly to the policy development process, which had a direct impact on the language and policy direction that appears throughout the final document.

The influence of our GBA+ analysis is perhaps most apparent in the first chapter of *Strong, Secure, Engaged* which deals with our people:

- The new policy direction on Recruitment, Training and Retention includes specific direction to prioritize diversity and inclusion in the Canadian Armed Forces, to develop and implement a new Canadian Armed Forces Retention Strategy to ensure a welcoming and healthy work environment, and to review conditions of service to promote more personalized and flexible career options.
- The policy contains a section on Leveraging Canada's Diversity that includes direction to appoint a diversity champion and integrate GBA+ in all defence activities across the Canadian Armed Forces and Department of National Defence, from the design and implementation of programs and services that support our personnel, to equipment procurement and operational planning. It also institutes mandatory GBA+ training, and directs the Canadian Armed Forces to be a leader in gender balance in the military by increasing the representation of women by one percent annually over the next 10 years to 25 percent representation by 2026.
- The policy deals directly with the need to eliminate harmful behaviours and ensure a work environment free from harassment and discrimination. The full implementation of the 10 recommendations of the Deschamps Report through Operation HONOUR – the Canadian Armed Forces mission to eliminate harmful and inappropriate sexual behaviour in the military – is explicitly identified as a key priority in

the policy, as well as the provision of a full range of victim and survivor support services to Canadian Armed Forces members.

- This policy includes new initiatives to support the health and resilience of the Canadian Armed Forces, including the creation of an environment free from stigma where military members are encouraged to raise health concerns of any nature and seek appropriate help when they need it.
- The policy recognizes that the impact of military service goes beyond those who wear the uniform, and includes a number of initiatives designed to help stabilize family life for Canadian Armed Forces members and their families. This includes improved access to psychological services, efforts to ease the burden of frequent relocation, resources to prevent and respond to gender-based violence, and other military family support programs.

In addition to the people-centred initiatives and policy direction outlined above, the application of GBA+ to our policy analysis influenced Canada's new defence policy in other important ways. For example:

- The overarching vision for the policy articulates the Canadian values that will guide the Canadian Armed Forces' engagement in the world: inclusion, compassion, accountable governance, and respect for diversity and human rights.
- Our analysis of the global security environment acknowledges the socio-economic drivers and other human dimensions of conflict; notes that the growing number of migrants worldwide fleeing economic, environmental, or conflict-related crises exacerbates the negative consequences of inequality and marginalization; and identifies the continued prevalence of conflict-based sexual violence as an issue of continued concern.
- The need to better anticipate and understand the global security environment – the first element of our new approach to defence – is focused on achieving a deeper and more sophisticated understanding of the root causes of conflict with a view to playing a greater role in conflict prevention, intervening earlier in the conflict cycle when necessary, and minimizing the effects of prolonged conflict. Our GBA+ analysis not only pointed to this requirement, but will also be a key tool in the analysis of the security environment on an ongoing basis. Our enhanced academic outreach program includes a commitment to be mindful of the need for a diverse spectrum of voices on defence and security issues.

- The new set of eight core missions for the Canadian Armed Forces includes a renewed commitment to peace operations and a new mission focused on building the capacity of others. Working to implement and advance the Women, Peace and Security agenda laid out in the United Nations Security Council's landmark Resolution 1325, and subsequent related resolutions, will be an important aspect of Canada's international military engagements in both of these areas. Further, the policy includes a commitment to continue to integrate gender perspectives into the analysis, planning, execution and evaluation of all Canadian Armed Forces operations.
- The Canadian Armed Forces recognizes that diversity and inclusion in the Canadian Armed Forces increases operational effectiveness by drawing on the strengths of Canada's diverse and multicultural population.
- Gender and diversity issues also feature prominently in the policy's treatment of global engagement, including contributing to broader Government of Canada efforts to empower women and girls in Africa, and to demonstrate leadership in gender mainstreaming – the routine consideration of gender in public policy development – in the Americas.
- The Defence team worked extremely closely with Status of Women Canada to apply a GBA+ lens to the text of this policy to ensure it is inclusive and reflective of Canadians.

