



Project CASA



Crisis Management and Disaster
Response Centre of Excellence



GCSP
Geneva Centre for
Security Policy

Advanced Research Workshop

“Climate and Security Action: The Role of Civil-Military Cooperation”

Place: Hotel Astoria, Sofia, Bulgaria

Dates: 16 – 18 July 2024

Travel dates: 15 and 19 July 2024

Number of speakers: ca. 25

Number of other participants: up to 60

Description and Justification

The occurrence of natural disasters, especially in fragile and vulnerable countries, can increase the risk of conflict and reduce the ability to deal with either or both. At the same time in some cases joint readiness and response to such emergencies can enhance cooperation and promote peace within and between countries.

Therefore, climate-related emergencies are an important aspect within the climate and security nexus along with the mitigation, adaptation, and resilience-related efforts. Whether or not the military should be involved in preparing for and responding to climate-related emergencies is a matter of considerable debate and views vary depending upon the context: the country, the political culture and whether the involvement is within national boundaries or beyond.

In particular, the workshop will address the need for better understanding of the nature, extent, and effectiveness of civil-military cooperation in climate-related emergencies. The importance of effective cooperation in the field of climate and security to protect our global “casa” has never been greater.

This event is organised in the context of the research project on “Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies” ([Project CASA](#)) which is being carried out with the support of the Mobilizing Insights in Defence and Security Program of the Canadian Department of National Defence, Directorate of Strategic Coordination and Outreach. The research project involves an interdisciplinary network of experts who collect, analyse, and publish data on military activities and civil-military cooperation in order to meet the need for relevant and timely advice from defence and security experts, foster the next generation of experts, and contribute to officials’ and public understanding of defence and security issues including the climate and security nexus.

The aim of this workshop is to help address NATO’s objective to “facilitate mutually beneficial cooperation on issues of common interest, including international efforts to meet emerging security challenges” and in particular with reference to “Security issues arising from key environmental and resource constraints, including health risks, climate change, water scarcity and increasing energy needs, which have the potential to significantly affect NATO’s planning and operations; Disaster forecasting and prevention of natural catastrophes; and Defence-related environmental issues”.



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Speakers and Participants

The ARW will bring together lecturers from the Crisis Management and Disaster Response Centre of Excellence (CMDR COE), Geneva Centre for Security Policy (GCSP), Carnegie Europe, Center for Naval Analyses (CNA), Climate Security Association of Canada (CSAC), Department of Government, University of Texas at Austin, EC-NATO D-Orbit, Environmental Law Institute, Environment & Development Resource Centre (EDRC), Euro Atlantic Disaster Response Coordination Centre (EADRCC), Faculty of Engineering Sciences, University College London, Foundation for Global Governance and Sustainability (FOGGS), Global Military Advisory Council on Climate Change (GMACCC), HES Paris, Johns Hopkins School of Public Health on Climate Disasters and Health, Joint Delegation of Canada to NAT, NATO HQ., NATO Climate Change and Security Centre of Excellence (NATO CCASCOE), and Organization for Security and Co-operation in Europe (OSCE), and other organizations.

The event is expected to welcome invitees from Albania, Belgium, Bosnia and Herzegovina, Canada, Croatia, Finland, France, Germany, Greece, Hungary, Italy, Jordan, Montenegro, Netherlands, North Macedonia, Poland, Romania, Republic of Moldova, Serbia, Switzerland, Ukraine, United Kingdom, and the United States. The event is open to all NATO Global Partners, Partnership for Peace (PfP) Nations, Mediterranean Dialogue Initiative (MDI), and Istanbul Initiative (II).

Goals and Outcomes

Goals: To meet the need for relevant and timely advice from defence and security experts, foster the next generation of experts and contribute to officials' and public understanding of defence and security issues including the climate and security nexus.

Participating experts will evaluate current and future tools to identify their utility in preventing conflict resulting from weak overall environmental security due to climate-induced degradation of both natural resources and human conditions.

