



National
Defence

Défense
nationale



MOBILIZING INSIGHTS IN DEFENCE AND SECURITY

MINDS

MOBILISATION DES IDÉES NOUVELLES EN MATIÈRE DE DÉFENSE ET DE SÉCURITÉ

ANNUAL REPORT 2020-2021

Canada



TABLE OF CONTENTS

MESSAGE FROM THE ASSISTANT DEPUTY MINISTER (POLICY)..... 4

EXECUTIVE SUMMARY:..... 5

ENHANCING COLLABORATION TO MOVE SECURITY AND DEFENCE FORWARD 5

THE MINDS PROGRAM: 6

YEAR IN REVIEW: 8

 A – Expert Briefing Series 9

 B - Targeted Engagement Grants 10

 C - Collaborative Networks 11

 D - Scholarships 15

 E - Rapid Response Mechanism 16

THE YEAR AHEAD..... 17

STAY IN TOUCH! 18

ANNEX A: MINDS POLICY CHALLENGES 19

ANNEX B: VIRTUAL EXPERT BRIEFING SERIES 23

ANNEX C: FUNDING RESULTS FOR TARGETED ENGAGEMENT GRANTS 25

ANNEX D: FUNDING RESULTS FOR COLLABORATIVE NETWORKS 36

MESSAGE FROM THE ASSISTANT DEPUTY MINISTER (POLICY)

In its second year of operations, the Mobilizing Insights in Defence and Security (MINDS) Program established and solidified its reputation as a vital resource, making impressive contributions to the Defence Team's understanding of the fluid and complex defence and security challenges it faces. MINDS continued to enable the delivery of relevant, innovative and timely external advice to the Department of National Defence and Canadian Armed Forces (DND/CAF). As COVID-19 reshaped our environment and priorities, I am particularly proud of how the program shifted its efforts and adapted to new dynamics, as well as how it responded to the need for novel insights on the implications of the pandemic on defence activities.

Throughout the year, the program's positive impact on policymaking was clear. More than \$1.8M, including over \$100k for pandemic-related research, was provided to Canadian and international defence and security experts, who delivered valuable analysis and perspectives on a range of important topics. Indeed, MINDS proved an indispensable tool to support evidence-based decision making, through important expert contributions on issues such as continental defence, organizational culture change, and sexual misconduct.

Behind the scenes, efforts this year were focussed on increasing the program's reach among internal stakeholders and finding ways to both better understand their needs, and connect them to available resources. To that end, we conducted a Defence Team-wide survey, and have been using this input to successfully inform improvements, in order to ensure MINDS remains a go-to capability that is pertinent and fit for purpose for the Defence Team.

I am pleased with how innovation persistently drives initiatives to grow and evolve the program and its network of internal and external stakeholders. Notably through virtual Expert Briefings, a new SharePoint site, and a re-vamped communications approach, MINDS has been increasing its engagement despite the pandemic. Its data-driven approach to service delivery helps position the program to support the Defence Team in tackling difficult issues via dynamic collaboration with high-calibre experts.

In the year ahead, I am confident that MINDS will continue to creatively expand its reach, optimize the delivery of useful and actionable information, and meaningfully support the crucial work of the Defence Team.



A handwritten signature in black ink, appearing to read 'Peter Hammerschmidt', written over a light grey background.

Peter Hammerschmidt
Assistant Deputy Minister (Policy)
Department of National Defence

EXECUTIVE SUMMARY:

ENHANCING COLLABORATION TO MOVE SECURITY AND DEFENCE FORWARD

In its second year – and despite the impact of the pandemic – the MINDS program continued to provide intellectual, analytical and creative support by connecting the Defence Team to the external defence and security expert community. Early in 2020, as the reality and implications of COVID-19 began to be felt, MINDS quickly adapted - moving seamlessly to virtual events and creating funding opportunities for pandemic-related initiatives. These efforts provided the opportunity for the Defence Team to learn from this unprecedented time, and grapple with its unique and complex challenges.

As the impact of the pandemic reverberated, MINDS also supported its grant recipients and Collaborative Networks in adapting their projects to the evolving situation and remote work environment.

In 2020-2021 MINDS...



LAUNCHED



3
COLLABORATIVE
NETWORKS

FUNDED



50
TARGETED
ENGAGEMENT GRANTS

HOSTED



14
EXPERT
BRIEFING EVENTS

AWARDED



28
SCHOLARSHIPS

PROVIDED



1
RAPID RESPONSE



Undeterred by COVID-19, funding recipients adapted in innovative ways to continue research and engagements.



MINDS continued to identify and create inclusive opportunities to amplify diverse voices in defence and security, including those of women, Indigenous peoples, and youth.



The Collaborative Networks actively engaged with and supported the ongoing work of the Defence Team.



MINDS continued to foster collaboration and bridge connections between DND/CAF and the expert community.

THE MINDS PROGRAM: MEETING THE DEFENCE AND SECURITY CHALLENGES OF TODAY AND TOMORROW



Through a variety of tools, the MINDS program continuously brings new and valuable perspectives to DND/CAF challenges. The five core funding mechanisms are:

- **The Expert Briefing Series**, invites leading Canadian and international thinkers to deliver focused presentations and stimulate exchanges, to both inform and challenge defence thinking;
- **Targeted Engagement Grants**, fund projects that creatively explore and aim to propose solutions to defence challenges;
- **Collaborative Networks**, are regionally diverse, multi-disciplinary teams that collaborate on specific research themes over a 3-year period to deliver in-depth and comprehensive analysis and policy recommendations on DND/CAF's most acute challenges;
- **The Rapid Response Mechanism**, provides immediate expert support to respond to evolving critical issues and new requirements; and,
- **Scholarships**, foster the next generation of defence and security experts.

Defence Policy Challenges

The MINDS Policy Challenges reflect the key strategic, operational and organizational issues facing DND/CAF today, and tie the various program elements together to ensure that funding decisions are aligned with Defence Team and broader Government of Canada priorities. Applicants for Targeted Engagement Grants, Collaborative Networks and Scholarships must demonstrate how their research proposals relate to and aim to address at least one of these Challenges and they are used to guide all other program spending decisions. The challenges are refreshed annually to adjust to evolving dynamics, and are the result of extensive consultations with stakeholders across the Defence Team.

In 2020-21, three new Challenges were added related to addressing sexual misconduct and hateful conduct in the CAF, and responding to COVID-19. A list of all Challenges is below and a more detailed overview of the associated key questions is available at Annex A.

<p>WELL-SUPPORTED, DIVERSE, RESILIENT PEOPLE AND FAMILIES</p> <ul style="list-style-type: none"> • Creative Recruitment and Retention Models • Innovative Approaches to Force Mix and Structure • Addressing and Preventing Sexual Misconduct • Addressing, Preventing Hateful Conduct and Radicalization 	<p>A CHANGING SECURITY ENVIRONMENT</p> <ul style="list-style-type: none"> • The Rise of Grey Zone Conflict • Evolving Role of Major Powers 	<p>GLOBAL DEFENCE ENGAGEMENT</p> <ul style="list-style-type: none"> • NORAD Modernization and the Future of North American Defence • Defence Role in Pandemic Preparedness and Recovery • Canada's Defence Relationships
<p>APPROACH TO DEFENCE: ANTICIPATE</p> <ul style="list-style-type: none"> • Anticipating Future Challenges 	<p>APPROACH TO DEFENCE: ADAPT</p> <ul style="list-style-type: none"> • Cyber, Space and Information as Operational Domains • The Role of AI • Emerging Technology and Military Application • Defence Role in the Arctic • Defence Procurement 	<p>APPROACH TO DEFENCE: ACT</p> <ul style="list-style-type: none"> • The Future of Capacity Building <hr/> <p>COVID-19 Challenge</p>

Amplifying Diverse Voices

MINDS has an important role to play in promoting diversity and amplifying a broad spectrum of voices in the defence and security community, including women, Indigenous peoples and youth. Applicants must always demonstrate how they factor Gender Based Analysis Plus (GBA+) considerations into the design of their project proposals, and are encouraged to seek out and include a broad variety of perspectives. MINDS continued to work with DND's Directorate for Gender Equality and Intersectional Analysis and the broader expert community in that field, to ensure that the defence and security sector continues to learn, grow and reflect the fabric and values of the Canadian population.