GBA+ AND POLICY IMPLEMENTATION

As noted above, this policy includes a commitment to integrate GBA+ in all defence activities across the Canadian Armed Forces and Department of National Defence. This commitment will ensure that every element of the implementation of Canada's new defence policy is informed by GBA+, from the procurement of major new equipment platforms, to the growth of the military and civilian Defence team, to the new Innovation for Defence Excellence and Security program, to the planning and conduct of Canadian Armed Forces operations.

ANNEX D:

SUMMARY OF NEW INITIATIVES

Canadian Armed Forces Core Missions

At any given time, the Government of Canada can call upon the Canadian Armed Forces to undertake missions for the protection of Canada and Canadians and the maintenance of international peace and stability. This policy ensures the Canadian Armed Forces will be prepared to:

- Detect, deter and defend against threats to or attacks on Canada;
- Detect, deter and defend against threats to or attacks on North America in partnership with the United States, including through NORAD;
- Lead and/or contribute forces to NATO and coalition efforts to deter and defeat adversaries, including terrorists, to support global stability;
- Lead and/or contribute to international peace operations and stabilization missions with the United Nations, NATO and other multilateral partners;
- Engage in capacity building to support the security of other nations and their ability to contribute to security abroad;
- Provide assistance to civil authorities and law enforcement, including counter-terrorism, in support of national security and the security of Canadians abroad;
- Provide assistance to civil authorities and non-governmental partners in responding to international and domestic disasters or major emergencies; and
- Conduct search and rescue operations.

Concurrent Operations

This policy ensures the Canadian Armed Forces will be prepared to simultaneously:

- Defend Canada, including responding concurrently to multiple domestic emergencies in support of civilian authorities;
- Meet its NORAD obligations, with new capacity in some areas;
- Meet commitments to NATO Allies under Article 5 of the North Atlantic Treaty; and
- Contribute to international peace and stability through:
 - o Two sustained deployments of ~500-1500 personnel, including one as a lead nation;
 - o One time-limited deployment of ~500-1500 personnel (6-9 months duration);
 - o Two sustained deployments of ~100-500 personnel and;
 - o Two time-limited deployments (6-9 months) of ~100-500 personnel;
 - o One Disaster Assistance Response Team (DART) deployment, with scaleable additional support; and
 - o One Non-Combatant Evacuation Operation, with scaleable additional support.

Well-Supported, Diverse, Resilient People and Families

Recruitment, Training and Retention

To ensure the effective recruitment, training and retention of the future work force, the Defence team will:

1. Reduce significantly the time to enroll in the Canadian Armed Forces by reforming all aspects of military recruiting.
2. Implement a recruitment campaign to promote the unique full- and part-time career opportunities offered by the Canadian Armed Forces, as well as to support key recruitment priorities, including hiring more women, increasing diversity, addressing priority occupations and the requirements of the Reserve Force.
3. Restore the Collège militaire royal in St-Jean as a full degree-granting institution to help prepare the next generation of Canadian Armed Forces leaders.
4. Increase the capacity of the Canadian Armed Forces Leadership and Recruit School, and its supporting organizations, to accommodate the increased number of recruits associated with a larger force size.
5. Develop and implement a comprehensive Canadian Armed Forces Retention Strategy to keep our talented people in uniform with a welcoming and healthy work environment.
6. Undertake a comprehensive review of conditions of service and career paths to allow much more personalized career choices and flexibility.
7. Modernize the Canadian Armed Forces Honours and Awards system to ensure military members' service to Canada is recognized in a more timely and appropriate manner.
8. Implement the first-ever, integrated strategy for human resources to balance the optimal assignment of tasks between the military, defence civilians and the private sector.
9. Provide tax relief for all Canadian Armed Forces members deployed on all named international operations, up to the maximum rate of pay applied to a Lieutenant-Colonel. This would not impact hardship and risk pay or operational allowances regulated by the Military Foreign Service Instructions (MFSI) which will continue. This initiative is retroactive to January 2017.