Outcomes: A report of the proceedings will be published in the NATO Science for Peace and Security Series and widely promoted and distributed by the partners within Project CASA and the members of its Advisory and Expert Groups, as well as members of the North-Atlantic Civil-Society Working-Group on Environment and Security (NCWES), and via organisations participating in the Brussels Dialogue on Climate Diplomacy (BDCD) and other networks.

Security Relevance and Impact

Within this context, the Advanced Research Workshop (ARW) will:

- (1) Examine security issues arising from the implications of climate change induced natural disasters, including health risks, resource constraints, water scarcity and increasing energy needs, which have the potential to significantly affect NATO's planning and operations on military activities.
- (2) Identify both policy and technical approaches to building resiliency disaster forecast and prevention of natural catastrophes.
- (3) Discuss defence-related issues intended to mitigate the military vulnerability to potential catastrophic disasters (e.g. flooding).

Draft Programme

15 JUL 2024		
Arrival and Accommodation		
16 JUL 2024		
Time	Topic / Moderator(s)	Lecturer(s)
12:30 – 13:00	Welcome Coffee and Registration of Participants	
13:00 – 13:45	<p>Session 1: Welcome, Introductions, and Overview</p> <p>COL Orlin Nikolov, Director, CMDR COE</p> <p>Ms. Anna Brach, Head of Human Security, GCSP</p> <p>Mr. Richard Brewin, Programme Manager: Energy & Environmental Security and Science for Peace & Security / Climate & Energy Security Section / Innovation, Hybrid and Cyber (IHC) Division, NATO</p> <p><i>This includes introductory remarks and an overview of the scope of the course. Examples of typical disasters throughout the Balkans will be presented as well as examples of current crisis intervention techniques.</i></p> <p>Ms. Bozhidara Kiryakova - Administrative remarks</p>	
13:45 – 15:00	<p>Session 2: The Security Implications of Climate Change</p> <p>Moderator: COL Orlin Nikolov, Director, CMDR COE</p> <p><i>In this session, faculty will provide an overview of the impacts of climate change and variability on natural disasters and industrial accidents caused by natural disasters (NATECHs). Both sudden-onset and slow-onset disasters will be addressed, as well as projections for future impacts of climate-related disasters. The session will also look at the crisis impacts on stability and security.</i></p>	
	National and International Security Implications	Ms. Jessica Olcott Yllemo , Research Scientist, Strategy, Policy, Plans and Programs, CNA / Former, Director, Climate Security, ASP / Member, GMACCC
	Human Security Implications: The Water-Energy-Food Nexus	Mr. Alexander Verbeek , Policy Director, Environment & Development Resource Centre (EDRC) (Online)
	The Gender Perspective	Police Chief-Commissioner Nicoleta Primavarus , CMDR COE
	Discussion	
15:00 – 15:30	Coffee Break	
15:30 – 17:00	<p>Session 3: Cross-cutting Impacts of Climate Change and the Need for Resilience and Adaptation</p> <p>Moderator / Introduction: Ms. Anna Brach, Head of Human Security, GCSP</p> <p><i>The facilitator for this session will prompt participants to consider the broad security impacts of climate change in the context of climate-related disasters and climate-induced human displacement influence. How do resilience building and climate adaptation efforts address these challenges? In this context the session will explore OSCE's actions in this area. The facilitator will then open the discussion for</i></p>	