Governance

The MINDS Steering Committee, composed of senior representatives from organizations across the Defence Team, serves as a high-level departmental advisory body focused on ensuring transparency and efficiency in the management of the program. This includes but is not limited to: supporting the development of MINDS priorities and challenges, reviewing and endorsing funding recommendations, communicating Defence's needs for external expertise, and promoting the MINDS program. The day-to-day management of MINDS is conducted by the Directorate of Strategic Coordination and Outreach. The directorate is situated within Assistant Deputy Minister (Policy), which is responsible for the development and management of defence policy-making in DND/CAF, and under the Director General of Policy Coordination.



YEAR IN REVIEW:

REACHING NEW LEVELS OF OUTREACH

Consolidating MINDS' reach and relevance, both within DND/CAF and with the security and defence expert community, remained a top priority in 2020-21. Enhancing internal and external outreach played an important role in helping MINDS continue to thrive and utilize its funding mechanisms to achieve its main objectives to:

- Provide the Defence Team with relevant and timely advice;
- Foster the next generation of experts; and,
- Contribute to Canadians' understanding of defence and security issues.

Strengthening Relevance

A key area of focus was ensuring MINDS built on past successes and continued to be a useful tool for DND/CAF. To this end, in early 2020, the MINDS Team conducted a comprehensive and informative general survey on the MINDS program with the Defence Team. Using the data and feedback collected, the program launched an ambitious outreach campaign to:

- increase awareness and use of MINDS among DND/CAF and Government of Canada;
- build new connections with and among internal and external MINDS partners; and
- leverage data to ensure MINDS outputs are continuously refined to achieve results.

As part of MINDS' commitment to innovation and improving accessibility, the program also established a new internal SharePoint site to provide the Defence Team with on-demand access to funded projects and activities.

Supporting Security and Defence Experts

Throughout the year, MINDS also continued to grow its network of external experts. Notably with the move to remote work, the MINDS website was an effective mechanism to promote the program and funding available to external experts. In fact, between April 2020 and March 2021, the page received over 13,000 visits. Social media, from the DND and CAF accounts, as well as Collaborative Networks' accounts, also helped make the program more visible and accessible.

Moreover, the MINDS Team conducted a number of targeted outreach activities that effectively expanded knowledge of the program and its reach into previously under-represented communities, demonstrating the benefits of finding new and innovative ways to collaborate.

A – EXPERT BRIEFING SERIES



Through the Expert Briefing Series (EBS), top Canadian and international defence and security experts are invited to brief the Defence Team and Government of Canada officials on priority issues.

Despite the challenges brought upon by COVID-19, the series continued to thrive under a new virtual webinar format that made the events more accessible to a wider audience, and remained MINDS' most flexible and responsive mechanism to access expertise on emerging issues. The shift to virtual speakers allowed MINDS to redirect funds from travel-related expenses to attracting high profile experts from around the world – thereby increasing the value of each dollar spent. MINDS hosted a total of 14 virtual engagements on topics that reflect the diverse and complex challenges faced by DND/CAF. A detailed list of all engagements is included at **Annex B**.

MINDS' well-attended webinars explored key issues and fostered rich conversations with leading experts and thinkers, such as:



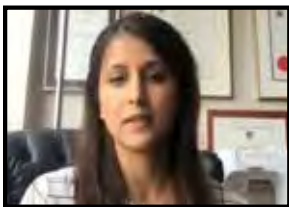
Guy Saint-Jacques, Canada's former Ambassador to the Republic of China, shared his in-depth knowledge and experience **working in China** throughout his career with Global Affairs Canada.



John Mearsheimer, a distinguished professor of Political Science at the University of Chicago, provided a brief **on great power competition and the increasing multipolarity in the international system**. The briefing provided insight on the future of great power politics and how Canada might navigate this environment, which helped with the awareness and anticipation of real and potential defence and security trends of significance.



Robert D. Kaplan, an acclaimed expert in geopolitics who is highly sought by political, business and academic leaders across the globe, provided senior officials from across the Government of Canada with his views on the present and future state of the tectonic shifts reshaping the **global order, great power competition**, and the implications for Canada.



Aisha Ahmad, Senior Researcher of the Global Justice Lab at the Munk School of Global Affairs and Chair of the Board of Directors of Women in International Security-Canada, provided a briefing on the **threat of jihad in Africa**, mapping out possible avenues for Canadian intervention and the potential operational impact for DND/CAF.



Just days following the 2020 US election, **Roland Paris**, founder of the Centre for International Policy Studies, and research associate at Chatham House, provided a timely brief on **the Biden Administration's expected foreign policy approach** and how it might affect Canada. He addressed anticipated changes in the administration's approach, including regarding the Arctic and climate change.

B - TARGETED ENGAGEMENT GRANTS



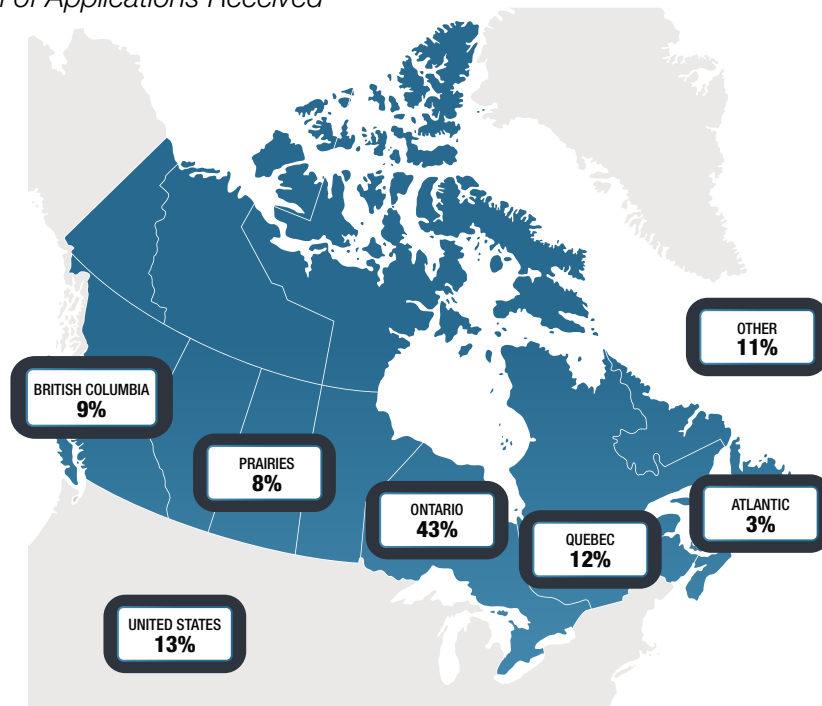
MINDS Targeted Engagement Grants drive innovation, amplify expert voices, spark wider discussions, and inform policy discussions on important and timely defence and security issues. The grants provide up to \$50,000 in non-recurring financial support for projects such as conferences, roundtables, workshops, research, and publications. To continue to foster the next generation of experts, grants valued at \$10,000 are also available under the Young MINDS Initiative for undergraduate students.