Leveraging Canada's Diversity

To fully leverage Canada's diversity, the Defence team will:

10. Promote diversity and inclusion as a core institutional value across the Defence team.
11. Appoint a Diversity Champion who will oversee the implementation of all aspects of the Diversity Strategy and Action plan including instituting mandatory diversity training across all phases of professional development.
12. Integrate Gender-Based Analysis – Plus (GBA+) in all defence activities across the Canadian Armed Forces and the Department of National Defence, from the design and implementation of programs and services that support our personnel, to equipment procurement and operational planning.
13. Place a new focus on recruiting and retaining under-represented populations within the Canadian Armed Forces, including but not limited to, women, Indigenous peoples, and members of visible minorities.
14. Aspire to be a leader in gender balance in the military by increasing the representation of women by 1 percent annually over the next 10 years to reach 25 percent of the overall force.

Supporting Health and Resilience

To improve the resilience and health of its members, the Canadian Armed Forces will:

15. Augment the Canadian Armed Forces Health System to ensure it meets the unique needs of our personnel with efficient and effective care, anywhere they serve in Canada or abroad. This includes growing the Medical Services Branch by 200 personnel.
16. Implement a joint National Defence and Veterans' Affairs Suicide Prevention Strategy that hires additional mental health professionals and implements a joint framework focused on preventing suicide across the entire military and Veteran community.
17. Remove barriers to care, including creating an environment free from stigma where military members are encouraged to raise health concerns of any nature and seek appropriate help when they need it.

Promoting a Culture of Leadership, Respect and Honour

To eliminate harmful behaviours and ensure a work environment free from harassment and discrimination, the Defence team will:

18. Complete the full implementation of the 10 recommendations of the Deschamps Report through Operation HONOUR.
19. Provide a full range of victim and survivor support services to Canadian Armed Forces members.
20. Deal with harassment complaints in a clear and timely manner by simplifying formal harassment complaint procedures.
21. Be open and transparent with Canadians and members of the Canadian Armed Forces in communicating progress on this important issue.

Supporting Military Families

To improve support and services offered for military family members, the Defence team will:

22. Implement teams at Wings and Bases across Canada, in partnership with Military Family Resource Centres, to prevent and respond to gender-based violence.
23. Improve access to psychological services through social workers and referrals to community programs and services.
24. Develop a Comprehensive Military Family Plan to help stabilize family life for Canadian Armed Forces Members and their families who frequently have to relocate. This includes:
 - providing an additional \$6 million per year to modernize Military Family Support Programs, such as Military Family Resource Centres, to provide better support to families when members are deploying or during periods of absence;
 - establishing relocation expertise to help military families find and access the services they need in a new community; and
 - working with federal, provincial and private sector partners to improve the coordination of services across provinces to ease the burden of moving.

Reinventing Transition

To better meet the needs of all retiring personnel, including the ill and injured, the Defence team will:

25. Establish a Personnel Administration Branch of experts in military human resources and personnel administration to focus and improve military human resource services to all Canadian Armed Forces members.
26. Allocate some of the growth in the Medical Services Branch to support transition care.
27. Create a new Canadian Armed Forces Transition Group that provides support to all members to seamlessly transition to post-military life. This Group, commanded by a General Officer and staffed from experts in human resources and personnel administration, will be approximately 1,200 personnel strong and include specialized staff and holding positions for ill and injured who are preparing to return to duty or transition out of the Canadian Armed Forces. The Group will provide a fully engaged, personalized, guided support to transition all Canadian Armed Forces members, with special care and attention being provided to those who are ill or injured, including those with psychological or critical stress injuries.
28. Ensure that all benefits will be in place before a member transitions to post-military life.

Long-Term Investments to Enhance the Canadian Armed Forces' Capabilities and Capacity

Investments in the Royal Canadian Navy

29. Recapitalize the surface fleet through the investments in 15 Canadian Surface Combatants and two Joint Support Ships.
30. Acquire five to six Arctic Offshore Patrol Ships.
31. Operate and modernize the four Victoria-class submarines.
32. Acquire new or enhanced naval intelligence, surveillance, and reconnaissance systems, upgraded armament, and additional systems for current and future platforms allowing for more effective offensive and defensive naval capabilities.
33. Upgrade lightweight torpedoes carried by surface ships, maritime helicopters and maritime patrol aircraft.

