



Resilience, Readiness, and Response

Report of the project on Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies (Project CASA)

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Project CASA is led by a Coordinating Group composed of representatives from the five partner organizations:



- 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), and
- Global Military Advisory Council on Climate Change (GMACCC)

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**Cover Image:** Sergeant André Hotton, a search and rescue technician, prepares to release marker streamers from a CC-130 Hercules aircraft on a 2018 exercise. PHOTO: <u>14 Wing</u> / Government of Canada <u>News Article</u> / October 13, 2020

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# Part 1: Introduction

# **1.1** Foreword

#### By Alice C. Hill

The escalating climate crisis has placed new demands on both civilian and military authorities. The frequency and intensity of extreme weather events—ranging from wildfires to floods and hurricanes— have surged dramatically in recent decades. These events not only challenge existing emergency management capabilities, but they also call for greater resilience, readiness, and response. This report examines the growing role of the military in these areas as countries experience increasing climate-worsened disasters.

Militaries, with their logistical expertise, infrastructure building capabilities, and extensive experience operating in extreme conditions, can improve disaster outcomes. The capacity to mobilize resources rapidly and operate in high-stress environments adds to the value of the military as a partner in emergency response efforts. One study reveals that between June 2022 and February 2025, over 500 deployments occurred in close to 100 countries. With the intensity and frequency of disasters likely to grow in the future, militaries will find themselves under increasing pressure to assist when civilian resources fall short.

This report explores the growing demand for military involvement in climate emergencies worldwide. It provides an in-depth analysis of national frameworks, operational strategies, and international coordination mechanisms shaping civil-military cooperation in all aspects adapting to climate change—resilience to climate shocks, readiness to respond, and response and recovery.

Through its examination of case studies from eighteen countries, the report offers valuable insights into emerging practices and operational frameworks. For example, the report reveals the expansion of the military's role in some countries from basic disaster relief to climate-risk reduction strategies like infrastructure fortification and environmental restoration projects. The report's case studies underscore the importance of pre-disaster coordination between civilian agencies and military forces to ensure comprehensive responses when climate-worsened extreme weather events occur. Pre-disaster delineation of roles and responsibilities likely help maintain trust within the civilian population.

This report serves as both a call to action and a resource for policymakers, practitioners, and stakeholders committed to addressing one of the defining challenges of our time.

# **1.2** The Imperative for Civil-Military Cooperation

#### By Members of the Project CASA Coordinating, Advisory, and Expert Groups

There is overwhelming consensus among national governments (until recently including the US government—long a leading voice on climate security policy and research), militaries, scientists, and countless state and local authorities and civil society organizations that climate change poses serious threats to international, regional, national, environmental, and human security.

Beyond direct environmental consequences, in fragile contexts, disasters can strain social and political systems to the breaking point, increasing the risk of conflict or humanitarian crises. At the same time, readiness for and response to such emergencies can enhance cooperation and promote peace within and between countries. Preparing for and responding to climate-related emergencies are thus important aspects within the climate and security nexus, along with the need for mitigation, adaptation, and resilience.

The tangible evidence of the escalating threat is evident in the increase in extreme weather events and their devastating consequences. According to the World Meteorological Organization (WMO), the number of recorded climate-related disasters increased five-fold over the 50 years between 1970 and 2019. WMO records show that, in that period, "there were more than 11,000 reported weather, climate and water-related disasters, resulting in just over 2 million deaths and US\$ 3.64 trillion in economic losses. That breaks down to a daily global average of 115 deaths and US\$ 202 million in economic losses."

The human displacement evidence is equally as stark. In 2020, according to the UN Office for Disaster Risk Reduction (UNDRR), an estimated 30 million people were displaced by disasters. This displacement was primarily due to events like floods, storms, and other extreme weather-related hazards.<sup>2</sup>

Records on such disasters continue to be broken. In the final update to its 2023 Billion-Dollar Weather and Climate Disasters report, the United States' NOAA National Centers for Environmental Information (NCEI) confirmed a historic number of costly disasters and extremes across the country. In total, there were 28 billion-dollar weather and climate disasters in the United States in 2023, surpassing the previous record of 22 in 2020 and tallying a price tag of at least US\$ 92.9 billion. The NCEI noted, however, that this total cost was expected to rise by several billion after accounting for an East Coast storm and flooding event that occurred late in 2023, impacting states from Florida to Maine.<sup>3</sup> Project CASA's new dataset reveals that, in these climate disasters in 2023, the US military deployed a total of 393 times, costing the US military alone US\$ 2.6 billion.<sup>4</sup>

In 2024, there were 27 confirmed weather/climate disaster events with losses exceeding \$1 billion each to affect the United States. This total places 2024 as the second-costliest disaster year on record in the United States, trailing only 2023. The next highest disaster totals were in 2017 (US\$ 395.9 billion), 2005 (US\$ 268.5 billion), and 2022 (US \$183.6 billion). Adding the 27 billion-dollar disasters of 2024 to the record that begins in 1980, the United States has sustained 403 weather and climate disasters for which the individual damage costs reached or exceeded US\$ 1 billion. The cumulative cost for these 403 events exceeds US\$ 2.915 trillion.<sup>5</sup> And this is just in one country.

The global capacity to anticipate and respond to these accelerating threats remains underdeveloped. The WMO highlights that only half of the 193 WMO members have multi-hazard early warning systems, and there are severe gaps in weather and hydrological observation networks in Africa, parts of Latin America and in Pacific and Caribbean island states.<sup>6</sup> This lack of foundational infrastructure for early detection and warning further compounds the vulnerability of populations, ensuring future events will continue to be catastrophic. Projections for the near future raise reasons for more concern,

according to the UN Secretary-General's Special Representative for Disaster Risk Reduction who notes that, "By the year 2030, an estimated 50 percent of the world's population will live in coastal areas exposed to flooding, storms and tsunamis."<sup>7</sup>

The escalating frequency, economic losses, deaths, and displacement are not isolated incidents but represent an accelerating systemic crisis in which the rate of climate impact is outstripping current adaptative and response capacities. That is, such figures are not abstract; they represent a clear factual baseline against which subsequent discussions on civil and military cooperation can be contextualized.

# The Many Roles of the Military

As the frequency and severity of climate emergencies rise, national militaries play a key role in areas struck by climate-related emergencies, working alongside civilian responders and often facing calls for greater involvement when civilian capacity is strained. Whether militaries should be involved in preparing for and responding to climate emergencies is a matter of considerable debate, and views vary depending on the context, country, political culture, and whether involvement is within national borders or beyond. What is clear, however, is that national militaries are already engaged in these roles and, with the rising number of climate emergencies globally,<sup>8</sup> the pressure for military involvement in such emergencies is also likely to increase when civilian agencies cannot respond at the speed or scale required.

Foundational international guidelines on disaster response—such as the Oslo Guidelines<sup>9</sup> and the Military and Civil Defence Assets Guidelines<sup>10</sup>—articulate that military assets should only be used as a "last resort," meaning that their deployment is justified only when no comparable civilian alternative exists and a need can be met only by using the unique military capabilities in an appropriate time. However, the escalating scale and frequency of climate-related emergencies increasingly challenge the application of this principle. Indeed, as these pressures mount, long-standing principles around the use of military assets in disaster response are being re-evaluated in practice. Joshua Michaud et al. observe that the debate has largely moved on from whether militaries should participate in civilian-led responses to how such participation can be improved.<sup>11</sup> This shift reflects a broader evolution of thought, described by Myriame Bollen and Jori Kalkman as the emergence of a new domain of civil-military interactions that are distinct from traditional models that were shaped largely by humanitarian operations in conflict zones.<sup>12</sup>

The military strengths in logistics, personnel, and rapid deployment capabilities frequently position them as indispensable early actors, often as first responders stepping with a speed and scale that is hard to match in civilian entities. Militaries' distinct advantages include significant sea and airlift capacities, heavy lift equipment, search and rescue personnel, and medical care. This operational reality creates a tension between established principles and urgent demands in response to large-scale climate emergencies that can overwhelm civilian infrastructure and resources. The divergence of the principle of last resort and the practical necessity of military engagement is therefore a critical point for understanding the imperative for civil-military cooperation.<sup>13</sup>

As the demand for military involvement in domestic operations and humanitarian assistance and disaster response abroad increases, this can result in some difficult decisions or unmet needs in some spheres, because other demands on militaries (e.g., in the NATO context) are simultaneously rising in response to the contested security environment. Over-reliance on the military for disaster response presents a significant risk. The military's primary responsibility is national defense, and they may be needed for other missions, potentially diverting resources and personnel from disaster relief efforts. This can create vulnerabilities if civilian agencies are not adequately prepared to handle major disasters on their own. Military planners also need to consider the diverse and potentially competing demands on armed forces, including national defense, humanitarian aid, and other operational requirements.

# **Responding to Disasters**

The volume and global reach of contemporary military involvement in climate-related emergencies are illustrated by current data. The Center for Climate and Security's Military Responses to Climate Hazards tracker now includes 501 deployments in 97 countries between June 2022 and February 2025—averaging more than one every two days.<sup>14</sup>

In Canada, there has been an increasing demand on the Canadian Armed Forces (CAF) over the last decade to respond to natural disasters across the country. In 2023, the military responded to eight requests for assistance for disaster relief operations from provinces and territories. This compares to an average of almost four requests for assistance per year between 2017 and 2021 and twice per year between 2010 and 2016. In other words, the CAF involvement in response to natural disasters has broadly doubled every five years since 2010.<sup>15</sup> An in-depth analysis was contained in a June 2024 Canadian Parliament report analyzing the Canadian Armed Forces' role in domestic disaster responses.<sup>16</sup> The rapid increase in deployments suggests a de facto normalization of military involvement, even as formal doctrines and civil-military coordination mechanisms struggle to keep pace with this operational reality.

The extensiveness of the 2023 wildfires in Canada is important to note for another reason. To tackle the worst wildfires in the previous 10 years, Canada activated the EU Civil Protection Mechanism requesting European assistance. In an immediate response, France, Portugal, and Spain offered almost 300 firefighters via the mechanism.<sup>17</sup> This is reminiscent of the role of the EU Civil Protection Mechanism coordinating assistance to help Sweden fight forest fires in 2018 which were the most serious in the country in modern history.<sup>18</sup> It also points to an increasing internationalization of military disaster response where national capacities are supplemented by international military aid.

Climate-related military missions are complex and expensive. They require careful coordination, planning, and tact with impacted communities—a point highlighted in a 2024 Project CASA panel by a Canadian Armed Forces officer who was on the frontline of responding to the 2023 wildfires in Canada. These experiences point to the importance of multinational planning and sharing of lessons learned when military organizations respond to climate-related disasters.