Funding Opportunities



MINDS issued calls for applications in January and September 2020. A record number of applications were received from across Canada and around the world, and covered all policy challenges. More than **\$1.8 million** in grant funding was awarded for projects that directly supported DND/CAF activities and helped advance defence priorities.

Table 1: Distribution of Applications Received



Grant recipients continued to be a source of creative thinking and diversity of perspectives for DND/CAF and the Government of Canada. While an overview of all projects funded is included in Annex C, highlights from the year include:

- The Center for Climate Security developed a **climate security strategy for Canada**.
- The Conference of Defence Associations Institute virtually hosted its **89th Annual Ottawa Conference on Security and Defence**.
- Valens Global produced an invaluable strategic framework and innovative risk indicia glossary for **identifying hateful conduct**.
- Canadian Global Affairs Institute's organized a series of webinars, research papers and graduate student presentations on how to **modernize continental defence**.
- Experts from the University of Sherbrooke studied the impacts of **conspiracy theories** related to COVID-19 on social media in Canada.
- Young MINDS from the University of Montreal and University of New Brunswick studied **NATO's training mission in Iraq**, and conspiracy theories that promote hateful conduct.



C - COLLABORATIVE NETWORKS

MINDS Collaborative Networks bring together multi-disciplinary teams of distinguished experts from a variety of sectors, from across Canada and abroad. Each Network receives up to \$750,000 over three years to support DND/CAF through research and activities aimed at bringing new perspectives to inform policy making, as well as fostering the next generation of experts.

Calling all Experts!

A call for applications was launched in January 2020 and received a record number of responses, with a total of 11. Applications were received primarily from academic institutions (8), but also from think tanks, one NGO, and one non-profit organization, with regional representation from Ontario (73%), Québec (9%), British Columbia (9%), and Alberta (9%). Overall, submissions touched on all MINDS policy challenges.

After a rigorous evaluation process, three new Collaborative Networks were selected:

- Network for Strategic Analysis;
- Innovative Methodologies for Defence Challenges Network; and,
- Network for Research on Hateful Conduct and Right-Wing Extremism in the CAF.

Our Collaborative Team

All six Networks, including those funded in 2019-20, thrived despite challenges from the pandemic. They were able to maintain their momentum and advance several projects and activities, expand their membership, and continue engagements in a virtual environment to contribute to some of the Defence Team's highest priority files and advance MINDS' main objectives.

Respond to the need for relevant and timely advice from defence and security experts

- Special reports on priority subjects
- Promoting partnerships and collaborating with DND/CAF

Foster the next generation of experts and scholars

- Student symposiums and forums
- Job opportunities for graduate students, emerging scholars, and next generation researchers

Contribute to Canadians understanding of defence and security issues

- Bilingual podcasts
- Publicly available webinar recordings
- Virtual events and webinar series
- Scholarly outputs, policy-relevant reports, event videos

Highlights

To date, all Networks have continually proven to be agile and highly responsive, delivering timely products while leading independent research programs that engage the public.



Defence and Security Foresight Group (University of Waterloo)

- Hosted regular virtual events, including a well-attended four-part webinar series on GBA+ and intersectionality in defence and security research
- Readily responded to information requests from DND/CAF
- Published special policy briefs and reports to address emerging issues

Director: **Dr. Bessma Momani**

Website: uwaterloo.ca/defence-security-foresight-group/



North American and Arctic Defence and Security Network (Trent University)

- Delivered insightful and timely expertise on NORAD and continental defence
- Provided expert advice on North American and Arctic defence issues via online initiatives, publications and engagements with the defence team
- Responded to requests for research on priority subjects, including for NORAD and DND/CAF

Director: **Dr. Whitney Lackenbauer**

Website: NAADSN.ca



Security-Policy Nexus of Emerging Technology Network (Concordia University)

- Continued research on emerging technology and delivered several notes to the Defence Team
- Conducted research on connected battlespaces and delivered a White Paper on Joint All-Domain Command and Control to inform ongoing work

Director: **Dr. Kash Khorasani**

Website: concordia.ca/ginacody/research/spnet.html



Network for Strategic Analysis (Queen's University)

- First fully bilingual Network created, and launched the first French language podcast on Canadian peace and security issues, Conseils de Sécurité
- Delivered several virtual events and policy briefs
- Held an annual symposium and Graduate Seminar with DND/CAF participation

Directors: **Dr. Stéfanie von Hlatky and Dr. Justin Massie**

Website: ras-nsa.ca/



Innovative Methodologies for Defence Challenges Network (Archipelago of Design)

- Supported the development of the CAF's Design Thinking program
- Delivered learning plans, training materials, and lectures and workshops with leading thinkers in military and civilian design

Directors: **Dr. Philippe Dufort and Dr Philippe Beaulieu-Brossard**

Website: aodnetwork.ca/



Network for Research on Hateful Conduct and Right-Wing Extremism in the CAF (Ontario Technical University)

- Grew its engagement with DND/CAF and government partners to inform ongoing efforts to address hateful conduct
- Led an advisory session for CAF members

Directors: **Dr. Barbara Perry and Dr. David Hofmann**

Website: sites.ontariotechu.ca/rwe-caf/resources/dnd-information/index.php

ON DEMAND EXPERTISE

Networks were called upon to help the Defence Team better understand the pandemic and its myriad impacts. In summer 2020, the MINDS team adjusted and added a specific COVID-19 Policy Challenge to guide external input, and issued a call for papers from Collaborative Networks. An overview of its key questions is included in Annex A.



The resulting report provided DND/CAF with timely and unique insights on the immediate impacts and longer-term implications of COVID-19, particularly on civil-military relations, disinformation, emergency management, geopolitics, and technology. The report can be consulted on the Network for Strategic Analysis' webpage at ras-nsa.ca/publication/network-challenge-report-covid-19/

Networks' ability to respond rapidly with relevant advice to an unprecedented event was well-received and their products provided valuable knowledge on emerging circumstances.



D - SCHOLARSHIPS

MINDS' commitment to fostering the next generation of defence and security scholars and experts, and helping showcase their work and expertise, remained strong. The MINDS Scholarship initiative, administered with the Social Science and Humanities Research Council of Canada (SSHRC) and the NATO Defense College (NDC), continued to thrive.

MINDS Scholarships

The MINDS scholarship initiative offers research training awards and supplements at the master's, doctoral and postdoctoral levels to students and researchers whose work is related to one or more of the MINDS Policy Challenges. In line with the program's commitment to fostering inclusivity and a diverse pool of experts, one-year awards are also available for Indigenous students at the master's level whose studies relate to defence and security issues.

In its second year, the MINDS Scholarship Initiative received a record number of applications.



Some candidates were offered full funding while others received a supplement to their existing SSHRC or MINDS scholarship. A total of \$717,500 in funding was allocated in 2020-21.

Table 2:

Type of Research Training Award	# awards distributed	Value (\$)
MINDS Initiative Postdoctoral Fellowships (up to 2 years)	1	90,000
MINDS Initiative Doctoral Awards (up to 3 years)	2	210,000
1-year MINDS Initiative Doctoral Awards	4	140,000
MINDS Scholarship Initiative Supplements (1 year, non-renewable) - Master's	12	120,000
MINDS Master's Scholarships Indigenous Students	9	157,000



NATO Defence College Fellowship

The NATO Defence College (NDC) Fellowship provides a unique opportunity for a Canadian researcher to work alongside experts from across NATO member countries at the NATO Defence College in Rome, Italy. The Fellowship enables Canada to continue to uphold its commitment to NATO, and helps advance both Canada and the Alliance's strategic objectives, through cutting-edge research and increased collaboration.