Investments in the Canadian Army

34. Acquire ground-based air defence systems and associated munitions capable of protecting all land-based force elements from enemy airborne weapons.
35. Modernize weapons effects simulation to better prepare soldiers for combat operations.
36. Replace the family of armoured combat support vehicles, which includes command vehicles, ambulances and mobile repair teams.
37. Modernize the fleet of Improvised Explosive Device Detection and Defeat capabilities.
38. Acquire communications, sustainment, and survivability equipment for the Army light forces, including improved light weight radios and soldier equipment.
39. Upgrade the light armoured vehicle fleet to improve mobility and survivability.
40. Modernize logistics vehicles, heavy engineer equipment and light utility vehicles.
41. Improve the Army's ability to operate in remote regions by investing in modernized communications, shelters, power generation, advanced water purification systems, and equipment for austere environments.
42. Modernize land-based command and control, intelligence, surveillance and reconnaissance systems.
43. Acquire all-terrain vehicles, snowmobiles and larger tracked semi-amphibious utility vehicles optimized for use in the Arctic environment.

Investments in the Royal Canadian Air Force

44. Replace the CF-18 fleet with 88 advanced fighter aircraft to improve Canadian Armed Forces air control and air attack capability.
45. Acquire space capabilities meant to improve situational awareness and targeting, including: replacement of the current RADARSAT system to improve the identification and tracking of threats and improve situational awareness of routine traffic in and through Canadian territory; sensors capable of identifying and tracking debris in space that threatens Canadian and allied space-based systems (surveillance of space); and, space-based systems that will enhance and improve tactical narrow- and wide-band communications globally, including throughout Canada's Arctic region.

46. Acquire new Tactical Integrated Command, Control, and Communications, radio cryptography, and other necessary communications systems.
47. Recapitalize next generation strategic air-to-air tanker-transport capability (CC-150 Polaris replacement).
48. Replace utility transport aircraft (CC-138 Twin Otter replacement).
49. Acquire next generation multi-mission aircraft (CP-140 Aurora maritime patrol aircraft replacement).
50. Invest in medium altitude remotely piloted systems.
51. Modernize short-range air-to-air missiles (fighter aircraft armament).
52. Upgrade air navigation, management, and control systems.
53. Acquire aircrew training systems.
54. Recapitalize or life-extend existing capabilities in advance of the arrival of next generation platforms.
55. Sustain domestic search and rescue capability, to include life extension of existing systems, acquisition of new platforms, and greater integration with internal and external partners.
56. Operationalize the newly acquired Fixed-Wing Search and Rescue aircraft fleet.

Investments in Special Operations Forces

57. Acquire airborne ISR platforms.
58. Recapitalize existing commercial pattern, SUV-type armoured vehicles.
59. Modernize and enhance Special Operations Forces Command, Control and Communications information systems, and computer defence networks.
60. Enhance next generation Special Operations Forces integrated soldier system equipment, land mobility, and maritime mobility platforms and fighting vehicle platforms.
61. Increase Special Operations Forces by 605 personnel.

Investments in Joint Capabilities

62. Acquire joint command and control systems and equipment, specifically for integrated information technology and communications.
63. Acquire joint signals intelligence capabilities that improve the military's ability to collect and exploit electronic signals intelligence on expeditionary operations.
64. Improve the capabilities of the Joint Deployable Headquarters and Signals Regiment, including the portable structures that house the headquarters when deployed and the equipment employed by that headquarters for command, control and communications.
65. Improve cryptographic capabilities, information operations capabilities, and cyber capabilities to include: cyber security and situational awareness projects, cyber threat identification and response, and the development of military-specific information operations and offensive cyber operations capabilities able to target, exploit, influence and attack in support of military operations.
66. Improve Chemical, Biological, Radiological, Nuclear, and Explosive detection and response capabilities.

Anticipate

Prioritizing Joint Intelligence, Surveillance, and Reconnaissance

To enhance its Joint Intelligence, Surveillance and Reconnaissance capabilities, the Defence team will:

67. Invest in Joint Intelligence, Surveillance and Reconnaissance platforms, including next generation surveillance aircraft, remotely piloted systems, and space-based surveillance assets (see pages 38-40).
68. Integrate existing and future assets into a networked, joint system-of-systems that will enable the flow of information among multiple, interconnected platforms and operational headquarters.
69. Prioritize Arctic Joint Intelligence, Surveillance and Reconnaissance as a defence research and development priority to produce innovative solutions to surveillance challenges in the North.