This substantial increase and regularity in military deployments also bring into focus an imperative to understand the nexus between the military's growing operational experience and the civilian sector's need for predictable, principled cooperation. In his presentation on the 2023 fires in Canada in the Project CASA panel in April 2024, LCol Vincent Virk of the Canadian Armed Forces described in detail the role of the CAF and the way in which citizens were involved in the disaster response efforts which also fosters a sense of stewardship towards the environment and communities affected by climate-related disasters. In describing the personal dynamics involved, he stressed the importance of understanding the perceptions of local citizens when the military comes into an area.<sup>19</sup>

# **Prediction and Prevention**

The military is emerging not merely as a responder but as an 'emergent actor' in global climate action. This expanded role of the military in dealing with climate change extends beyond traditional disaster relief to include climate adaptation, security risks associated with climate change, and even addressing the military's own carbon footprint and reliance on fossil fuels. This is also because climate change impacts military operations in several ways, including damage to installations, disruptions to supply chains, and increased health risks for personnel.<sup>20</sup>

Additionally, the role of national military capacities in dealing with climate change extends beyond disaster and crisis response. Militaries are also engaged in broader aspects of the disaster risk reduction (DRR) cycle, including prevention, mitigation, and recovery. In the case of the United States, for example, our study appropriately highlights the National Guard which is the primary military entity

directly tasked with support to the civilian authorities in a crisis. However, it is also important to acknowledge the US Army Corps of Engineers (USACE). With national responsibility for waterways (including flood defenses), USACE it has been highly engaged with climate-related DRR activities, especially after Hurricane Katrina.

Such an expanded and evolving scope of military involvement in climate-related challenges demands greater emphasis on comprehensive risk management, particularly in the areas of prediction, projection, and prevention. As climate threats become more complex and interlinked, effective early warning systems, strategic foresight, and scenario-based planning are essential. Militaries are increasingly contributing to these functions, leveraging their analytical capabilities to support anticipatory action and long-term resilience. In addition, the military plays an important role in supporting decentralized approaches to climate risk analysis and forecasting. Through joint exercises, data sharing, and field operations, military actors often collaborate with humanitarian organizations and civilian agencies to strengthen collective situational awareness and coordinated response.

Preparing for climate-related emergencies involves detailed contingency planning and preparedness exercises that bolster civil-military cooperation and disaster risk management. Tellingly, the primary challenge to effective coordination is relationship-building and trust, especially in multi-actor collaborations in disaster preparedness and response which can involve other militaries, civilian actors, IGOs, and NGOs.<sup>21</sup> Traditionally, militaries have a more response-centered approach; however, future levels of preparedness for climate risks will inform the capacity to respond effectively and recover efficiently. Therefore, the role of international and intergovernmental mechanisms will have to adapt accordingly and coordinate to improve both preparedness and response capacities across all levels.

# The Role of International / Intergovernmental Organizations and Mechanisms

The importance of work on the international level and the growing importance of alliances and international military cooperation in disaster response should also be acknowledged. National capabilities are no longer operating in isolation but are increasingly integrated with allied support, reflecting a broader move toward collective crisis management and shared resilience.

The European Union's Preparedness Union Strategy in March 2025, which followed on the President Minister Report, should be commended in looking at the European level of preparedness and what more should be done. It embeds "preparedness by design" into policy and actions, which includes comprehensive military preparedness arrangements such as a European Civil Defense Mechanism.<sup>22</sup> That strategy, along with the first-ever European Climate Risk Assessment in March 2024, should be an example for other countries and regions as a model for whole-of-threat scenarios and recognized in any effort at preparedness in a whole-of-government manner.

The European Climate Risk Assessment has informed the design of the European Union's Preparedness Union Strategy and future cooperation with other actors. Consequently, the European Union has deepened its cooperation with the North Atlantic Treaty Organization (NATO) to integrate preparedness and resilience actions on military mobility, defense, and climate security.<sup>23</sup> Over time, this will inform the preparedness and response capacities to climate-related emergencies for both institutions.

The role of NATO also needs to be commended. Since the late 1960s, NATO has progressively expanded its remit from traditional military concerns to include environmental protection, civil preparedness, and disaster response. The Committee on the Challenges of Modern Society established in 1969 marked NATO's first step in addressing environmental issues. Throughout the 1970s and 80s, NATO developed guidelines and standards aimed at minimizing the environmental impact of military activities and by the 1990s, the focus had expanded to include civil preparedness and emergency response to environmental disasters.

NATO adopted a Climate Change and Security Action Plan in 2021,<sup>24</sup> and since that time has engaged in work to build awareness of how climate change will affect the Alliance and its core tasks, how to adapt to these challenges, and how to support efforts to limit greenhouse gas emissions while maintaining or enhancing operational effectiveness. As part of this work, NATO has published three Climate Change and Security Impact Assessments and many internal guidelines and reports in support of its members.

The Euro-Atlantic Disaster Response Coordination Centre is NATO's principal civil emergency response mechanism in the Euro-Atlantic area. It is active all year round, operational on a 24/7 basis, and involves all NATO Allies and partner countries. The Centre functions as a clearing-house system for coordinating both requests for and offers of assistance mainly in case of natural and man-made disasters.

Since its establishment in 2013, the Crisis Management and Disaster Response Centre of Excellence (CMDR COE) has had as its key objective to support and contribute to the enhancement of NATO's crisis management and disaster response capabilities and, as a corollary, to improve the Alliance's interoperability. It is an indispensable source of expertise and advice in the field of crisis management and disaster response placing significant emphasis on the ability to establish and foster collaborative partnerships across the international CMDR community of interest.

In support of NATO's Climate Change and Security needs, Canada with eleven other Allies—Denmark, France, Germany, Greece, Italy, Latvia, Luxembourg, Norway, Romania, Türkiye, and the United Kingdom—established the NATO Climate Change and Security Centre of Excellence (CCASCOE) in 2023 as NATO's 30th and newest COE. Based in Montreal, Canada, the CCASCOE serves as a hub for stakeholders in the climate change and security community, undertaking research, analysis, education, and training. It also undertakes doctrine development, concept development, and outreach work on climate change and security to support NATO forces to meet increased demands for response to crisis and disasters without compromising their core defense posture.

More extensive profiles of the EU, NATO, and other international entities focusing on climate security are annexed to this report. They cover 23 international / intergovernmental organizations and mechanisms dealing with climate change risk reduction, response, and more.

# Conclusion

It is clear that climate change is a threat to all types of security and at all levels from the local to the global. It is also clear that the military plays an important and increasing role in addressing climate change in all aspects of the DRR cycle. International / intergovernmental organizations and mechanisms are also essential players. Partnerships involving cooperation, coordination, and sharing of good practices are essential between all levels of government, the military, local communities, CSOs, and international humanitarian organizations. Good practices can be advanced from the bottom-up by local authorities and citizens.

Given the retrenchment from mitigation efforts in some countries and therefore the reducing of prospects for keeping average global warming below the target of 1.5 degrees, as well as the increasing severity of the climate threat, more and more attention is now being given to adaptation and including resilience, readiness, and response as the title of this report stresses. Also given reductions in development assistance budgets and increasing costs for traditional defense, when it comes to the impact of climate change, the importance of cooperation and coordination among civilian agencies and citizens, the military, and international humanitarian organizations cannot be overstated.

<sup>4</sup> See chapter 2.3 for a more extensive discussion.

<sup>5</sup> Adam B. Smith, "2024: An Active Year of U.S. Billion-Dollar Weather and Climate Disasters," *Climate.gov*, January 10, 2025, https://www.climate.gov/news-features/blogs/beyond-data/2024-active-year-us-billion-dollar-weather-and-climate-disasters.

<sup>6</sup> UNDRR, "UNDRR welcomes WMO Atlas of Mortality and Economic Losses," September 1, 2021, https://www.undrr.org/news/undrr-welcomes-wmo-atlas-mortality-and-economic-losses.

See also an overview of impacts from weather, climate, and water extremes globally from 1970 to 2019 based on disaster data from the Emergency Events Database (EM-DAT); WMO, *WMO Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019)*, WMO-No. 1267 (WMO, 2021).

<sup>7</sup> UN Secretary-General's Special Representative for Disaster Risk Reduction, Mami Mizutori, in UNDRR, "Tsunami in Tonga Underlines Importance of Investing in Early Warning Systems," *reliefweb*, January 21, 2022, https://reliefweb.int/report/tonga/tsunami-tongaunderlines-importance-investing-early-warning-systems

See also: WMO, "Rising Risks", undated, https://wmo.int/about-us/world-meteorological-day/wmd-2022/rising-risks.

<sup>8</sup> Intergovernmental Panel on Climate Change (IPCC), "Summary for Policymakers," in Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, ed. Core Writing Team, Hoesung Lee, and José Romero (IPCC, 2023), 1-34.

<sup>9</sup> UN Office for the Coordination of Humanitarian Affairs, *Guidelines on the Use of Foreign Military and Civil Defence Assets in Disaster Relief ("Oslo Guidelines")* (United Nations, 2007).

<sup>10</sup> United Nations and Inter-Agency Standing Committee (IASC), *Civil-Military Guidelines and Reference for Complex Emergencies* (United Nations, 2008).

<sup>11</sup> Joshua Michaud, Kellie Moss, Derek Licina, Ron Waldman, Adam Kamradt-Scott, Maureen Bartee, Matthew Lim, Jamie Williamson, Frederick Burkle, Christina Polyak, Nicholas Thomson, David L. Heymann, and Louis Lillywhite, "Militaries and Global Health: Peace, Conflict, and Disaster Response," *The Lancet* 393, no. 10168 (2019): 276–286.

<sup>12</sup> Myriame Bollen and Jori Pascal Kalkman, "Civil-Military Cooperation in Disaster and Emergency Response: Practices, Challenges, and Opportunities," *Journal of Advanced Military Studies* 13, no. 1 (2022): 79–91.

<sup>13</sup> Emily M. Chapman, *Civil-Military Interaction during Disaster Response: A New Model* (Routledge, 2025).

<sup>14</sup> Center for Climate and Security, "Military Responses to Climate Hazards (MiRCH)," Council on Strategic Risks, https://councilonstrategicrisks.org/2025/02/12/mirch-update-military-responses-to-climate-disasters-across-the-united-states.

<sup>15</sup> Operation LENTUS, Government of Canada, National Defence, https://www.canada.ca/en/department-nationaldefence/services/operations/military-operations/current-operations/operation-lentus.html.

<sup>16</sup> House of Commons Standing Committee on National Defence, *Providing Aid to the Civil Power: Disaster Relief and the Canadian Armed Forces' Domestic Operations*, Report of the Standing Committee on National Defence (Parliament of Canada, 2024).