More information on the NDC is available on the [NATO Defense College](#) website.

For its second competition, MINDS received five applications.

Dr. Benjamin Zyla was awarded the fellowship for 2021.

Dr. Zyla has over fifteen years of research experience on Canadian foreign policy and NATO, and focused his time with the NDC on discussions around NATO burden sharing.



E - RAPID RESPONSE MECHANISM

The Rapid Response Mechanism is contingency funding that enables MINDS to readily respond to new, evolving and pressing security and defence challenges, facilitating quick access to high quality advice from external experts to support the Defence Team in making informed policy decisions.

In 2020-2021, this funding was utilized to support DND/CAF in better understanding the implications of **COVID-19**. In consultation with key leaders from across the Defence Team, MINDS organized a special grant competition based on the COVID-19 Policy Challenge that was shared with Collaborative Networks.

The challenge identified key issues where DND/CAF could benefit from external expertise, and was focused on the pandemic's emerging geopolitical, domestic, and defence implications. An overview of its key questions is included in **Annex A**.



11 projects received funding (a total value of \$107,605) to conduct research on key issues such as:

- Defence's role in Canada's economic recovery;
- Role of Canadian Rangers during the pandemic; and
- Like-minded countries' pandemic response efforts.

A list of all projects funded is included in **Annex C**.

THE YEAR AHEAD...



BUILDING CONNECTIONS

MINDS has become an important hub in the global network of defence and security experts and practitioners. As the program enters its third year, MINDS will focus on building and leveraging connections that can maximize, measure, and communicate its impact. Through an internal communications strategy, the program will utilize digital tools to broaden the distribution of its outputs and increase the accessibility of its events. Externally, MINDS will enhance its social media presence and promotional activities to attract more first-time and diverse funding applicants.

RENEWING PRIORITIES

Based on lessons learned and feedback from the expert and DND/CAF communities, MINDS will refresh its suite of Policy Challenges for 2022-23. The new challenges will be more concise, distinct, open-ended, and effective in communicating DND/CAF's priorities. To ensure MINDS continues to support the Defence Team's access to timely, relevant, and high-quality expertise, the challenges will focus on four thematic priorities: People, Culture, and Diversity; Continental Defence; The Global Security Environment; and Domains and Technology.

COLLABORATIVE NETWORKS

Three new Collaborative Networks will be launched to tackle DND/CAF's most pressing challenges. With nine concurrent networks, this program pillar will achieve full operational capacity. Each network will contribute unique research and engagement; ensuring their expertise cover the breadth of leading defence challenges. In 2021-22, the Defence Team will be well-supported by a diverse and multidisciplinary group of leading external experts, including the new:



The Canadian Network on Information and Security (CANIS): a bilingual network that will examine the impact of the domestic and international information environments on Canadian national defence and security.



The Research Network on Women, Peace and Security (RN-WPS): a bilingual network that will study defence and security threats, with emphasis on the Women, Peace and Security agenda through a GBA+ lens.



The Canadian Military Sexual Trauma Collaborative Network: builds on an existing multi-disciplinary community of practice to further knowledge on sexual misconduct.

STAY IN TOUCH!

FOLLOW. SHARE. APPLY.

@CanadianForces #MINDS
@NationalDefence #MINDS



MINDS@forces.gc.ca
Canada.ca/Defence-MINDS

FOLLOW OUR COLLABORATIVE NETWORKS

Defence and Security Foresight Group

@DSF_Group
uwaterloo.ca/defence-security-foresight-group

North American and Arctic Defence and Security Network

@NAADSN_RDSNAA
naadsn.ca

Security-Policy Nexus of Emerging Technology

concordia.ca/ginacody/research/spnet/

Network for Strategic Analysis

@RAS_NSA
ras-nsa.ca

Innovative Methodologies for Defence Challenges Network

aodnetwork.ca/

Network for Research on Hateful Conduct in the CAF

@RWE_CAF_Network
sites.ontariotechu.ca/rwe-caf/index.php

ANNEX A: MINDS POLICY CHALLENGES

THEME ONE: WELL-SUPPORTED, DIVERSE, RESILIENT PEOPLE AND FAMILIES

Challenge 1: Creative recruitment and retention models

- How can DND/CAF make a military career attractive?
- What are the barriers to recruiting/retaining a diverse CAF?
- How can DND/CAF best integrate/manage a more diverse membership?
- How can DND/CAF improve retention of its experienced, mid-career members?

Challenge 2: Innovative approaches to force mix and structure

- What is the appropriate force mix and structure for today and the future, in light of emerging challenges like climate change?
- How do we maximize the output/impact of the Reserves?
- How can diversity targets support Force Posture and Readiness?

Challenge 3: Addressing and Preventing Sexual Misconduct

- What practices could improve outcomes for those affected by sexual misconduct?
- What further efforts can the CAF take to prevent sexual misconduct?
- How can we encourage men to seek assistance and to report experiences?
- How can we increase understanding of those individuals who commit sexual misconduct and the situational/individual risk factors which may lead to incidents?

Challenge 4: Addressing and Preventing Hateful Conduct and Radicalization

- Can institutional measures be adapted to ensure a culture free from hateful attitudes and conduct?
- How can DND/CAF work with OGDs and civil society to disrupt this conduct?
- What best practices can be applied to identify prospective, serving, or veteran members who may be susceptible to radicalization/hateful attitudes?
- Does the CAF's unique culture play a role in perpetuating or removing hateful conduct and views?
- Do existing policies and processes sufficiently address hateful conduct and radicalization?

THEME TWO: A CHANGING SECURITY ENVIRONMENT

Challenge 1: The Rise of Grey Zone Conflict: Below Threshold Tactics and Hybrid Warfare

- What does this mean for policies/capabilities at the strategic, operational and tactical level?
- What is the role for DND/CAF and OGDs?
- How do allies/adversaries define and approach to threshold tactics and hybrid warfare?
- How are non-state actors/adversaries using non-traditional actors?

Challenge 2: The Evolving Role of Major Powers

- What are the strategic objectives of Russia and China? How do they align and diverge?
- How are allies, partners and other actors responding to Russia and China?
- What threats and opportunities exist in a time of great power competition?
- What are the implications of Canada's democratic system on the ability to respond to major powers?

THEME THREE: GLOBAL DEFENCE ENGAGEMENT

Challenge 1: NORAD Modernization and the Future of North American Defence: Identifying Threats and Gaps

- What are the threats against North America and associated gaps in continental defence?
- What capabilities and infrastructure fill these gaps?
- How should NORAD evolve?
- What policies must be reformed to modernize NORAD?
- What role is there for other security organizations such as NATO?

Challenge 2: Canada's Defence Relationships

- How does the breakdown of the international rules-based order affect defence relations?
- What is the future of NATO in an era of great power competition?
- What opportunities for defence and security cooperation exist?
- How can defence diplomacy be better understood, evaluated, and practiced?

THEME FOUR: APPROACH TO DEFENCE: ANTICIPATE

Challenge 1: Anticipating Future Challenges

- How will the following domains evolve over the next 10, 20, 50 years?
 - » Security Environment
 - » Defence Investment and Burden Sharing
 - » Geopolitical issues, alliances and partnerships
 - » Capabilities
 - » Technology / Information
- Are current capabilities broad and adaptable enough to meet an evolving security domain? If not, what force structure is the most applicable to meet any future challenge in a joint or combined environment?