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	<i>participants to share how their countries have identified these impacts and their proposed actions, including efforts to rebuild through resilient recovery.</i>	
	Readiness and Responses to Climate-related Natural Disasters	Professor Debarati Guha-Sapir , Faculty Member on Climate Disasters and Health, Johns Hopkins School of Public Health on Climate Disasters and Health / Former Director, Centre for Research on the Epidemiology of Disasters (CRED), UCLouvain
	Addressing the Impact of Climate Change on Human Migration and Population Displacement	Professor François Gemenne , Professor, Economics and Decision Sciences, and academic director of the Master in Sustainability and Social Innovation, HEC Paris / Co-director, Observatory on Climate and Defence, French Ministry of Armed Forces / FNRS Senior Research Associate, University of Liège
	OSCE Action to address Climate-related Risks	Ms. Sylvie Goyet , Deputy Coordinator / Head, Environmental Activities, Environmental Co-operational Unit, Organization for Security and Co-operation in Europe (OSCE)
	Discussion	
18:00 – 20:00	Opening Reception at CMDR COE, 34A Tottleben Blvd, 1606 Sofia	
17 JUL 2024		
09:00 – 10:30	<p>Session 4: Principles for Effective Civil-Military Cooperation</p> <p>Moderator / Introduction: Dr. Georgios Kostakos, Executive Director, Foundation for Global Governance and Sustainability (FOGGS)</p> <p><i>The session will address the need for better understanding of the nature, extent, and effectiveness of civil-military cooperation in climate-related emergencies. Effective civil-military cooperation (CIMIC) is crucial in various contexts, including disaster response, peacekeeping operations, humanitarian assistance, and infrastructure development. Establishing clear communication channels and protocols is essential for effective CIMIC. Civilian and military stakeholders should maintain open lines of communication, share relevant information in a timely manner, and coordinate decision-making processes to facilitate joint action.</i></p>	
	Civil-Military Cooperation in Climate-Related Emergencies: Comparing Current Practices	Dr. Ashley McIlvain Moran , Research Scientist and Lecturer, Department of Government, University of Texas at Austin / Research Director, Comparative Constitutions Project / Member, GMACCC
	Leveraging Data for Climate-Smart Decision-Making and Civil-Military Cooperation	Ms. Jessica Olcott Yllemo , Research Scientist, Strategy, Policy, Plans and Programs, CNA / Former, Director, Climate Security, ASP / Member, GMACCC
	Role and Relationships of CIMIC's Military Side with IOs and Non-military Actors	General (Ret.) Fabio Aversa , EC-NATO D-Orbit Representative



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	<i>The impact of Climate Change on Civil-military Interaction</i>	Ms. Mona Koehler-Schindler , Staff Officer, Climate Security, Policy and Capabilities Division, International Military Staff, NATO
	<i>Discussion</i>	
10:30 – 11:00	Coffee Break	
11:00 – 12:30	<i>Session 5: Towards a Systemic Approach to Crisis Management and Adaptation</i> Moderator / Introduction: Ms. Anna Brach , Head of Human Security, GCSP <i>Drawing together the various experiences and dynamics being shared, this session will introduce key concepts and terms linking environmental security, human security, and theatre security in the context of climate change and disasters. These include: (1) conceptual frameworks which describe vulnerability and resilience, illustrated by examples, (2) the difference between direct and indirect impacts, (3) the core concepts of prevention, planning, preparedness, response, and recovery (including both the hard and soft aspects of building back better), (4) key humanitarian principles as well as (5) the nature of, and relationship between basic frameworks for environmental, human, and theatre security.</i>	
	<i>Key Concepts in Linking Environmental, Human, and Theatre Security</i>	Mr. Carl Bruch , JD, Senior Attorney and Director of International Programs, Environmental Law Institute / Founding President, Environmental Peacebuilding Association
	<i>Toward a Systemic Understanding of The Geo-Strategic Dimension of Climate Change</i>	Ms. Olivia Lazard , Research Fellow, Carnegie Europe (Online)
	<i>Barriers and Opportunities for increasing Climate Resilience in Fragile and Conflict-affected Settings</i>	Ms. Anca Elena Ursu , Independent Expert on Civil-military Coordination
	<i>Discussion</i>	
12:30 – 13:30	Lunch	
13:30 – 15:00	<i>Session 6: Whole-of-Government / Whole-of-Society Approaches to Climate Change Adaptation, Disasters, and Security</i> Moderator / Introduction: Mr. Ronald A. Kingham , Executive Director, Environment & Development Resource Centre (EDRC) / Coordinator, Project CASA / Coordinator, GMACCC <i>This session will discuss civilian and military approaches to planning, preparedness, response, and resilient recovery in the context of climate-related disasters, and how to integrate these into a whole-of-government approach. The session will highlight the role of military-military and civilian-military cooperation in whole-of-society approaches. It will also discuss ethics and risks associated with civilian-military cooperation in climate change-related disaster planning, preparedness, response, and recovery. It will: (1) introduce the Oslo Guidelines, governing civil-military coordination, (2) review key activities that are central to planning and disaster risk reduction, including zoning, building codes, and public works, (3) consider that logistical support for responding to climate-related disasters is essential, and (4) discuss the concepts of deference to civilian authority and concerns about militarizing humanitarian assistance.</i>	
	<i>Principles for successful Whole-of-Society Collaboration in addressing the Security Risks of Climate Change</i>	Rear Admiral Neil Morisetti, RN (Ret.) , Vice Dean (Public Policy), Faculty of Engineering Sciences, University College London / Member, GMACCC (Online)