<sup>17</sup> Directorate-General for European Civil Protection and Humanitarian Aid Operations, "Wildfires: Almost 300 European Firefighters Mobilised to Support Canada," *European Commission*, June 8, 2023, https://civil-protection-humanitarian-aid.ec.europa.eu/newsstories/news/wildfires-almost-300-european-firefighters-mobilised-support-canada-2023-06-08\_en.

<sup>18</sup> "EU Coordinates Further Assistance to Help Sweden Fight Forest Fires," *European Commission*, July 21, 2018, https://ec.europa.eu/commission/presscorner/detail/en/ip\_18\_4628. See also: Chris Harris, "Data Shows Sweden's Wildfire Problem is Unusual," *Euronews*, July 20, 2018, https://www.euronews.com/2018/07/20/this-chart-explains-how-unusual-sweden-s-wildfire-problem-is.

<sup>19</sup> The presentation was made in the Project CASA panel discussion Civil-Military Cooperation in Climate-Related Emergencies at the Second Annual ASCS-CSAC Conference, *Climate Security and its Challenges*, Montreal, April 8-9, 2024, https://www.csac-acsc.org/Climate-Security-and-its-Challenges-Eng. See also the video of the Civil Military Cooperation in Climate-Related Emergencies panel available at https://www.csac-acsc.org/Closing-remarks-Civil-military-cooperation-in-climate-related-emergencies.

<sup>20</sup> See for example: Ricardo Tavares da Costa, Elisabeth Krausmann, and Constantinos Hadjisavvas, *Navigating Climate Change in Defence – Climate Risk Management: Guide for Chiefs of Defence Staff* (Publications Office of the European Union, 2024). *See also: Summary Report of the Conference on The Climate-Security Nexus: Implications for the Military - Installations, Operations and Personnel* (BDCD, EDRC, EUROMIL, and GMACCC, 2019), https://www.edrc.net/events/the-climate-security-nexus-implications-for-the-military.

<sup>21</sup> Lloyd Michael Puckett, "Civil-Military Coordination in Disaster Preparedness and Response," *Natural Hazards Review* 22, no. 2 (2021).

<sup>22</sup> European Commission, "EU Preparedness Union Strategy to Prevent and React to Emerging Threats and Crises," *European Commission*, March 25, 2025, https://ec.europa.eu/commission/presscorner/detail/en/ip\_25\_856.
<sup>23</sup> Ibid.

<sup>24</sup> NATO, "Climate Change and Security Action Plan," June 14, 2021, https://www.nato.int/cps/en/natohq/official\_texts\_185174.htm.

<sup>&</sup>lt;sup>1</sup> Adam B. Smith, "2023: A Historic Year of U.S. Billion-Dollar Weather and Climate Disasters," *Climate.gov*, January 8, 2024, https://www.climate.gov/news-features/blogs/beyond-data/2023-historic-year-us-billion-dollar-weather-and-climate-disasters.

<sup>&</sup>lt;sup>2</sup> UNDDR, "Listen to the Communities – Disaster Displacement is on the Increase, and the Affected People Must Be Heard," May 31, 2022, https://www.undrr.org/news/listen-communities-disaster-displacement-increase-and-affected-people-must-beheard#:~:text=More%20than%2030%20million%20people,to%20reduce%20disaster%20displacement%20risks. See also Bruce Burson, *Displacement in a Changing Climate: Localized Humanitarian Action at the Forefront of the Climate Crisis* (International Federation of Red Cross and Red Crescent Societies, 2021).

<sup>&</sup>lt;sup>3</sup> Ibid.

# **1.3** Origins, Objectives, and Activities

#### By Ronald A. Kingham

# Origins

In 2018, Dr. Susanne Michaelis, who was then working in NATO's Emerging Security Challenges Division suggested to members of the Brussels Dialogue on Climate Diplomacy (BDCD) that there was a need to gather data on how successful the military has been as a first responder in the aftermath of disasters. She pointed out that though crucial for improving the civil-military response to climate change-related emergencies, such data are scarce and have not been collected in a coherent manner and, therefore, she recommended that we should create a project on "data collection on military responses to natural disasters."

As a first step Susanne, and I, as EDRC's Executive Director and Coordinator of the BDCD and GMACCC, along with Wing Commander Neil Wood, then Desk Officer, EU Military Staff, European External Action Service, met with Dr. Debarati Guha-Sapir, then Director of the Centre for Research on the Epidemiology of Disasters (CRED) in Brussels to discuss the feasibility and possible parameters of such a study.

On his part, Neil Wood, contacted the Director of the Crisis Management and Disaster Response Centre of Excellence (CMDR COE) in Sofia suggesting that they might also have a keen interest in such a potential project.

Other GMACCC members became involved including Dr. Ashley McIlvain Moran, Research Scientist and Lecturer in the Department of Government at the University of Texas at Austin who began investigating potential research avenues and possible raw data sources. In response to her inquiries, a colleague at the Harvard Humanitarian Initiative replied that "There is an astonishingly little amount of data out there on humanitarian civil military engagement or data on use of military in disaster response."

Several representatives of BDCD participating organizations and members of GMACCC were among the 75 participants at the EDRC conference on <u>The Climate-Security Nexus: Implications for the</u> <u>Military - Installations, Operations and Personnel</u>, co-organized with the European Organisation of Military Associations and Trade Unions (EUROMIL) at the European Economic and Social Committee (EESC) in Brussels on October 24, 2019. Stakeholders from different institutions (EU, NATO, SHAPE, UN, OSCE, national departments of defense, foreign ministries and embassies, military trade unions and professional associations, academia, think tanks, and NGOs participated to raise awareness about the ways in which climate change impacts security challenges, exchange views on what needs to be done to understand and address how the climate-security nexus affects military personnel, and develop ideas on how to further work on these issues in a coordinated way.

In 2020, in response to the opportunity for civil society organizations to contribute input in the NATO 2030 process, the EDRC invited the non-governmental organizations participating in the BDCD and other NGOs, think tanks, and individual experts to form the informal North-Atlantic Civil-Society Working-Group on Environment and Security (NCWES) to exchange ideas and produce the report entitled <u>Sustainable Peace & Security in a Changing Climate: Recommendations for NATO 2030</u>, published in April 2021. The recommendations in the chapter on Responding to Disasters included a call to build an inventory of good practices in using military assets to respond to civil emergencies through a questionnaire to be addressed to all NATO member states and partners and for support for the development of a dataset tracking military involvement in responding to domestic and foreign disasters.

The development of the project was also fostered by the Foundation for Global Governance and Sustainability (FOGGS) through its <u>M4CE Project: Militaries for Civil(ian) Emergencies</u> which resulted in the publication of <u>Use of Military Resources to Address Natural and Human-made Disasters</u> in September 2021. The paper included eight country-level case studies and a brief review of the role of the UN and NATO as international mechanisms for the coordination of disaster response and relief efforts across borders. The paper concluded with a set of initial findings and further research questions which were then addressed through a <u>series of interviews</u> with key stakeholders which were summarized in an <u>article</u> and followed by <u>an online event</u> on November 23, 2021 where invited experts from various countries and organizations discussed questions related to the legal framework and modalities of civilian-military cooperation in responding to non-military emergencies, command and control issues, budgets and training, cross-border support, and coordination.

These and other activities also involving the CMDR COE in Sophia, as well as the Climate Security Association of Canada (CSAC) / Association Canadienne sur la Sécurité Climatique (ACSC) which was officially launched on March 14, 2023 in Montreal, were all part of the lead up to EDRC setting up the project on <u>Climate and Security Action through Civil-Military Cooperation in Climate-Related</u> <u>Emergencies (Project CASA)</u> in June 2023. Project CASA is led by a Coordinating Group composed of representatives from the <u>five project partner organizations</u>:

- 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), and
- Global Military Advisory Council on Climate Change (GMACCC).

The <u>Coordinating Group</u> members reflect a wide range of substantive and geographic experience applicable to this project. They work together to oversee and implement all aspects of the project.

The <u>Advisory Group</u> consists of experts working in civil and military emergency response, research, and policymaking with knowledge of a wide variety of topics and countries covered by the project research. The project has been developed and implemented with their guidance.

The **Expert Group** involves the active participation of additional experts on climate change and security. It includes other representatives from the five partner organizations as well as experts from the CMDR COE Community of Interest, the BDCD, NCWES, and other researchers, policymakers, and practitioners from the international to the local level who exchange information, contribute to the research, provide feedback, and help disseminate the project results.

Members of the Advisory Group and the Expert group serve in the individual capacities and not necessarily as representatives of their respective organizations or countries.

The project was launched with initial support from the Directorate of Strategic Coordination and Outreach of the Canadian Department of Defence through its <u>Mobilizing Insights in Defence and</u> <u>Security</u> (MINDS) program. The MINDS program aims to:

- Respond to the need for relevant and timely advice from defense and security experts,
- Foster the next generation of experts,
- Contribute to Canadians' understanding of defense and security issues,
- Advance informed public conversations relating to defense and security issues, and
- Incorporate new analysis and innovative ideas and perspectives into the conversation.

# **Objectives**

Project CASA studies the extent to which NATO and selected non-NATO countries have engaged their national militaries in responding to climate-related emergencies. It examines trends in these responses over time, the degree to which national militaries have the resources and mechanisms needed to prepare for and respond to these emergencies, and the consequences for force composition and readiness from participation in civil protection operations. The project does so through an interdisciplinary network of experts who are working to collect, analyze, and publish data on relevant military activities and civil-military cooperation.

The project aims to provide actionable data for decision makers, stakeholders, and the wider public on how militaries are working together with civilian emergency management agencies within countries and across international borders.

## Activities

Key activities in Project CASA include:

**Country Profiles on Civil-Military Cooperation in Climate-Related Emergencies explore** the Project CASA research questions as they relate to selected NATO countries, as well as NATO partners and other countries globally with high climate security risks. Country profiles include details on each country's legal, funding, and operational frameworks and related policies, procedures, or guidelines on military involvement in climate-related emergencies.

**Profiles of International / Intergovernmental Organizations (IGOs) and Mechanisms** contain brief descriptions of their work related to climate and security and preparing for and responding to climate-related emergencies in particular.

A **Dataset on Military Involvement in Climate-Related Emergencies** captures military involvement in climate-related emergencies. It includes information on the responder (country, military branch), recipient (country, subnational locations), disaster (type, description, disaster number), and response (requesting agency, start and end dates, type, description, funding total, personnel total). The dataset is meant to facilitate analysis and comparison of countries' involvement in climate-related emergencies over time. It will also provide a framework for systematic recording and tracking of such activities moving forward.