THEME FIVE: APPROACH TO DEFENCE: ADAPT

Challenge 1: Cyber, Space, and Information as Operational Domains

- How can DND/CAF maximize these domains especially in the context of great power competition?
- How can DND/CAF maintain effective C2 and freedom of action in new domains amidst rapid technological change?

- How do you develop, test and employ capabilities in light of strategic, operational, legal and ethical considerations?
- How must domestic and international legal and policy frameworks change to compete/ contest/ confront/combat adversaries in the information domain?
- How will adversaries use/exploit domains?
- How do we respond to developments in a way that is compatible with Canada's international engagements on space security?
- How can DND/CAF support whole of government efforts to instill resiliency?

Challenge 2: The Role of Artificial Intelligence

- What are the strategic and military implications of AI?
- How can the CAF be better positioned to leverage AI?
- What are the legal/ethical considerations?
- How will adversaries use AI to challenge DND/CAF?

Challenge 3: Emerging Technology and Military Application

- What are the strategic, operational and tactical implications of emerging technology?
- How are allies and potential adversaries addressing emerging technology for defence and security purposes?
- How can DND/CAF work with private sector to raise awareness and mitigate risk?
- What are relevant examples where military/dual-use technology was acquired by a foreign state?

Challenge 4: Defence Role in the Arctic

- Beyond the military domain, what threats exist in the Arctic? What are foreign and economic military interests?
- How does DND/CAF work with partners (e.g. government, other Canadian partners, other Arctic countries, NATO, non-Arctic partners) to more effectively deliver benefits/services?
- What is/will be the role of land, sea, air, special operations forces in demonstrating sovereignty and deterrence against activities undermining interests in the North?

Challenge 5: Defence Procurement

- How does DND/CAF improve defence procurement?
- What does the model look like?
- What policy changes, if any, are required to implement a new model?

THEME SIX: APPROACH TO DEFENCE: ACT

Challenge 1: The Future of Capacity Building

- How should capacity building evolve?
- What are the implications of hybrid warfare on capacity-building?

Geopolitical Impacts

- How has COVID-19 changed the geopolitical landscape? What are the likely short- and long-term impacts of the pandemic on international relations, defence and security issues, political economy and society?
- How has the COVID-19 pandemic changed the nature of strategic competition between great powers, most notably between the US (and the West) and Russia/China?
- What, if any, are the potential impacts of aggressive disinformation operations targeting Western governments, including militaries, on future operations?

Lessons Learned

- What lessons can DND/CAF learn from Canada and other countries' response to COVID-19?
- What's the appropriate role for DND/CAF in managing and responding to requests for assistance?
- How can DND/CAF work more closely with other government departments and agencies, civil society organizations, and the communities in which they serve to prepare for and prevent the spread of infectious disease? Who are the key stakeholders with whom they should partner?
- How can DND/CAF contribute to Canada's global health engagement, in anticipation of health security becoming a larger problem in the future?
- Should there be a restructuring or re-prioritization of the collection and presentation of medical intelligence to DND/CAF leadership and other government departments?
- What vulnerabilities or dependencies revealed by COVID-19 require urgent action (supply chains, reliance on civilian health care, etc.)?

The Defence Team: People, Capabilities, Roles, and Relationships

- How can DND/CAF adapt its support and service delivery to DND/CAF members and their families following COVID-19? What unique barriers or challenges did CAF members and their families encounter in managing the crisis?
- How can DND/CAF help to grow the economy following COVID-19? How can the CAF assist the recovery of Canada's defence and dual-use sectors which are essential to meeting capability needs or maintaining readiness/posture?
- How can the Primary Reserve and Ranger forces be used during public health crises?
- What are the impacts to how the CAF operate during a global health pandemic? What equipment, training, doctrine, capabilities, etc. would better prepare DND/CAF for future public health crises?
- What are the gendered and diversity implications of the Covid-19 pandemic on CAF members, both at home and in their work?
- What are the implications of COVID-19 for DND/CAF's capacity building efforts abroad? How should DND/CAF engage with partner forces to enable partner nation rebalancing post-COVID-19?
- What opportunities for innovation and efficiency have arisen from the COVID-19 crisis and what can DND/CAF learn from adaptations elsewhere in the public and private sectors?

ANNEX B: VIRTUAL EXPERT BRIEFING SERIES

Guy Saint-Jacques

August 2020

Mr. Guy Saint-Jacques, shared his in-depth knowledge and experience working with China throughout his career with Global Affairs Canada, which included serving as Canada's Ambassador Extraordinary and Plenipotentiary in the People's Republic of China from 2012 to 2016.

Robert D. Kaplan

September 2020

Mr. Kaplan (acclaimed expert in geopolitics and twice named one of the "Top 100 Global Thinkers") provided senior officials from across the Government of Canada with his views on the present and future state of the tectonic shifts reshaping the global order, great power competition, and the implications for Canada.

Alice Pannier

September 2020

France's Strategic Role in the World

Ms. Pannier (Assistant Professor, Johns Hopkins' School of Advanced International Studies) provided a briefing and led a round table discussion on France's strategic interests and ambitions, its military and political strategy, President Macron's priorities and doctrine, and Canada-France relations.

Christopher Sands and James Carafano

October 2020

The U.S. Return to Great Power Competition: Forging Canada's Path Forward

Mr. Sands (Director, Wilson Center's Canada Institute) and Mr. Carafano (Vice President, Heritage Foundation's Kathryn and Shelby Cullom Davis Institute for National Security and Foreign Policy) delivered an expert briefing and panel discussion on the US' approach to great power competition and the implications for its Allies and partners.

John Mearsheimer

November 2020

The Future of Great Power Politics and Canada's Role in the World

Mr. Mearsheimer (distinguished professor of Political Science at the University of Chicago) provided a brief on great power competition and the increasing multipolarity in the international system.

Valens Global

December 2020

"Like a Drop of Cyanide" – A Strategic Framework for Addressing Hateful Conduct and Radicalization in the CAF

The Valens Global team provided an overview of their recently published Framework for addressing hateful conduct in the CAF. They discussed the outcomes of this MINDS-funded project and provided recommendations on how to address, counter, and prevent hateful conduct in the CAF.

John Hemmings

November and December 2020

Evolving the Five Eyes: Challenges and Opportunities in the New Global Environment

Mr. Hemmings (Associate professor, Daniel K. Inouye Asia-Pacific Center for Security Studies) discussed a paper he prepared with officials from Canada and from key partner countries on Below Threshold Conflict activities in the technology, information and military, and economic domains.

Roland Paris

January 2021

What to Expect from a Biden Presidency – Implications for Canada

Roland Paris (founder of the Centre for International Policy Studies, and research associate at Chatham House) provided a brief on the Biden Administration's expected foreign policy approach and its potential implications for Canada.

Center for Climate and Security

February 2021

A Climate Security Plan for Canada

John Conger (Director of the Center for Climate and Security) and Shiloh Fetzek (Senior Fellow for International Affairs at the Center) provided an overview of the study MINDS-funded on the impact of climate change on Canada's geostrategic interests, peace support operations, and international disaster response. They also provided recommendations for the development of a Climate Security Action Plan for Canada.

Ewan Lawson, Thomas Mahnken and James Rolfe

March 2021

Below Threshold and Hybrid Warfare Conflicts

Ewan Lawson (Senior Research Fellow at the U.K.'s Royal United Services Institute) delivered a paper and presentation on the **UK's responses** to Below Threshold activities and hybrid conflict.