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	<i>Canada's Multidimensional Approach to Climate and Security</i>	Ms. Blair Brimmell , Joint Delegation of Canada to NATO
	<i>The Aims and Role of the NATO Climate Change and Security Centre of Excellence</i>	Dr. Reiner Zimmermann , Branch Head for Research, Analysis and Lessons Learned, NATO Climate Change and Security Centre of Excellence (NATO CCASCOE) / Member, GMACCC
	<i>Discussion</i>	
15:00 – 15:30	Coffee Break	
15:30 – 17:00	<i>Session 7: NATO's Approach to Layered Resilience</i> Moderator / Introduction by: Dr. Tom Deligiannis , Vice-President, Climate Security Association of Canada (CSAC) / Member, GMACCC <i>The NATO Warfighting Capstone Concept (NWCC) identifies Layered Resilience (LR) as a Warfare Development Imperative (WDI) for the Alliance. This proposal informs Allies and other stakeholders of ACT's plan to develop a Layered Resilience Concept (LRC) for supporting NATO's military and civil resilience.</i>	
	<i>Breakout Group 1: Baseline Requirements for National Resilience and Planning</i> COL Orlin Nikolov , Director, CMDR COE <i>Planning among military and civilian stakeholders and contributing to NATO's resilience agenda.</i>	
	<i>Breakout Group 2: Policy, Planning, Practice: What do Practitioners need to respond to Climate-related Disasters?</i> Ms. Camilla Nicoletti , Staff Officer, Euro-Atlantic Disaster Response Coordination Centre (EADRCC) / NATO HQ <i>NATO and Allies need to develop and update their doctrines, policies and plans to ensure proper civil-military interaction in responding to the new normal of climate-driven disasters. They also need hands-on experience of interoperability: between civilian and military actors, between countries, and with international organisations like NATO and the EU. How to bring this cooperation to the practical level? How to learn from experience? And how to ensure that the lessons feedback and improve policies and plans?</i>	
	<i>Breakout Group 3: Climate Change and Security on NATO's Eastern, Southern and Northern Flanks</i> Dr. Tom Deligiannis , Vice-President, Climate Security Association of Canada (CSAC) / Member, GMACCC <i>In all these regions, adaptation strategies are crucial to mitigate the impacts of climate change and build resilience. This may include measures such as coastal protection, water management, ecosystem restoration, early warning systems, sustainable land use practices, and community-based adaptation initiatives. Additionally, international cooperation is essential to address transboundary challenges and support vulnerable regions in adapting to climate change.</i>	
19:00 – 21:00	Official Dinner	



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18 JUL 2024

09:00 – 10:00

Reporting from Breakout Groups, Discussions with takeaways

Moderator: **Dr. Tom Deligiannis**, Vice-President, Climate Security Association of Canada (CSAC)

Session 8: Mitigation and Adaptation by the Military and Using Information Technology, Modelling and Simulation Tools in the Climate Crises

Moderator / Introduction by: **Abigail Robinson**, Director, Continua

This session on the role of the military in climate change mitigation and adaptation will also cover using new technology for early warning, prediction, monitoring, mitigation, and management of climate-related crises. How can military capacity be better leveraged to contribute to climate adaptation and environmental protection, and what risks are most important to manage? What tools and methods available from remote sensing and climate modelling can inform military and civilian actors, and what are the associated challenges and limitations? This can range, for example, from predictive elements of targeting certain types of infrastructure to including environmental dimensions in planning and response.