The <u>Project CASA website</u> includes information on climate and security in general, climate-related emergencies, and especially information on civil-military cooperation in climate-related emergencies. Sections and features of the site include:

- <u>Climate and Security Action News</u>, which is primarily devoted to news about the project.
- The <u>Overview</u> which explains the project context, objectives, and research questions, as well as how the project is organized including through the participation and communication strategy.
- The <u>Resource Guide</u> in an interactive directory of research and action on civil-military cooperation, including relevant organizations, initiatives, publications, databases, and events. The guide seeks to help promote joint research and cooperation among the project participants and a wider audience. The publications section serves as an ongoing bibliography for the project.
- The <u>Project Reader</u> includes personal stories, experiences, lessons learned, good practices, and in-depth expert articles, essays, and opinion pieces submitted by interested individuals and representatives of like-minded organizations participating in the project.

• The <u>Research Section</u> covers in detail the project Methodology, Data and Analysis, Country Profiles, Profiles of IGOS, and this Report of the Study Results.

The project's <u>Climate and Security Action Group</u> is a public group on LinkedIn where interested individuals and representatives of like-minded organizations are welcome to exchange information and promote cooperation on the topic of climate change and security action and civil-military cooperation in climate-related emergencies in particular.

**Project Events and Representations** created opportunities for members of the Project CASA Coordinating, Advisory, and Expert Groups to share project research and support outreach and engagement in the project. The two main events were:

- NATO Crisis Management and Disaster Response COE Advanced Research Workshop (ARW) <u>Climate and Security Action: The Role of Civil-Military Cooperation</u> (Sofia, Bulgaria, July 16- 18, 2024). The purpose of the workshop was to meet the need for relevant and timely advice from defense and security experts, foster the next generation of experts, and contribute to officials' and public understanding of defense and security issues including the climate and security nexus.
- International Seminar on Climate and Security Action: New Frontiers and Tools in Climate Change Adaptation and the Role of Civil-Military Cooperation (Brussels, March 28, 2025). The seminar which was the main Project CASA conference was convened as the 17th meeting of the BDCD and was held at the Mission of Canada to the EU in Brussels and online. Eight of the 10 moderators and speakers were Project CASA team members, and other members were among the 100+ participants.

The project Coordinating Group is grateful to Project CASA team members for their active participation in the above activities and to the many others who have provided input into this report including especially for the country profiles.

In compiling the report, we have endeavored to include policy options and recommendations relevant for the EU, NATO, the UN, and other institutions and member states, as well as civilian stakeholders with whom militaries interact in emergency response. We especially aimed for the report and website to highlight good practices that can be advanced from the bottom-up by local authorities and citizens.

# The Way Forward

Developing and implementing Project CASA over the last nearly two years has been challenging but also rewarding, especially thanks to the participation of so many dedicated and knowledgeable participants.

We aim to continue this collective action on climate and security and welcome others to <u>Get Involved</u> as we add profiles of more countries and further enrich the website as a depository of information on other related research, organizations, and activities.

For more information and to provide your feedback, please Contact Us via the Project CASA website.

# **1.4** A New Research Agenda

#### By Dr. Ashley McIlvain Moran and Ronald A. Kingham

This project examines the extent to which countries in NATO and globally have engaged their national militaries in managing climate-related emergencies. In particular, it explores patterns in military involvement in climate emergencies, the mechanisms militaries have in place to plan for and respond to these emergencies, and the impacts that participation in these emergencies has had on force structure and operations. To analyze national militaries' involvement in climate-related emergencies, this project involves several novel analytical products and processes. These include:

- Country profiles on civil-military cooperation in climate emergencies for selected countries,
- Profiles of international/intergovernmental organizations (IGOs) and mechanisms facilitating civil-military cooperation in preparing for and responding to climate-related emergencies,
- A new dataset on military involvement in climate-related emergencies, capturing systematic, comparative data on the scope and nature of military involvement in such disasters,
- A typology of civil protection activities that captures the scope of military involvement in climate-related emergencies, and
- An 8-person Advisory Group and 40-person Expert Group of military, government, civic, and multilateral leaders from 26 countries, providing input into and review of the research.

This chapter outlines the definitions and methodology used to produce each of these products.

# Definitions

#### Disaster Types

This project explores civil-military cooperation in the context of climate-related emergencies. It defines climate-related emergencies as those in the climatological, hydrological, and meteorological disaster subgroups in the EM-DAT Disaster Classification System,<sup>1</sup> summarized in Table 1.1.

Disaster Subgroup	Disaster Type	Disaster Subtype
	Drought	Drought
Climatological	Glacial lake outburst flood	Glacial lake outburst flood
	Wildfire	Forest fire, land fire, wildfire
Hydrological	Flood	Coastal flood, flash flood, flood (general), ice jam flood, riverine flood
	Mass movement (wet)	Avalanche (wet), landslide (wet), mudslide, rockfall (wet), sudden subsidence (wet)
	Wave action	Rogue wave, seiche
Meteorological	Extreme temperature	Cold wave, heat wave, severe winter conditions
	Fog	Fog

<sup>&</sup>lt;sup>1</sup> Centre for Research on the Epidemiology of Disasters (CRED)/Université Catholique de Louvain (UC Louvain), *EM-DAT Documentation* (CRED/UC Louvain, 2023).

Source: CRED/UCLouvain, EM-DAT Documentation.

#### Activity Types

The project examines military involvement in climate emergencies according to a typology of civil protection activities developed for this study and summarized in Table 1.2. This typology groups activities into categories aligning with core phases of civil protection (prevention, preparation, response, and recovery), while creating additional categories within "response" for core areas of activity (related to hazard containment, relief, and broader operations). The typology describes activities using specific language from this study's country profiles where possible, while generalizing the terminology somewhat so activities that are roughly the same across countries can be grouped on the same "activity" row. The typology then groups activities chronologically or thematically.

Civil Protection Phase	Civil Protection Activities
	Risk assessment
	Risk reduction
	Risk reduction training
Prevention	Prevention planning
	Evacuation planning
	Research and innovation
	Public awareness and education
	Disaster planning
	Disaster training
	Supply management
Preparedness	Domestic cooperation
	International cooperation
	Early warning
	Emergency declaration
	Firefighting
Response (Hazard Containment)	Flood response
	Storm response
	Debris clearing
	Pollution control
	CBRN response

Table 1.2. Civil Protection Activities Included in this Study

	Evacuation
Response (Relief)	
	Search and rescue
	Medical assistance
	Mortuary service
	Water treatment
	Water, food, and supply distribution
	Shelter establishment
	Shelter management
	Mobile bridge installation
	Transportation (air, land, sea)
	Coordination
	Communications
	Intelligence and surveillance
	Damage assessment
	Critical area isolation
	Critical infrastructure protection
Response (Operations)	Engineering
	Security
	Law enforcement
	Border control
	Migration management
	Resource management
	Volunteer management
Recovery	Damage assessment
	Debris clearing
	Infrastructure restoration
	Housing reconstruction
	Economic planning
	Rehabilitation
	Resilience against residual risks
	Response evaluation
	hesponse evaluation

This typology of civil protection activities seeks to delineate activities that are mutually exclusive and at the same level of abstraction, so that a general activity on one row does not encompass specific activities listed on other rows. The typology excludes activities that are explicitly unrelated to climate emergencies, based on the scope defined in Table 1.1. For example, this typology excludes operations related to explosive environments (e.g., unexploded ordnance defusal and demining).

#### Activity Locations

The project examines military involvement in climate-related emergencies in both domestic and cross-border operations.

#### Military and Civilian Entities

When referring to civil and military cooperation in climate-related emergencies, we consider "civil" and "civilian" to refer primarily to official civilian entities including governmental agencies at the national, provincial/state, and local levels. In some contexts, this might also include nonmilitary international and regional organizations. In both domestic and cross-border activities, "civil" and "civilian" activities could also include civil society organizations that are non-governmental organizations, public or private foundations, professional associations, unions, and cooperatives. In climate-related emergencies, businesses, religious organizations, and volunteers are also often involved. However, for the purposes of this study, civil-military cooperation especially refers to activities involving official civilian entities interacting with the military.

# **Country Profiles**

This project creates country profiles on civil-military cooperation in climate emergencies.<sup>2</sup> These include selected NATO countries, as well as NATO partners and other countries globally with high climate security risks. Country profiles include details on each country's legal, operational, funding, and training frameworks and related policies, procedures, or guidelines on military involvement in climate-related emergencies. The country profiles answer several research questions to assess the nature, extent, and impact of military involvement in climate-related emergencies and to identify good practices across a wide range of national contexts. Depending on the country context, the questions include:

- What is the legal framework for the military's use in civil protection?
- Does the military have policies for its involvement in climate change mitigation, adaptation, disaster prevention, disaster response, disaster recovery, and/or equitable disaster response implementation?
- Which military branches and civilian authorities are primarily involved in civil protection? Which tasks are handled by each? Does this differ in domestic and cross-border operations?
- What are the standard operating procedures for civil-military cooperation in civil protection?
- What domestic training and cross-border cooperation exists for such activities?
- What multilateral engagement exists through the European Union (EU), International Federation of Red Cross and Red Crescent Societies (IFRC), North Atlantic Treaty Organization (NATO), Organization for Security and Co-operation in Europe (OSCE), or United Nations (UN)?
- Are there advantages to having the military do some tasks? Which tasks are best done by civilian agencies?
- What are the advantages and disadvantages in having military units specializing in climaterelated emergencies, versus preparing all armed forces to assist in such tasks?
- What effect does military involvement in civil protection have on force composition, recruitment, morale, and retention?
- What effect does military involvement in civil protection have on force readiness?

<sup>&</sup>lt;sup>2</sup> These seek to build on the country overviews provided in Foundation for Global Governance and Sustainability (FOGGS), *Use of Military Resources to Address Natural and Human-Made Disasters* (FOGGS, 2021).

This project collects this information for 18 countries. These country profiles and analysis synthesizing findings across the profiles are included in chapters 2.1 and 2.2 of this report.

# **IGO Profiles**

The project also creates profiles of international/intergovernmental organizations (IGOs) to explore these issues as they relate to international coordination mechanisms such as those organized by the EU, IFRC, NATO, OSCE, and UN. These IGO profiles build on initial research conducted by the Foundation for Global Governance and Sustainability on the use of military resources in disasters.<sup>3</sup> This project collects this information for 23 international organizations and mechanisms. These IGO profiles are included in annex 4.1 of this report.

# **Dataset on Military Involvement**

A central challenge to examining the extent and evolution of civil-military cooperation in climate emergencies is the lack of systematic data on military involvement in such disasters. No country we surveyed for inclusion in the project currently has a national dataset tracking such military operations. There is also no cross-national dataset systematically tracking such military operations. This project develops a system to start tracking such activities and thus begin maintaining full statistics on military roles in climate emergencies. The framework accounts for national military activities in both domestic and cross-border civil protection related to climate emergencies. This aims to provide a foundation for building a cross-national dataset on military involvement in climate-related emergencies to provide comprehensive coverage for included countries. This project pilots the effort with available national data from 2012 to 2023.