Thomas Mahnken (President and Chief Executive Officer of Center for Strategic and Budgetary Assessments, in Washington DC) delivered a paper and presentation on **China's integrated strategy**.

James Rolfe (Senior Fellow, Victoria University of Wellington's Center for Strategic Studies in New Zealand) delivered a paper and presentation on **New Zealand's armed forces** experience with Below Threshold activities.

Aisha Ahmad

March 2021

Understanding Jihad in Africa

Aisha Ahmad (Director of the Islam and Global Affairs Initiative, Senior Researcher of the Global Justice Lab at the Munk School of Global Affairs, and Chair of the Board of Directors of Women in International Security-Canada) provided a briefing on the threat of jihad in Africa.

Dmitri Trenin

March 2021

From Pipelines to Pipe Dreams? The Future of Russo-German Relations

Dmitri Trenin (founding member of the Carnegie Moscow Center) delivered an expert briefing on the present, past, and future of Russo-German and Russo-European relations.

ANNEX C: FUNDING RESULTS FOR TARGETED ENGAGEMENT GRANTS

Note: Due to COVID-19 some of these events and projects may not have occurred on the dates included below.

ROUND 1

Valens Global

Hateful Conduct and Radicalization in the Canadian Armed Forces: A Strategic Framework for Action & Blueprint for Recognizing Risk Indicators

Washington, DC
\$49,676

Funding provided to support a project to help the Department of National Defence and the Canadian Armed Forces prevent, recognize, and intervene against hateful or radicalized conduct through the provision of identification tools, as well as a framework to prevent and manage radicalization among members. Additionally, the project looked to generate a risk indicia glossary and a brochure on prevention, identification, and intervention.

University of Ontario Institute of Technology

Handling Hateful Conduct in CAF: Scoping the Policy Environment

Oshawa and Ottawa, ON
\$49,995

Funding provided to support a survey and analysis of the policies that govern hateful conduct and right-wing extremism in the CAF, as well as a comparative analysis of similar policies in like-minded countries. The project also aims to provide options for addressing misconduct (training, culture, etc.), and approaches to strategic communications.

Queen's University and Servicewomen's Salute Canada

Improving Collaboration of the CAF SMRC and local Sexual Assault Centres: Kingston as a Comparative Study

Kingston, ON
\$49,945

Funding provided to support an evaluation of the Sexual Assault Support Centre in Kingston, Ontario, which is supported by the Canadian Armed Forces' Sexual Misconduct Response Centre. The evaluation included a comparative case study of civilian and military members using the Support Centre's services and resources.

Center for Climate and Security (an institute of the Council on Strategic Risks)

A Climate Security Plan for Canada

Washington, D.C., USA
\$50,000

Funding provided to support a study of the potential impact of climate change on Canadian Armed Forces' missions and infrastructure in Canada, with a particular focus on the Arctic. This study aimed to inform the development of a climate security action plan for Canada, with identified risks to be addressed by policy makers and security experts.

Association québécoise de la prévention du suicide

Thematic day on Suicide Prevention in the Armed Forces during the 2020 National Convention on Suicide Prevention

Montreal, QC
\$33,500

Funding provided to support a thematic day on suicide prevention in the armed forces during the 2020 Convention on Suicide Prevention.

Queen's University – Centre for International Defence Policy

Arctic Challenges: International Security in the Circumpolar North

Kingston, ON
\$50,000

Funding provided to support a conference and workshop on international security in the circumpolar north, the increased geopolitical and geospatial instability in the Arctic and its implication for future CAF operations. The concluding report provided policy options for Canada in this area.

The Henry L. Stimson Center

Assessing Chinese Military Ambitions and Strategy in the Arctic: Policy Recommendations for Canada

Washington, D.C. and China
\$50,000

Funding provided to support a 12-month research project, focused on Chinese military interests in the Arctic. The research, based on field visits and primary sources, involved in-depth analysis on China's military intent in the Arctic.

**Center for a New American Security
The Future of Russia and China in the Mediterranean**

Washington, D.C.
\$47,088

Funding was provided to support research on Chinese and Russian activities in the Mediterranean over the next 10-15 years, including a foresight study on the implications of these developments on Canadian, NATO, and others' interests.

Wilfrid Laurier University

Conceptualizing Canada's Approach to International Defence Capacity Building: A Mapping Exercise

Waterloo and Ottawa, ON; Kiev, Ukraine
\$49,258

Funding provided to support a six-month research project examining the last 20 years of Canadian defence capacity building abroad. The project focused on "mapping" these initiatives and sought to provide recommendations on how DND/CAF can better leverage capacity building moving forward.

University of New Brunswick – Gregg Centre for the Study of War and Society

Enhanced Learning for Combat Team Command Readiness, Phase II

Fredericton and Gagetown, NB
\$50,000

Funding provided to support the second phase of a project aimed at enhancing the decision-making skills of Canadian Army officers on the battlefield through virtual simulation. Working in close collaboration with the Tactics School of the Canadian Army, this phase focused on the completion and use of virtual case studies during the Tactics School Combat Team Commanders Course in November 2020.

Carleton University

The Year Ahead 2021: An International Security, Intelligence, and Defence Outlook

Ottawa, ON
\$37,374

Funding provided to support a conference examining the boundaries of local and global power, women's experience in deployment, as well as unconventional security threats. This conference brought together academics, experts, and practitioners in Ottawa in December 2020.

Carleton University

Foreign Suppliers of 5G Technology in Canada: Assessing Potential Threats and Vulnerabilities

Ottawa, ON
\$34,583

Funding provided to support a one day workshop in Ottawa, bringing together technical and policy experts to examine the technical, geopolitical and economic challenges of 5G. In addition, the project delivered a policy brief on foreign suppliers of 5G technology and the implications for Canada.

Canadian Global Affairs Institute

Procuring for Interoperability

Ottawa, ON
\$50,000

Funding provided to support a one-day conference in Ottawa focused on improving the Canadian defence procurement model. The event focused on key issues in Canada's defence procurement process and drew on international perspectives to propose alternative procurement models to mitigate these challenges.

University of Waterloo

Cybersecurity Threat to Canada's Critical Infrastructure

Ottawa, ON
\$49,910

Funding provided to support a two-day workshop in September 2020 in Ottawa to discuss cybersecurity risks to Canadian critical infrastructure. The workshop focused on technical security gaps that may leave infrastructure open to cyber threats, as well as dispersed authority and responsibility that can leave Canada unprepared for attacks from evolving technologies.

Concordia University

#RightsCity: Human Rights in the Digital Age

Ottawa, ON
\$33,377

Funding provided to support a one-day conference in Ottawa examining the implications of technological evolution on human rights and security issues, focusing on the challenges for Canada's defence, policymaking, and international engagement. The conference specifically addressed foreign interference, disinformation, cybersecurity and multilateral cooperation, and the freedom of expression.

The Roméo Dallaire Child Soldiers Initiative

Impact of Women's Participation and Leadership in Peace Operations: Research and Dialogue

Ottawa, ON
\$49,564

Funding provided to support research on best practices around issues related to the women, peace and security agenda, by both state and non-state actors, with a focus on child protection policies and practices from a gender-neutral perspective. The resulting research was discussed at an event in Ottawa in summer 2020.



**McGill University –
Centre of Genomics and Policy**

**Opportunities and Challenges of Using
Epigenetic Technologies in Defence and
Security Contexts**

Montréal, QC
\$47,647

Funding provided to support research examining the application of epigenetics in a defence and security context, including tracking exposure to chemical weapons, monitoring mental health, and enhancement of bodily functions. The research also studied the legal frameworks, as well as military directives, that could apply to the use of epigenetics. The work culminated in a one-day workshop and policy brief.