Enhancing Defence Intelligence

In order to address the demand for defence intelligence internally, across the Government of Canada, and among our allies, the Defence team will:

70. Establish up to 120 new military intelligence positions, some of which will be filled by Reservists, and add up to 180 new civilian intelligence personnel.
71. Build CFINTCOM's capacity to provide more advanced intelligence support to operations, including through an enhanced ability to forecast flash-points and emerging threats, and better support next generation platforms, and understand rapid developments in space, cyber and other emerging domains.
72. Establish a Canadian Armed Forces targeting capability to better leverage intelligence capabilities to support military operations.

Bolstering Academic Outreach

To enhance its relationship with and derive greater benefit from Canada's rich academic and analytic community, the Defence team will:

73. Increase investment in academic outreach to \$4.5 million per year in a revamped and expanded defence engagement program, including:
 - Collaborative networks of experts;
 - A new scholarship program for Masters and Post-Doctoral fellows; and
 - Expansion of the existing expert briefing series and engagement grant program.

Adapt

A New Vision for the Reserve Force

To enhance the role and capabilities of the Reserve Force, the Canadian Armed Forces will:

74. Increase the size of the Primary Reserve Force to 30,000 (an increase of 1,500) and dramatically reduce the initial recruitment process from a number of months to a matter of weeks.
75. Assign Reserve Force units and formations new roles that provide full-time capability to the Canadian Armed Forces through part-time service, including:

- Light Urban Search and Rescue;
 - Chemical, Biological, Radiological and Nuclear Defence;
 - Combat capabilities such as direct fire, mortar and pioneer platoons;
 - Cyber Operators;
 - Intelligence Operators;
 - Naval Security Teams; and
 - Linguists.
76. Enhance existing roles assigned to Reserve Force units and formations, including:
 - Information Operations (including Influence Activities);
 - Combat Support and Combat Service Support; and
 - Air Operations Support Technicians.
 77. Employ the Reserve Force to deliver select expeditionary missions in a primary role such as Canadian Armed Forces capacity building.
 78. Create an agile service model that supports transition between full- and part-time service and provides the flexibility to cater to differing Reserve career paths.
 79. Align Primary Reserve Force remuneration and benefits with those of the Regular Force where the demands of service are similar.
 80. Revise annuitant employment regulations to attract and retain more former Regular Force personnel to the Reserves.
 81. Offer full-time summer employment to Reservists in their first four years with the Reserves commencing in 2018.
 82. Work with partners in the federal government to align Federal Acts governing job professionalization legislation. Subsequently, we will work with provinces and territories to harmonize job protection for Reservists at that level.

Space Capabilities

To adapt to evolving challenges and opportunities in the space domain, the Defence team will:

83. Defend and protect military space capabilities, including by working closely with allies and partners to ensure a coordinated approach to assuring continuous access to the space domain and space assets.

84. Work with partners to promote Canada's national interests on space issues, promote the peaceful use of space and provide leadership in shaping international norms for responsible behavior in space.
85. Invest in and employ a range of space capabilities, including space situational awareness, space-based earth observation and maritime domain awareness, and satellite communications that achieve global coverage, including in the Arctic. (For more detail on Defence investments in space capabilities, please see pages 38-39).
86. Conduct cutting-edge research and development on new space technologies in close collaboration with allies, industry and academia to enhance the resilience of space capabilities and support the Canadian Armed Forces' space capability requirements and missions.

Cyber Capabilities

To better leverage cyber capabilities in support of military operations, the Defence team will:

87. Protect critical military networks and equipment from cyber attack by establishing a new Cyber Mission Assurance Program that will incorporate cyber security requirements into the procurement process.
88. Develop active cyber capabilities and employ them against potential adversaries in support of government-authorized military missions.
89. Grow and enhance the cyber force by creating a new Canadian Armed Forces Cyber Operator occupation to attract Canada's best and brightest talent and significantly increasing the number of military personnel dedicated to cyber functions.
90. Use Reservists with specialized skill-sets to fill elements of the Canadian Armed Forces cyber force.

Remotely Piloted Systems

To better leverage the unique benefits associated with remotely piloted systems, the Defence team will:

91. Invest in a range of remotely piloted systems, including an armed aerial system capable of conducting surveillance and precision strikes (For more details on planned investments in remotely piloted systems, please see pages 38-39).