Such a framework makes it possible to answer several research questions related to national militaries' involvement in climate-related emergencies—both for individual countries and comparatively across countries—including:

- What is the level of military involvement in civil protection in climate-related emergencies?
- What are the patterns and trends in this military involvement in recent years?
- At what stage are military personnel called in to assist with climate-related emergencies?
- How do national militaries' responses align and differ in responding to the same climaterelated emergency?

#### Dataset Compilation

A central feature of this dataset is its use of national government data as the source for information on national militaries' involvement in disaster responses. Importantly, we rely on country experts most of whom are currently working in the country's government or military—to identify these government data sources. The use of government data, vetted by country experts, provides a systematic process that advances our goals of producing comprehensive coverage within countries and comparable data across countries. We then use the EM-DAT Emergency Events Database to identify which military responses to disasters are specifically related to climate-related emergencies.<sup>4</sup> We include only those military responses related to the climatological, hydrological, and meteorological disasters tracked by EM-DAT and summarized in Table 1.1.

#### Dataset Structure

The dataset provides a structure to collect information about the country responding to the disaster, the country receiving assistance, the disaster itself, and the response—for both domestic and crossborder operations. Table 1.3 summarizes the structure used to standardize this information for each country, identifying the fields included in the dataset, and the definition and source for each field.

<sup>&</sup>lt;sup>3</sup> FOGGS, Use of Military Resources.

<sup>&</sup>lt;sup>4</sup> CRED/UCLouvain, EM-DAT Emergency Events Database (CRED/UCLouvain, 2023).

Field	Definition	Source
Responding country	Name of country responding to disaster	Government data from responding country
Requesting agency	Name of entity in responding country requesting response	Government data from responding country
Responding military agency	Name of military entity responding to disaster	Government data from responding country
Recipient country	Name of country receiving assistance	Government data from responding country
Recipient state/region	Name of state or subsidiary unit receiving assistance	Government data from responding country
Recipient city	Name of city receiving assistance	Government data from responding country
Domestic or cross- border response	Category of the response location	Government data from responding country
Disaster subgroup	Climate-related disaster subgroups in EM-DAT Disaster Classification System: climatological, hydrological, and meteorological	EM-DAT <i>Disaster Subgroup</i> variable
Disaster type	Disaster types falling under climate-related disaster subgroups in EM-DAT Disaster Classification System	EM-DAT Disaster Type variable
Disaster subtype	Disaster subtypes falling under climate-related disaster subgroups in EM-DAT Disaster Classification System	EM-DAT <i>Disaster Subtype</i> variable
Associated disaster types	List of secondary disaster types cascading from or co- occurring with the main disaster type	EM-DAT Associated Types variable
Authority	Legal authority under which the disaster assistance is issued	Government data from responding country
Date started	Date the assistance was started	Government data from responding country
Date completed	Date the assistance was completed	Government data from responding country
Activity description	Description of the assistance provided	Government data from responding country
Activity type	Type of civil protection activity included in the assistance (see Table 1.2 for a complete list)	CASA researcher
Funding total	Total funding allocated for the disaster management activity	Government data from responding country
Notes	Notes by dataset researcher regarding uncertainties or other issues that should be conveyed with the data	CASA researcher

#### Table 1.3. Fields Included in the Dataset on Military Involvement in Climate Emergencies

Source: Variables defined by Project CASA or drawn from CRED/UCLouvain, EM-DAT Emergency Events Database.

This project pilots data collection using this structure, analyzing the results in chapter 2.3 of this report.

## **Consultative Groups**

A core aspect of the project's methodology is the formation of internal advisory groups to provide input into and review of project research. To accomplish this, the project formed an 8-member Advisory Group and 40-member Expert Group of military, government, civic, and multilateral leaders from 26 countries around the world. These groups have been essential to provide input into the research plan, access to government information, and review of the research findings.

## Conclusion

Overall, this methodology seeks to provide the framework needed to assess the extent to which countries have engaged their national militaries in managing climate-related emergencies. This provides the project with a foundation to explore patterns in military involvement in climate emergencies, the mechanisms militaries have in place to plan for and respond to these emergencies, and the impacts that participation in these emergencies has had on force structure and operations. The resulting products aim to increase our understanding of these important and growing demands on national militaries and pathways for supporting effective civil-military cooperation in these processes.

# Part 2: Study Results

# **2.1** National Militaries' Expanding Remit in Climate Emergencies

#### By Dr. Ashley McIlvain Moran<sup>1</sup>

As climate emergencies beset communities with increasing frequency and severity, national militaries play a key role, working alongside civilian responders and often facing calls for greater involvement when civilian capacity is strained. Whether militaries should be involved in preparing for and responding to climate emergencies is a matter of considerable debate, and views vary depending on the context, country, political culture, and whether involvement is within national borders or beyond. What is clear, however, is that national militaries are already engaged in these roles and, with the rising number of climate emergencies globally,<sup>2</sup> the pressure for such military involvement is also likely to increase when civilian agencies cannot respond at the speed or scale required.

Despite these challenges, there has been very little systematic cross-national information on country approaches to military involvement in climate emergencies. Project CASA seeks to help fill this gap by assessing the nature, extent, and impact of military involvement in such emergencies across a range of countries. It has done so by working with government and military officials in countries in NATO and globally to compile information on their approaches to engaging the military in preparing for and responding to climate emergencies, as well as the impacts this has had on force structure and operations.

This project's country profiles provide new comparative information on core frameworks shaping the use of national militaries in domestic and cross-border operations for civil protection during climate emergencies. This includes information on countries' current legal and policy frameworks, operational frameworks, military training, delineation of military and civilian roles, and international coordination. It also includes their perspectives on the potential advantages and disadvantages of increasing military involvement in civil protection, as well as the comparative advantages of civilian and military agencies. The aim is to understand the increasing demands placed on national militaries amid expanding climate emergencies globally and to share the range of approaches countries are using to manage these.

# **Sharing Experiences**

This chapter provides an overview of approaches to military involvement in climate emergencies seen across the 18 country profiles produced in this project.<sup>3</sup> Countries included in this study are Bangladesh, Belgium, Brazil, Bulgaria, Canada, France, Hungary, Ireland, Italy, Latvia, Lithuania, Mexico,

<sup>&</sup>lt;sup>1</sup> The Project CASA Coordinating Group would like to thank the many government and military officials and several nongovernmental experts who completed the project's country surveys on military involvement in climate-related emergencies. We are deeply grateful to them for sharing their time and expertise.

<sup>&</sup>lt;sup>2</sup> Intergovernmental Panel on Climate Change (IPCC), "Summary for Policymakers," in *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. Core Writing Team, Hoesung Lee, and José Romero (IPCC, 2023), 1-34.

<sup>&</sup>lt;sup>3</sup> Unless otherwise noted, all references to country experiences in this chapter draw from the country profiles drafted for this project by officials and experts in those countries. The full country profiles are available in chapter 2.2 of this report. See Environment & Development Resource Centre (EDRC), *Resilience, Readiness, and Response: Report of the Project on Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies (Project CASA)* (EDRC, 2025), ch. 2.2.

Pakistan, Romania, Spain, Sweden, Switzerland, and the United States. This provides country experiences across a range of geographic regions, climate hazards, and national contexts.

Analysis of countries under study reveals stark differences in how countries have structured their legal and policy frameworks, operational frameworks, military training, military and civilian roles in civil protection, and international coordination.<sup>4</sup> These reflect a spectrum of approaches in each of these core areas guiding the use of national militaries in climate emergencies. It is key to note that there are advantages on each end of the spectrum of decisions in each area. This study does not seek to assess whether states have taken the 'right' or 'wrong' decision in these areas. On the contrary, these country profiles are produced in the spirit of sharing a wide variety of approaches across states facing varied types of climate security risks, budgetary constraints, military and civilian agency structures, and national contexts—with the goal of learning from each other as all states face growing climate challenges and a potential need to take new steps outside of what has worked in the past.

## **Structuring Military Involvement in Climate Emergencies**

#### Legal and Policy Frameworks

Three core approaches have emerged in the legal and policy frameworks that countries use to guide their militaries' involvement in climate emergencies.

Some countries use a general national framework to guide the overall state disaster response and do not have specific guidance for the use of their militaries in civil protection generally or in climate activities specifically. This is the case in Bangladesh and Sweden, as Table 2.1 shows. Bangladesh, for example, uses its National Plan for Disaster Management to guide a whole of government approach to disaster planning and response, and this does not specify particular roles or policies for the military. The plan notes, however, that it "will also be critical to define the relative [disaster management]...responsibilities of military and civilian organizations."<sup>5</sup> Sweden likewise uses a national whole-of-government framework—the Civil Protection Act and the Act on Municipal and County Council Measures Prior to and During Extraordinary Events in Peacetime and during Periods of Heightened Alert—to guide overall response, specifying responsibilities for national and local civilian agencies without specifying the role of the military in civil protection or climate activities.

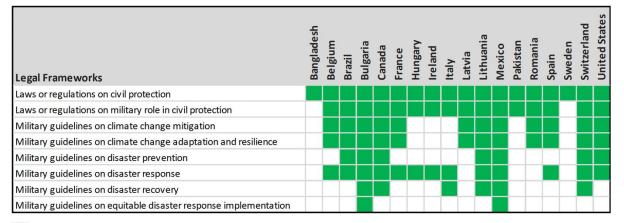


Table 2.1. Legal Frameworks for Military Involvement in Climate Emergencies

Legal framework present in the country

Source: Country profiles in EDRC, Resilience, Readiness, and Response, ch. 2.2.

<sup>&</sup>lt;sup>4</sup> The structure of this analysis draws from an initial framework presented in Ashley Moran, "Civil-Military Cooperation in Climate-Related Emergencies," in *NATO Science for Peace and Security Studies* (Springer, forthcoming).

<sup>&</sup>lt;sup>5</sup> Ministry of Disaster Management and Relief, *National Plan for Disaster Management (2021-2025)* (Government of the People's Republic of Bangladesh, 2020), 10.

A second approach likewise uses general national frameworks to guide planning for civil protection but also provides specific guidance for military involvement in civil protection generally. This is seen in Pakistan, as Table 2.1 shows. In Pakistan, the constitution provides the highest-level framework for the military's involvement in civil protection, noting the "Armed Forces shall...act in aid of civil power when called upon to do so."<sup>6</sup> Pakistan's Disaster Management Act then provides the general national framework for civil protection and also specifies the roles and responsibilities of government agencies and the military.