Road Home Research & Analysis

**Canadian Nationalism in the Fight Against
Extremism**

Toronto, ON
\$50,000

Funding supported a project aimed at fostering discussion on extremism in the CAF and provided to support a project aimed at fostering discussion on the issue of extremism in the CAF and the role of nationalism as a potentially constructive and destructive force.

**YOUNG MINDS
Ryerson University**

**Developing a Public Health Framework to
Ensure Strong, Secure, Engaged Canadian
Armed Forces in the Light of the Climate
Change Era**

Toronto, ON
\$7,390

Funding provided to support a study on the development of preparedness plans for natural disasters, as well as an examination of how Artificial Intelligence can be used to collect data on past natural disasters to identify patterns and predict future crises. The study's preliminary results were presented during a workshop in Toronto.

ROUND 2

Carleton University

Yesterday's Enemies, Tomorrow's Friends: China-Russia Cooperation, Global Decoupling, and Canada's Strategic Future

Ottawa, ON
\$46,720

Funding provided to support research on how China and Russia may be dividing the international order through cooperation and mutual support, and the implications for Canadian defence and security interests.

Carleton University

The COVID-19 pandemic and its implications for the Canadian national defence and security community

Ottawa, ON
\$10,000

Funding provided to support a study on the Department of National Defence and the Canadian Armed Forces' current capabilities, role, and contribution to anticipate, prevent, and manage public health crises, and how they can be improved.

Queen's University

The Power of Diversity in the Armed Forces: International Perspectives on Immigrants' Participation in the Military

Kingston, ON
\$16,865

Funding provided to support a workshop, the publishing of an edited volume, and production of a policy brief comparing how 12 different allied countries (Canada, USA, Australia, Belgium, Brazil, India, Israel, The Netherlands, Norway, Poland, Sweden, and Switzerland) address the recruitment of immigrants and non-citizens in their respective armed forces.

Queen's University

Tracking and Identifying Women Peace and Security Research

Kingston, ON
\$17,900

Funding provided to support efforts to map and create an online database of existing expertise on Women, Peace and Security (WPS) at academic institutions and in government, military, activist and not-for-profit organizations across Canada, in English and French.

Queen's University

The validation of a gender-informed, culturally competent mentorship framework for women in the CAF

Kingston, ON
\$37,971

Funding provided to support a study of a gender-informed, culturally-competent mentorship framework to support women in the Canadian Armed Forces throughout the lifespan of their military careers, by providing both career-oriented and psychosocial supports.

University of British Columbia

(Survive and Thrive Applied Research (STAR) Initiative) Governance and Organization for Whole of Canada Response to Grey Zone Tactics in the Pan-Domain

Kelowna, BC
\$18,800

Funding provided to support a series of simulations that will explore the Department of National Defence and Canadian Armed Forces, and whole-of-government, response to two illustrative grey zone tactics used by adversaries in pan-domain competition and beneath the threshold of warfare.

University of British Columbia

A Digitized Community-Based Recruitment and Referral Portal and A Militainment Approach for DND and CAF

Okanagan, BC
\$31,520

Funding provided to support the creation of an on-line recruitment and referral portal which will showcase Canadian Armed Forces (CAF) careers, as well as develop community influencer campaigns and online gaming prototype to underrepresented visible minority groups in the CAF.

British Columbia Institute of Technology

National Advanced Placement & Prior Learning Program (N-APPL)

Burnaby, BC
\$25,820

Funding provided to support to support research and program development on work-place training provided by external experts. While similar to the Prior Learning Assessment Review (PLAR) system, it went beyond the formal educational qualifications normally recognized.

Loughborough University

Going 'East of Greenland': Examining Canada's Defence Role in the Arctic

Loughborough, Leicestershire, UK; Peterborough, ON; Winnipeg, MB
\$49,738

Funding provided to support a study of the geographical seams that join NORAD, NATO and the United States' Unified Command Plan in the Arctic, as well as their vulnerability to exploitation by Russia and China.

Dallaire Institute for Children, Peace and Security

'Moral Injury' Research & Training Collaboration with the Canadian Armed Forces Chaplaincy

Halifax, NS; Borden, ON
\$40,757.50

Funding provided to support a research on 'moral injury', its relation to soldiers on mission and in potential interactions with child soldiers. This research will inform the development of a new curriculum to add to chaplain training, and a 'Train the Trainer' course at CFB Borden.

University of Waterloo

Artificial Intelligence, Automated Warfare, and Ethics

Waterloo, ON
\$50,000

Funding provided to support the development of a virtual speaker series to discuss the ethics of applying artificial intelligence in the battlefield.

Chatham House

Understanding the implications of recent developments in Russia's advanced military technology

London, UK
\$15,676

Funding provided to support research and a virtual workshop to assess how Canada and NATO partners could identify, and potentially exploit, Russian military vulnerabilities, as well as examine existing operational and doctrinal discrepancies between capabilities and their intended use.

**International Crisis Group & Stichting Giustra
International Foundation**

A Changing Security Environment: Understanding the role, interests and strategies of Russia, China, Iran and Turkey

Ottawa, ON
\$50,000

Funding provided to support research and virtual roundtables on the strategic objectives of Russia, China, Iran, and Turkey.

**Conference of Defence Associations Institute
89th Annual Ottawa Conference on Security and Defence**

Ottawa, ON
\$50,000

Funding provided to support the 89th Annual Ottawa Conference on Security and Defence in March 2021 under the theme “Canada and the World: A Threat Assessment”.

Ryerson University

Coordinated Vulnerability Disclosure for Networked Technologies: Best Practices and Policy Frameworks

Toronto, ON
\$44,550

Funding provided to support research on the security of cyberspace and networked technologies including those used and relied upon by National Defence, with a particular focus on the policy considerations and implications of the use of coordinated vulnerability disclosure programs.

**Organization for the Prevention of Violence
The Violent Far-Right and Service in the Armed Forces: Insights from Former Extremists**

Ottawa, ON; Edmonton, AB
\$44,125

Funding provided to support research on former extremists that served in Canadian, U.S., German, and Swedish armed forces’ perspectives, to identify potential factors between military experiences and radicalisation.

**Centre for International Governance Innovation
Facilitating Strategic Engagement: The Impact of Artificial Intelligence on Military Defence and Security**

Waterloo, ON
\$33,500

Funding provided to support a study on how countries like Canada can adapt to the force multiplying effects of artificial intelligence.

University of Alaska Fairbanks

Special Operation Forces and the Arctic: Meeting North America’s 21st Century Security Needs (MINDS NAASOF)

Fairbanks, AK
\$44,622

Funding provided to support a study on the Special Operational Forces’ current ability to address the emerging security needs, challenges, and threats to, and in, the North American Arctic.

Project Ploughshares

Charting the way forward: Examining the responsible uses of military AI by Canada's allies

Waterloo, ON
\$24,200

Funding provided to support research on emerging trends in the adoption of artificial intelligence in weapons and other systems, as well as examine the policies and best practices of Canadian allies and likeminded states.

African Access Consulting

African Navies & Maritime Security in an Age of Global Rivalry: Implications for Canadian Defence Policy

Calgary, AB
\$14,500

Funding provided to support research on the relationship between African sea-power, regional prosperity and security, and great power competition.

University of Calgary

Understanding public attitude toward defence spending in a post-COVID fiscal environment

Calgary, AB
\$50,000

Funding provided to support a study on Canadian perceptions, in particular on the impact of COVID-19 on support for defence spending.