92. Conduct research and development of remotely piloted land, sea and aerial capabilities, in close collaboration with industry and academia.
93. Promote the development of international norms for the appropriate responsible and lawful use of remotely piloted systems, in support of Global Affairs Canada.

Improving Defence Procurement

To streamline defence procurement, better meet the needs of the military, and deliver projects in a more timely manner, the Defence team will:

94. Reduce project development and approval time in the Department of National Defence by at least 50 percent for low-risk and low-complexity projects through improved internal coordination, increased delegation, and strengthened approval processes.
95. Work with partners to increase the Department of National Defence's contracting authorities for goods up to \$5 million by 2018, allowing over 80 percent of defence procurement contracts to be managed by Defence.
96. Use procurement to incentivize Canadian research and development in important and emerging technological areas.
97. Increase the transparency and timeliness of communication with defence industry associations, including instituting meetings between the Department of National Defence and Canadian industry through a Defence Industry Advisory Group and other fora.
98. Grow and professionalize the defence procurement workforce in order to strengthen the capacity to manage the acquisition and support of today's complex military capabilities. This includes the addition of over 60 procurement specialists and enhanced training and professional accreditation for defence procurement personnel.
99. Provide Canadians with regular updates on major project and programs to increase transparency, communicate challenges and measure performance.
100. Ensure that Canadian environmental standards are adhered to in all procurement projects.

Greening Defence

To ensure it supports the low-carbon government targets outlined in the Federal Sustainable Development Strategy, the Defence team will:

101. Reduce greenhouse gas emissions by 40 percent from the 2005 levels by 2030, including through the following measures:
 - Investing \$225 million by 2020 in a wide range of infrastructure projects across Canada to reduce our carbon footprint.
 - Transitioning 20 percent of non-military vehicle fleets to hybrid and electric by 2020.
 - Requiring new construction and major recapitalization projects to meet industry-recognized standards for high performing buildings such as the Silver Leadership in Energy and Environmental Design (LEED) standard or equivalent.
 - Expanding the use of Energy Performance Contracts to implement energy efficiencies on bases and wings across Canada.
 - Installing electric charging stations at new or retrofitted buildings for personnel to use with defence fleets and/or personal vehicles.
102. Examine alternative energy options and their potential use for operations.

Repairing and Rebuilding Defence Infrastructure

To modernize the management of the real property portfolio to better serve defence and free up personnel to perform military tasks, the Defence team will:

103. Dispose of underutilized or obsolete buildings. This will improve the efficiency of the infrastructure portfolio, while at the same time help us accelerate the reduction of greenhouse gas emissions.
104. Improve infrastructure on bases and wings, including housing for Canadian Armed Forces personnel. In doing so, we will explore ways to partner with the private sector and will consult with public sector unions.

Innovation for Defence Excellence and Security (IDEaS)

To transform defence innovation in Canada, the Defence team will:

105. Invest \$1.6 billion over the next 20 years to implement the new Innovation for Defence Excellence and Security (IDEaS) program, including :
 - Creating clusters of defence innovators (academics, industry and other partners) to conduct leading-edge research and development in areas critical to future defence needs.
 - Holding competitions that invite innovators to present viable solutions to specific defence and security challenges.
 - Implementing flexible new procurement mechanisms that allow Defence to develop and test ideas and the ability to follow through on the most promising ones with procurement.

Enhancing Arctic Capability

To enhance the Canadian Armed Forces' ability to operate in the Arctic and adapt to a changed security environment, the Defence team will:

106. Enhance the mobility, reach and footprint of the Canadian Armed Forces in Canada's North to support operations, exercises, and the Canadian Armed Forces' ability to project force into the region.
107. Align the Canadian Air Defence Identification Zone (CADIZ) with our sovereign airspace.
108. Enhance and expand the training and effectiveness of the Canadian Rangers to improve their functional capabilities within the Canadian Armed Forces.
109. Collaborate with the United States on the development of new technologies to improve Arctic surveillance and control, including the renewal of the North Warning System.
110. Conduct joint exercises with Arctic allies and partners and support the strengthening of situational awareness and information sharing in the Arctic, including with NATO.

Global Defence Engagement

To ensure the continued security of North America, Defence will:

111. Modernize NORAD to meet existing challenges and evolving threats to North America, taking into account the full range of threats.