A third group of countries has extensive frameworks of laws and military policies that provide guidance for the military's involvement in both civil protection generally and in climate-related activities specifically. This third approach is seen, for example, in Hungary, Ireland, and Italy where national laws and regulations define the military's role within the national civil protection framework, and more detailed military policies also define military involvement in some aspects of disaster planning. All three have military policies on disaster response, and Italy also has military policies on disaster *recovery*, as Table 2.1 shows.

This third approach is also seen in several countries that have the most extensive legal and policy frameworks guiding military involvement in climate-related disasters. Switzerland is another of the few countries that provide for military involvement in civil protection in the constitution, noting "The armed forces....shall support the civilian authorities...in dealing with exceptional situations."<sup>7</sup> Belgium, Brazil, Bulgaria, Canada, France, Latvia, Mexico, Romania, Spain, Switzerland, and the United States all have laws or regulations guiding the military's involvement in civil protection, as well as military guidelines specifically addressing climate change mitigation, adaptation, and resilience, as Table 2.1 shows. All of these but Latvia and Romania also have military policies on disaster response. Brazil, Bulgaria, Canada, Mexico, Switzerland, and the United States additionally have military guidelines on disaster *prevention*, and Bulgaria, Canada, Mexico, and Switzerland have further military guidelines on disaster *recovery*.

#### **Operational Frameworks**

Three distinct operational frameworks can be seen in how countries structure their militaries' involvement in civil protection activities.

Some train specialized personnel within regular units in specific skills needed for civil protection. In Romania, for example, specialized personnel in regular units are trained in firefighting. In Italy and Pakistan, specialized personnel are trained in civil-military cooperation to coordinate planning for civil protection. In Latvia, specialized personnel handle specific tasks like flood response or search and rescue, while others handle civil protection more broadly as part of civil protection committees composed of representatives from the National Guard and National Armed Forces.

A second approach creates specialized stand-alone units dedicated to civil protection. France and Spain have stand-alone units dedicated to a specific, high-demand civil protection task: firefighting. Bulgaria, France, Spain, and Switzerland have stand-alone units dedicated to all civil protection tasks, handling a range of tasks like hazard containment, search and rescue, first aid, relief distribution, water treatment, hazard prevention, and disaster training. Canada has a stand-alone Disaster Assistance Response Team (DART) dedicated to *cross-border* assistance for civil protection. Brazil has stand-alone units that are instead 'dual-use' units, trained as the civil protection units but also deployed for general military missions. With this, Brazil has created specialized humanitarian assistance units in each regional command yet also requires those units to engage in conventional military missions since the full military is needed to cover the large territory of Brazil.

A third approach engages the full military in civil protection activities. In Bangladesh, the full military is engaged in disaster response, search and rescue, medical care, evacuation, relief assistance,

<sup>&</sup>lt;sup>6</sup> Constitution of Pakistan, art. 245, www.constituteproject.org/constitution/Pakistan\_2018.

<sup>&</sup>lt;sup>7</sup> Constitution of Switzerland, art. 58, www.constituteproject.org/constitution/Switzerland\_2014.

infrastructure restoration, security, and a range of other civil protection tasks during domestic disasters. This is also the case in Ireland where the military provides a range of personnel, equipment, and services during emergencies. Sweden too engages personnel from across the military, noting that civil protection response is handled primarily by the volunteer reserved force, the Home Guard. Some countries that engage their full militaries in disaster management activities *also* have specialized personnel or units for specific civil protection tasks or contexts. This is seen in Canada, where Operation LENTUS engages members from across force in domestic disaster response and Operation PALACI engages specialized personnel from artillery units in domestic avalanche prevention.

#### **Military Training**

Countries likewise reflect different practices regarding the focus and scope of training they provide to their militaries, often aligning with how they structure their militaries' involvement in civil protection more broadly.

Some countries provide civil protection training only for the specialized personnel responsible for those tasks within regular units. This includes training on specific civil protection tasks like search and rescue (SAR) and chemical, biological, radiological, and nuclear (CBRN) hazards (as in Ireland), civil-military cooperation (as in Italy and Pakistan), flood response and search and rescue (in Latvia), and firefighting (as in Romania), as Figure 2.1 shows. This also includes broad training in civil protection for military personnel participating in multiagency response teams (as for the Belgian First Aid and Support Team, or B-FAST, in Belgium) and multiagency coordination mechanisms (as for the civil protection committees in Latvia and Mexico). Notably in Mexico, specialized personnel are trained in all stages of civil protection—prevention, response, and recovery.

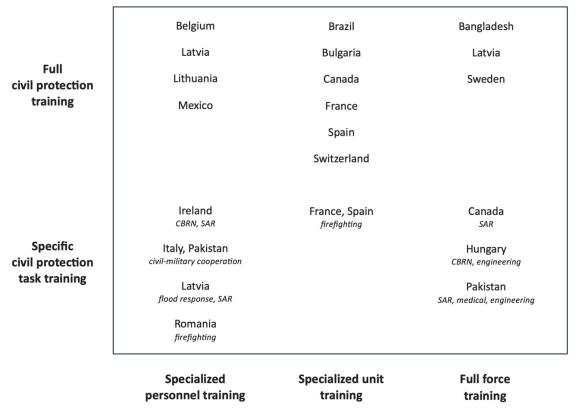


Figure 2.1. Focus and Scope of Military Training by Country

Source: Source: Country profiles in EDRC, *Resilience, Readiness, and Response,* ch. 2.2. Note: In this figure, CBRN stands for chemical, biological, radiological, and nuclear hazards, with diseases and pandemics addressed in the biological component being of relevance to this study on climate-related emergencies. SAR stands for search and rescue operations.

Other countries provide civil protection training only for the specialized units responsible civil protection. Again, this includes training on specific civil protection tasks like firefighting, as for the Paris Fire Brigade and Marseille Marine Firefighter Squadron in France and the Air Force 43<sup>rd</sup> Air Group in Spain, as Figure 2.1 shows. This also includes broad civil protection training, as for the specialized humanitarian assistance units in Brazil, specialized units in Bulgaria, the Disaster Assistance Response Team in Canada, the Military Civil Security Formations in France, Military Emergency Unit in Spain, and rescue troops in Switzerland.

Other countries provide full-force training specifically on disaster response and related civil protection activities to support a full-force response. This is seen in Bangladesh, Latvia, and Sweden with full-force training on civil protection generally, as Figure 2.1 shows. This is also seen in other countries that make provide full-force training available on specific civil protection activities, including training in search and rescue in Canada; CBRN hazards and engineering in Hungary; and search and rescue, medical, and engineering in Pakistan.

Notably, a handful of countries pursuing approaches across the range of training strategies maintain permanent training schools focused specifically on natural hazard response training. These schools provide natural hazard response training for the militaries in Canada and France, and for joint civil and military training in Spain.

#### Military and Civilian Roles

The civil protection activities done by military and civilian agencies vary widely across countries, but there are some similarities. Militaries are most often involved in the early stages of emergency response, providing services like firefighting, flood response, and other hazard containment; evacuation, aerial support, temporary construction, and other immediate relief; engineering, and security, as Table 2.2 shows.<sup>8</sup> Civilian agencies,<sup>9</sup> on the other hand, most often focus on longer-term processes like prevention, preparedness, and recovery. There is wide variation, however, in whether countries' military or civilian agencies (or both) engage in activities related to search and rescue, medical assistance, relief distribution, and infrastructure restoration. Exceptions are seen in Mexico— where the military is engaged in many activities across all stages of civil protection, from prevention and preparedness to response and recovery—and in the military's engagement more in preparedness in Bulgaria, Canada, and Switzerland, and in recovery in Bulgaria and Pakistan, as Table 2.2 shows.

Many country profiles explicitly note that the military's engagement in activities related to civil protection is at the request of civilian authorities and thus civilian agencies maintain primary responsibility for these activities. Canada notes, for example, that "while the Canadian Armed Forces (CAF) do respond to requests for assistance from communities in times natural disasters, the CAF do so as the force of last resort when provincial and territorial resources are not able to address a particular crisis. The appropriate provincial or territorial government is primarily responsible when a natural disaster occurs in their jurisdiction.... Federally, Public Safety Canada is the primary authority responsible....." Pakistan notes, for example, that "the the National Disaster Management Authority.... coordinates the overall disaster response and can request military assistance when necessary."

<sup>&</sup>lt;sup>8</sup> Table 2.2 synthesizes activities raised in this study's country profiles to provide a visual sense of where military and civilian agencies are focused across the phases of civil protection. However, since it is based on activities authors raised in country profiles, it is not necessarily a comprehensive accounting of all military and civilian activities in the country related to climate emergencies. The empty white boxes in the table thus do not necessarily mean that a country's military or civilian agencies do not address that issue—just that the country profile author did not address it in the profile. Some activities listed in country profiles do not translate exactly to activities on the table. One is an activity described in country profiles (on Hungary and Latvia) as managing "consequences" of extreme weather events, which is categorized here as "firefighting," "flood response," and "storm response."

<sup>&</sup>lt;sup>9</sup> By civilian agencies, we mean governmental agencies at the national, regional, and local levels. In some countries, this might also include international and regional organizations.

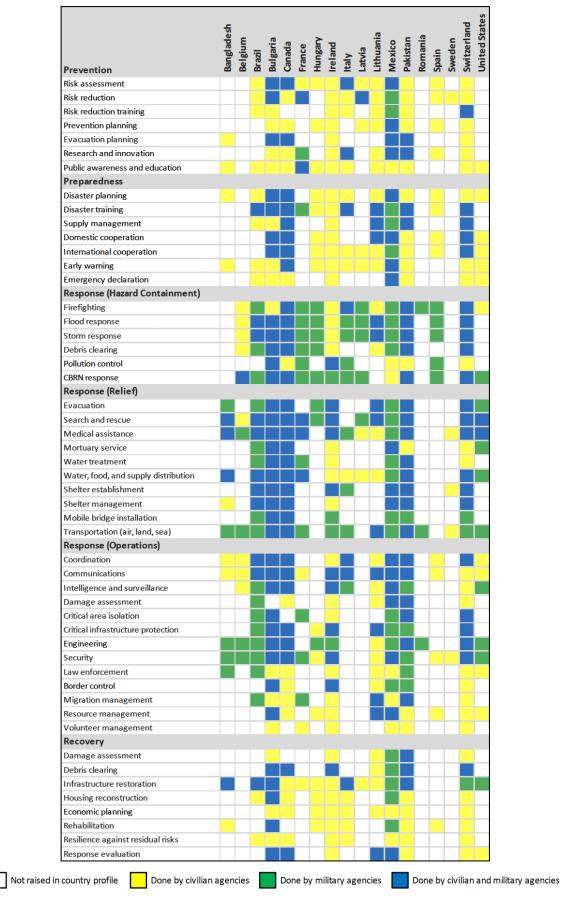


Table 2.2. Military and Civilian Agency Activity in Civil Protection

Source: Country profiles in EDRC, Resilience, Readiness, and Response, ch. 2.2.