Valens Global

Deepfakes, Climate Change, Flying Cars & Quantum Drones: Conditional Forecasting for Canadian Defense

Washington D.C., US; Raleigh, NC, US
\$49,040

Funding provided to support research on novel security challenges, specifically: weapons technology; a new global order; human rights, human security, and governance; and, the information ecosystem.

Canadian Global Affairs Institute

Climate Change and the Canadian Armed Forces

Ottawa, ON
\$50,000

Funding provided to support virtual workshops in winter 2021 on how National Defence can adapt and respond to climate change.

Canadian Global Affairs Institute

Emerging Technologies and Continental Defence

Ottawa, ON
\$50,000

Funding provided to support a series of webinars, research papers and graduate student presentations, from January to March 2021, on how Canada and the US can modernize continental defence amidst accelerating great power competition and technological advances.

Saint Paul University

The Factors of Successful or Failed use of Virtual Counter-narratives to Prevent Hateful Conduct and Violent Extremism

Ottawa, ON
\$50,000

Funding provided to support research on the effectiveness of different counter-narratives in the prevention of the dissemination of hateful and violent extremism speech on the web.

University of Sherbrooke

From distrust to disinformation: virtual tools used to perpetrate conspiracy theories and their potential violent impacts in Canada

Sherbrooke, QC
\$44,839

Funding provided to support a study of the emergence of conspiracy theories related to COVID-19 on social media in Canada, in order to better understand the development, dissemination and adherence to conspiracy theories.

YOUNG MINDS
University of Montreal

The Politics of Canadian Foreign Military Training: Operation IMPACT in Comparative Perspective

Montreal, QC
\$4,008.60

Funding provided to support research on the Canadian domestic and international politics of capacity building/training military operations, using Canada's participation in NATO's training mission in Iraq as a case study.

University of New Brunswick

Scoping Review of Canadian Conspiracy Theories Related to Political Extremism and Hateful Conduct in the CAF

Fredericton, NB
\$10,000

Funding provided to support a study of Canadian conspiracy theories that potentially promote hateful attitudes, conduct, and radicalization within the Canadian Armed Forces.

Queen's University

Considering Best-Practices in Middle Power Defence Policies

Kingston, ON
\$10,000

Funding provided to support research on defence policy and evolving role of middle powers, to identify the best-practice defence policies that Canada should consider to promote the rules-based order and deter threats as a middle power.

Queen's University

Enhancing Servicewomen's Salute COVID-19 Research Support and Online Engagement Capabilities

Kingston, ON
\$9,746.50

Funding provided to support work to improve the online tools and resources of the Servicewomen's Salute Canada Portal, as well as efforts to conduct a scan of existing research on servicewomen's experiences during COVID-19.

European Values Center for Security Policy

P.I.N.C.E.R. (Protecting Information; Negating Chinese Espionage and Reconnaissance)

Prague, Czech Republic
\$4,150

Funding provided to support research on Chinese intellectual property theft in Canada and its national security implications.

COVID-19 CHALLENGE

Laval University

Causes and Consequences of Pandemics: A Multidisciplinary Approach

Quebec, QC / Online
\$10,000

Funding supported a series of virtual seminars aimed at fostering a multidisciplinary dialogue about the practical, methodological, and normative aspects of studying pandemics.

Carleton University

COVID-19 Malicious Online Activities: Exploring Cyber Threats to Future Military Operations

Ottawa, ON
\$9,900

Funding supported research on the potential impacts of COVID-19 disinformation campaigns from violent non-state actors on CAF operations.

École nationale d'administration publique

A Comparative Analysis of the management of the COVID-19 pandemic in the Arctic

Ottawa, ON, Québec, QC
\$8,900

Funding supported research on government strategies in the Arctic region to limit the propagation of COVID-19.

Université du Québec à Montréal

Borders in the Era of COVID-19: (Im)mobility, Inequality, and Sovereignities, what are the implications for Canada?

Montreal, QC
\$10,000

Funding supported research on the impact of border closures at community, national, regional, and international scales.

Canadian Global Affairs Institute

Economic Recovery from COVID-19: Leveraging the Defence Team

Ottawa, ON
\$10,000

Funding supported a study of how DND/CAF spending can be redirected to facilitate Canada's economic recovery from COVID-19.

McMaster University

The Impact of COVID-19 on Military Members and Veterans Who Experienced Sexual Misconduct

Hamilton, ON
\$10,000

Funding supported a virtual international symposium on best practices and lessons learned in addressing cases of sexual misconduct among military members and veterans during COVID-19.

The Institute for Peace and Diplomacy

Discussion Series: COVID-19 Impact on Peace and Security

Toronto, ON / Online
\$10,000

Funding supported a series of panel discussions on the geopolitical impacts of COVID-19, with a focus on Canadian grand strategy, Middle East and Asia-Pacific policy, and global supply chains.

Sexual Assault Centre Kingston

Building Digital Bridges

Kingston, ON
\$8,957

Funding supported research on the experiences of CAF members who have accessed distance counselling via four sexual assault centres in Ontario prior to and during COVID-19.

Friends of Europe

Building Trust and Confidence in Cyberspace: Advancing International Law

Brussels, Belgium
\$10,000

Funding supported a panel discussion with leading experts on the impact of COVID-19 on cybersecurity and disinformation campaigns.

St. Francis Xavier University

The Canadian Rangers and COVID-19

Online
\$10,000

Funding supported research on the roles, impact, and local perception of the Canadian Rangers in their response to COVID-19.

Valens Global

Anticipating and Navigating the Post-COVID-19 Strategic Environment: A Virtual Event Series

Washington D.C., Raleigh, NC, United States/
Online
\$9,847.50

Funding supported two roundtables and an immersive wargame simulation to explore the impact of COVID-19 on great power competition and the various ways by which to navigate it.



ANNEX D: FUNDING RESULTS FOR COLLABORATIVE NETWORKS

Network Directors: Stéfanie von Hlatky (Queen’s University) and Justin Massie (UQAM)

Network for Strategic Analysis

Kingston, ON

Defence Policy Challenges Addressed: Evolving Role of Major Powers, Defence Relations, The Future of Capacity Building

The Network for Strategic Analysis examines regional tensions that can impact international stability and Canadian security; opportunities to support international organizations; and, strategies for Canada to enhance its effectiveness in capacity building. It is the first fully bilingual MINDS Collaborative Network that looks to support DND/CAF’s work in both official languages.

Network Directors: Barbara Perry, Ontario Tech University; and David Hofmann, University of New Brunswick

Network for Research on Hateful Conduct and Right-Wing Extremism in the CAF

Oshawa, ON and Fredericton, NB

Defence Policy Challenges Addressed: Addressing and Preventing Hateful Conduct and Radicalization, Anticipating Future Challenges

The Network for Research on Hateful Conduct and Right-Wing Extremism in the CAF is examining policy issues related to hateful conduct and radicalization in the CAF. It is comprised of a multidisciplinary group of Canadian experts and practitioners operating within regional hubs. The network is conducting case studies, social media analyses, and interviews with members of the Defence Team to better understand the issue and inform responses.

Network Director: Philippe Dufort, Archipelago of Design

Innovative Methodologies for Defence Challenges Network

Ottawa, ON

Defence Policy Challenges Addressed: The Rise of the Grey Zone / Hybrid Warfare, Anticipating Future Challenges, The Future of Capacity Building

The Military Design & Innovation Collaboration Network aims to build upon an existing network of researchers and military practitioners to centralize efforts in the area of Military Design. Its topics of research are varied and extensive, and include utilizing design thinking in response to hybrid warfare, as well as in support of investments in people and capabilities over the next 10 to 50 years.