Breakout Group 1: Climate Crises Mitigation through Energy Transition by the Military and other new technologies

Mr. Richard Brewin, Programme Manager: Energy & Environmental Security and Science for Peace & Security / Climate & Energy Security Section / Innovation, Hybrid and Cyber (IHC) Division, NATO

What is NATO doing from a technological perspective to understand climate change and security risk with respect to both prevention and response recovery? Of course, military emissions assessment, best practice exchange, and the development of NATO's Energy Transition by Design demonstrate that NATO is thinking about the future of force design amid climate change and net zero objectives. But what future projects could the NATO Science for Peace and Security Programme support more innovation in response to climate change?

10:00 – 11:30

Breakout Group 2: The increasing Participation of Militaries in Climate-related Knowledge Production, Resource Provision, and Decision-making

MAJ Ralitsa Bakalova, CMDR COE

"The military is emerging as an important actor in climate change mitigation and adaptation, particularly when it comes to responding to climate extremes. While not generally considered a "governance actor" in scholarship on climate governance, militaries increasingly participate in climate-related knowledge production, resource provision, and decision-making. However, the nature and degree of involvement of militaries in these issues vary from context to context, based on political, socio-cultural, institutional, and economic conditions." Source: Dhanasree Jayaram and Marie Claire Brisbois "[Aiding or undermining? The military as an emergent actor in global climate governance](#)", Earth System Governance, Volume 9, September 2021,

Breakout Group 3: Big Data and Artificial Intelligence

COL Kostadin Lazarov, Chief of CMDR COE Operational Laboratory

Big data analytics techniques process large volumes of data from diverse sources, including weather stations, sensors, social media, and satellite imagery, to extract valuable insights. This data can inform climate risk assessments, early warning systems for extreme weather events, and optimization of energy and resource management practices.

AI has the potential to significantly enhance our understanding of climate change, improve decision-making processes, and accelerate the transition to a more sustainable and resilient future. However, it's essential to address ethical considerations, data biases, and governance challenges to ensure that AI applications in climate change are equitable, transparent, and aligned with societal goals.

11:30 – 12:00

Coffee Break



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12:00 – 13:00	Reporting from Breakout Groups, Discussions with take-aways Moderator: Abigail Robinson , Director, Continua	
13:00 – 13:30	Closing of the Workshop Session <i>Summary and Conclusions by the Session Chairs / Participatory Discussion: Evaluation and Follow-up / Closing Remarks by the Co-Directors</i>	Session Chairs, Co-Directors
13:30 – 14:30	Farewell lunch	
19 JUL 2024		
Departure of participants		

Organisers

The workshop is organised by the [Crisis Management and Disaster Response Centre of Excellence \(CMDR COE\)](#) and the [Geneva Centre for Security Policy \(GCSP\)](#). **In association with:** the Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies ([Project CASA](#)) partners: Climate Security Association of Canada ([CSAC](#)) / Crisis Management and Disaster Response Centre of Excellence ([CMDR COE](#)) / Environment & Development Resource Centre ([EDRC](#)) / Foundation for Global Governance and Sustainability ([FOGGS](#)) / Global Military Advisory Council on Climate Change ([GMACCC](#)) **with the participation of** The American Security Project ([ASP](#)).

NATO Country Co-Director: COL Orlin Nikolov, Crisis Management and Disaster Response Centre of Excellence (CMDR COE)

Partner Country Co-Director: Ms. Anna Brach, Head, Human Security, Director of the New Issues in Security Course, Geneva Centre for Security Policy (GCSP)

Organising Committee Members: Dr. Tom Deligiannis, Vice-President, Climate Security Association of Canada (CSAC), Mr. Ronald A. Kingham, Executive Director, Environment & Development Resource Centre (EDRC), and Ms. Jessica Olcott Yllemo, Research Scientist, Strategy, Policy, Plans and Programs, CNA / Former, Director, Climate Security, ASP



EDRC



Contacts

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This workshop is supported by the [Science for Peace and Security Programme](#) but is not a NATO organised event.