Overall, militaries are involved in a wide range of activities across the 18 countries under study on this project, as Table 2.2 shows. Militaries are involved in prevention activities like risk assessment, risk reduction, research, and public awareness; and preparedness activities like disaster planning, training, and early warning. Militaries are also involved in a wide range of activities across all stages of response, including hazard containment like firefighting, flood response, and debris clearing; relief activities like evacuation, search and rescue, medical assistance, water treatment, water and food distribution, shelter and bridge construction, and transportation; and broader response operations like communications, intelligence, and surveillance; damage assessment, critical infrastructure protection, and engineering; and security, law enforcement, and migration management. Militaries are also involved in a limited set of activities in the recovery phase, sometimes assisting with post-response damage assessment and debris clearing, infrastructure repair, reconstruction, and rehabilitation.

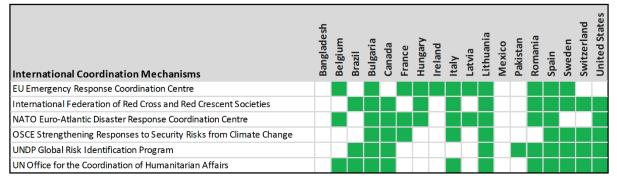
The scope of military response can vary depending on whether the military is engaged in domestic or cross-border civil protection. Some militaries can be deployed to an equally broad scope of civil protection activities in their domestic and cross-border responses—as is the case for Belgium, Brazil, France, Lithuania, and Spain. Other militaries have a more limited scope of activities in cross-border responses—as with Bangladesh's military that only engages in peacekeeping missions during cross-border operations and Italy's military that only plays an enabling role aiding civilian agencies' early entry to the disaster scene. The Mexican military too has a narrowed scope in cross-border civil protection, providing only search and rescue, transport, communications, health, medical assistance, sanitation, and relief distribution abroad.

The oversight of civil protection operations likewise varies across countries. In some countries, civilian agencies have operational command, as in Pakistan under the National Disaster Management Authority. In Latvia, on the other hand, the National Civil Protection Plan adopted in 2020 puts the military in the lead role for some activities—search, rescue, and emergency response at sea—and in a supporting role on other aspects of civil protection. In Ireland, there is a joint civilian and military control, with all emergency planning across state agencies overseen by the Ministry of Defence' Office of Emergency Planning—an internal civil-military body established in 2001. In Romania, oversight can change with a change in location, with the Ministry of Internal Affairs responsible for domestic responses, and the Ministry of Internal Affairs or the Ministry of Defence responsible in cross-border responses.

#### International Coordination

Among six international coordination mechanisms that facilitate emergency response across borders, those with the widest current participation among surveyed countries are the EU Emergency Response Coordination Centre, the NATO Euro-Atlantic Disaster Response Coordination Centre, and the UN Office for the Coordination of Humanitarian Affairs—each with 12 of 18 surveyed countries participating, as Table 2.3 shows. There is also wide participation in the UNDP Global Risk Identification Program and the International Federation of Red Cross and Red Crescent Societies—each with 11 surveyed countries participating. The latter two also have more country participants from outside Europe. The OSCE mechanism on Strengthening Responses to Security Risks from Climate Change has relatively lower participation from surveyed countries, with nine participating.





Country is active in the international coordination mechanism

Source: Country profiles in EDRC, Resilience, Readiness, and Response, ch. 2.2.

While Table 2.3 provides a comparison of state participation in several key international coordination mechanisms, states surveyed here also participate in a wide range of other international mechanisms. Among countries outside Europe and the North Atlantic, Bangladesh and Mexico do not participate in any of the mechanisms in Table 2.3, and Pakistan participates in one. Bangladesh instead participates in UN Peacekeeping Operations through UN Mandates. Pakistan also participates in the Economic Cooperation Organization, the South Asian Association for Regional Cooperation, the United Nations Environment Programme, the United Nations Framework Convention on Climate Change, and the World Food Programme. In addition to several coordination mechanisms listed in Table 2.3, Brazil also participates in the Conference of American Armies; the Conference of Ministers of Justice of Ibero-American Countries; the Ibero-American Conference; the Ibero-American General Secretariat; the Ibero-American Social Security Organization; the Inter-American Defense Board of the Organization of American States; the Inter-American Treaty of Reciprocal Assistance; the Organization of Ibero-American States for Education, Science, and Culture; the South American Defense Council of the Union of South American Nations; and the South Atlantic Peace and Cooperation Treaty.

In Europe, Hungary also participates in the Tsza Multinational Engineer Battalion. Lithuania also participates in the Council of the Baltic Sea States; the European Group of Organizations for Fire Testing, Inspection, and Certification; the European Fire Service Colleges' Association; the International Association of Fire and Rescue Services; and the International Atomic Energy Agency Convention on Assistance in the Event of a Nuclear Accident or Radiological Hazard. Romania also participates in the Danube-Kris-Mures-Tisa Regional Cooperation and the Disaster Preparedness and Preventive Initiative for South Eastern Europe. Sweden also participates in Nordred.

## Assessing the Impact of Military Involvement

The country profiles highlight both advantages and disadvantages of giving the military a significant role in civil protection, particularly in a context of increasing climate emergencies. Several NATO members specifically emphasized that increased threat levels are affecting military planning and prioritization of missions, which could reduce the military capacity available to address future emergencies. At the same time, many national and multilateral strategies (e.g., the EU Preparedness Union Strategy<sup>10</sup>) underscore the need to strengthen both civilian and military preparedness to face a wide range of risks and potential emergencies. The range of responses illustrate that there are no perfect answers when it comes to defining the role of the military in responding to climate emergencies, but rather a number of considerations that could shape future decisions.

<sup>&</sup>lt;sup>10</sup> European External Action Service, "Preparedness Union Strategy: Reinforcing Europe's Resilience in a Changing World," *European Union*, March 25, 2025, https://www.eeas.europa.eu/eeas/preparedness-union-strategy\_en.

#### Potential Advantages and Disadvantages of Military Contributions

Most country profiles highlighted similar skills and assets that make the military well suited to the task of supporting national and international disaster response efforts. These include the ability to mobilize and deploy rapidly, and to operate and communicate in difficult terrain and austere conditions, including from offshore locations.<sup>11</sup> Militaries also bring significant logistical and engineering capacity, and the ability to augment civilian medical systems, for example by setting up field hospitals. Together, these factors have led some countries to rely significantly on military capacity, particularly where civilian response capabilities may be more limited. In Pakistan, for example, the military has traditionally been viewed as the most practical and efficient means of responding to crises; it is only recently that efforts have been made to develop additional civilian capacity.

The profiles reveal broad agreement that military responses to emergencies positively impact public perceptions of the military. Similarly, they can have a positive impact on the morale of units involved in responses, as they offer an opportunity to provide direct support to local populations in a time of need. Beyond this, such operations also offer a valuable opportunity to sharpen skills needed for key mission areas (e.g., command and control, logistics, interagency coordination, and response procedures) in a real-life but non-combat setting. In Brazil, for example, military support to emergency response operations is viewed as strengthening interagency cooperation in a way that can also benefit other operations, including border management and efforts to address environmental crime. Seen from this perspective, military contributions to civil protection can potentially *increase* readiness.

However, the opposite may also be true. Several country profiles highlighted the risk that military contributions to civil protection might undermine the military's ability to respond to other, potentially higher priority, threats. Involvement in an increasing number of response operations can also take a toll on personnel and equipment and therefore *decrease* readiness. Countries with military units dedicated to disaster response generally perceive lower risks to readiness, as their military responses to disasters would not affect parts of the force dedicated to other missions. Where this is not the case, relying on the military to provide significant support to civil protection and related operations could also lead to critical gaps in national response capacity, should the military be deployed for other national defense missions and therefore unavailable.

#### Comparative Advantages of Civilian Contributions

Civilian organizations also offer distinct advantages, underscoring the importance of developing integrated civil-military responses. Whereas military capabilities tend to be concentrated in a few key locations, to be deployed when required, local governments and NGOs are located throughout countries and are generally perceived as having a closer connection with local communities. This proximity can have positive implications for governance, provided community members have mechanisms to hold local authorities accountable for decisions made throughout the disaster risk reduction cycle. Civilian agencies also have specialized capacities that are critical in responding to emergencies but less likely to be part of military responses, including providing social services and psychosocial support. They are also likely to be better equipped to manage the coordination of donor support during international response operations.

Many country profiles noted that civilian authorities have a longer-term perspective, focusing not only on immediate response and recovery, but also on prevention, preparedness, reconstruction, and economic development. Importantly, they are best placed to advocate for changes required to address the economic, regulatory, legislative, and other factors that are driving climate change, environmental degradation, and other trends contributing to increasingly frequent and severe disasters.

Citizens themselves are also seen as key to future responses. Countries including Latvia and Sweden highlight the importance of all members of society being prepared to act in an emergency. While this

<sup>&</sup>lt;sup>11</sup> See Marine Corps University, "Seabasing," *Marine Corps University Research Library*, https://grc-usmcu.libguides.com/research-topics/usmc-topics/seabasing.

is often connected with a broader concept of total defense, <sup>12</sup> it is highly relevant to climate emergencies. No state institution can be present everywhere in the aftermath of a disaster; communities are the first line of defense when it comes to preparing for and responding to a range of emergency situations.<sup>13</sup>

#### Lessons to Shape Future Military Responses

Command and control is consistently highlighted as an area to improve in civil-military responses, as is the need for joint training. Several country profiles mentioned the need to regularly update procedures, an observation that may become even more relevant as climate change accelerates and requires further adaptation. One also noted that social media and local news outlets can play a key role in shaping public perceptions of military responses, an important reminder as mis- and disinformation are already impacting responses to climate and other emergencies.<sup>14</sup>

While a limited number of specific lessons were shared in the country profiles, the profiles indicated that militaries in many countries are documenting lessons identified/learned during emergency response operations, pointing to the value of harvesting and sharing these lessons more consistently, both within and across regions.

### Conclusion

Overall, the country profiles developed for this study provide useful new comparative information on core frameworks shaping the use of national militaries in domestic and cross-border operations for civil protection during climate emergencies. The study reveals both alignment and stark differences in how countries have structured their legal and policy frameworks, operational frameworks, military training, military and civilian roles in civil protection, and international coordination. It also highlights important perspectives on the potential advantages and disadvantages of increasing military agencies. Having this comparative information deepens our understanding of the increasing demands placed on national militaries amid expanding climate emergencies, as well as the range of approaches countries are using to manage these.

<sup>&</sup>lt;sup>12</sup> Government Offices of Sweden, "Total Defence," https://www.government.se/government-policy/total-defence.

<sup>&</sup>lt;sup>13</sup> Abigail Robinson, Viola Csordas, and Fredrik Wallin, *Protecting People, Planet and Peace: Shaping the Future of the Security Sector* (Geneva Centre for Security Sector Governance, 2023).

<sup>&</sup>lt;sup>14</sup> Marina Adami, "Watching Chaos through a Screen: How Social Media is Changing the Way We Follow Extreme Weather Events," *Reuters Institute*, February 10, 2025, https://reutersinstitute.politics.ox.ac.uk/news/watching-chaos-through-screen-how-social-media-changing-way-we-follow-extreme-weather-events.

# **2.2** Country Profiles on Civil-Military Cooperation in Climate-Related Emergencies

The country profiles developed in this project aim to provide comparable, cross-national information on civil-military cooperation and military involvement in climate emergencies. They include NATO countries, as well as NATO partners and other countries globally with high climate security risks. Country profiles include details on each country's legal, operational, funding, and training frameworks and related policies, procedures, or guidelines on military involvement in climate-related emergencies.

Conducted by government and military officials and several non-governmental experts, the country profiles answer several research questions to assess the nature, extent, and impact of military involvement in climate-related emergencies and to identify good practices across a wide range of national contexts. Depending on the country context, the questions include:

- What is the legal framework for the military's use in civil protection?
- Does the military have policies for its involvement in climate change mitigation, adaptation, disaster prevention, disaster response, disaster recovery, and/or equitable disaster response implementation?
- Which military branches and civilian authorities are primarily involved in civil protection? Which tasks are handled by each? Does this differ in domestic and cross-border operations?
- What are the standard operating procedures for civil-military cooperation in civil protection?
- What domestic training and cross-border cooperation exists for such activities?
- What multilateral engagement exists through the European Union (EU), International Federation of Red Cross and Red Crescent Societies (IFRC), North Atlantic Treaty Organization (NATO), Organization for Security and Co-operation in Europe (OSCE), or United Nations (UN)?
- Are there advantages to having the military do some tasks? Which tasks are best done by civilian agencies?
- What are the advantages and disadvantages in having military units specializing in climaterelated emergencies, versus preparing all armed forces to assist in such tasks?
- What effect does military involvement in civil protection have on force composition, recruitment, morale, and retention?
- What effect does military involvement in civil protection have on force readiness?

This chapter includes profiles on Bangladesh, Belgium, Brazil, Bulgaria, Canada, France, Hungary, Ireland, Italy, Latvia, Lithuania, Mexico, Pakistan, Romania, Spain, Sweden, Switzerland, and the United States. This provides country experiences across a range of geographic regions, climate hazards, and national contexts.



BANGLADESH

By Major General ANM Muniruzzaman, NDC, PSC (Ret.)

#### 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

In Bangladesh, the funding for military in domestic and foreign civil protection is usually allocated through the national budget. The government determines the budgetary allocations for defense and related activities, and specific funds may be earmarked for civil protection, disaster response, or peacekeeping missions.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovery from natural disasters?

National Plan for Disaster Management, 2021-2025

#### 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

There is no legal framework for the use of the military in domestic and foreign civil protection.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in the following activities? If so, explain.

Disaster response Disaster recovery Policies are guided by the National Disaster Preparedness Plan.

#### 3. OPERATION FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

In Bangladesh, the primary military branches involved in civil protection, including disaster response and relief efforts, are the Bangladesh Army, Bangladesh Navy, and Bangladesh Air Force. In addition to the national military branches, various paramilitary forces and organizations, such as the Bangladesh Border Guard (BGB) and the Coast Guard, also play significant roles in civil protection, especially in specific regions and contexts.

3.2. Which **civil protection tasks** are done by the military? Do these differ in domestic and foreign operations?

Civil protection tasks (Domestic):

- Search and rescue
- Medical assistance
- Evacuation operations
- Distribution of relief supplies
- Infrastructure restoration
- Security and Law enforcement
- Aerial support

Civil protection tasks (International):

• Peacekeeping mission

#### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

National Authorities:

- Ministry of Disaster Management and Relief
- Department of Disaster Management
- National Disaster Management Council
- Armed Forces Division
- Bangladesh Meteorological Department
- Bangladesh Fire Service and Civil Defence

Sub-national Authorities:

- Local Government Bodies
- District Disaster Management Committee (DDMC)
- Upazila Disaster Management Committee (UzDMC)
- Community based organizations
- Non-governmental organizations

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

Civil protection tasks by civilian authorities:

- Disaster preparedness and planning
- Early warning systems
- Coordination and communication
- Search and rescue operations
- Medical assistance and emergency services
- Evacuation planning and execution
- Relief distribution
- Infrastructure restoration
- Community awareness and training
- Shelter management
- Recovery and rehabilitation

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

This is also done by the National Disaster Preparedness Plan. Decisions are made by the civilian hierarchy and chain of command.

#### 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

N/A

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

N/A

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

N/A

4.4. Does your country engage in any of the following international coordination mechanisms? If so, how?

UN Peacekeeping Operations through UN Mandate

#### 5. ANALYSIS

#### 5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

Yes, there are advantages to involving the military in civil protection tasks, particularly in the context of responding to natural disasters and emergencies. The military possesses unique capabilities and resources that can complement civilian efforts, leading to a more effective and comprehensive response. Some of the advantages include:

1. The military is trained and equipped for rapid deployment in emergency situations. They have the logistical capacity to quickly mobilize personnel, equipment, and supplies to affected areas, which is crucial for timely response and relief efforts.

2. Military personnel undergo specialized training in disaster response, search and rescue operations, and medical care.

3. The military, especially the air force and navy, possesses aerial and maritime capabilities that are essential for reaching remote areas. Helicopters, aircraft, and naval vessels can be used for reconnaissance, transportation of relief supplies, and medical evacuations.

4. The military operates under a hierarchical command and control structure, allowing for efficient coordination of resources and personnel.

5. Military engineering units are skilled in rapid infrastructure repair and reconstruction. They can contribute to reopening roads, rebuilding bridges, and restoring essential services, helping communities recover more quickly.

6. In post-disaster situations, maintaining law and order is crucial. The military can provide security, prevent looting, and ensure a safe environment for relief operations and recovery activities.

7. The military's involvement in civil protection tasks can extend to international deployments, including peacekeeping missions. This allows for collaboration with the international community and the sharing of experiences and resources.

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

There are distinct advantages to having civilian agencies play a significant role in civil protection tasks, especially in the context of disaster management and response. Civilian agencies bring specific expertise, community engagement capabilities.

1. Civilian agencies often have strong ties to local communities and possess in-depth knowledge of local customs and languages

2. Civilian agencies often have specialized expertise in areas such as healthcare, social work, and engineering. This expertise is valuable for addressing specific needs arising from disasters, such as medical care, psychosocial support, and infrastructure reconstruction.

3. Civilian agencies are often involved in community-based disaster risk reduction initiatives. They work to empower communities through education, training, and the development of local resilience strategies, reducing vulnerability to future disasters.

4. Civilian agencies can adopt flexible and adaptive approaches tailored to the unique needs of each disaster. They are often more agile in responding to dynamic situations and can adjust strategies based on real-time assessments. 5. Civilian agencies typically focus on long-term development and sustainable solutions.

6. Civilian agencies adhere to humanitarian principles, including neutrality, impartiality, and independence. This commitment ensures that assistance is provided based on need, without discrimination, and with a focus on alleviating human suffering.

7. Civilian agencies are experienced in coordinating with various stakeholders, including local governments, international organizations, and communities. Their collaborative approach fosters effective partnerships, ensuring a more comprehensive and integrated response.

8. Civilian agencies often provide crisis counselling and psychosocial support.

9. Non-governmental organizations (NGOs) often have established networks and a local presence, allowing for quick mobilization.

10. Civilian agencies often engage in advocacy efforts and influence policies. Their work contributes to shaping effective and sustainable approaches at both local and global levels.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

N/A

5.4. What effect does military involvement in civil protection have on **force readiness**?

N/A

5.5. Do specific disasters stand out in terms of **lessons learned** for civil-military cooperation in civil protection?

- Coordination exists between the civil and military
- Joint training is a lesson
- Regular updating of the procedures is also a lesson

#### 6. REFERENCES

6.1. Please include any references or further reading that should be included in the country profile.

**Bangladesh Climate Change Strategy and Action Plan 2009** 

National Plan for Disaster Management, 2021-2025



# **BELGIUM**

By Major Hannes de Reu, Climate Change and ESG Strategy and Policy Advisor, Belgian Armed Forces

#### 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

In support of domestic civil protection, payment is by Federal Public Service (FPS) Internal Affairs.

In support of foreign civil protection, payment is by:

- Belgian First Aid and Support Team (B-FAST): interdepartmental organization led by Federal Public Service (FPS) External Affairs
- Coordination/activation via the European Union (EU) Emergency and Response Coordination Center or bilaterally
- Payment by own department, but depending on the case partially funded via EU Civil Protection Mechanism

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

2022: Activation of B-Fast following the floods in Pakistan - BEL Defence provided trained personnel for the water purification units. See <u>B-FAST sends water purification module and team of experts to Pakistan</u>

2023: Activation of B-FAST as response to the earthquake in Türkiye – BEL Defence provided strategic transport, medical equipment, consumables, and medical personnel for the emergency field hospital type EMT-2. See: <u>B-FAST sends medical aid and field hospital to Türkiye</u>

2023: Activation of B-FAST for medical AIREVAC of severe burns patients out of Armenia – BEL Defence provided medical personnel for an assessment team, coordinated the evacuation, and treated the patients in the military hospital. See: <u>Three Armenian burn victims admitted to the Military Hospital on Sunday evening</u>

# 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

**Domestic:** Activation of BEL Defence on order of government or Ministry of Defence. BEL Defence would support the first responders or the civil protection with specific means which could be used in dual use. BEL Defence doesn't foresee specific means for disaster/emergency relief. A requisition by Internal Affairs / Civil Protection of means of BEL Defence could be done as well in case of an emergency when no other means are available to provide a specific support.

**Foreign:** There is a collaboration between different BEL departments (through <u>B-FAST</u>) for relief in disasters abroad. The national legal framework for this interdepartmental cooperation is stipulated in a specific Royal Decree and is in line with European law regarding foreign civil protection assistance and reciprocal assistance within the EU. BEL Defence supports B-FAST with personnel, logistics, transport, and if necessary, military capabilities in dual use.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Climate change mitigation

Climate change adaptation and resilience

Disaster response: Nationally, see guidelines homeland operations; Internationally, see B-FAST point of contact on staff level

# 3. OPERATIONAL FRAMEWORK

#### 3.1. Which national and subnational military branches are primarily involved in civil protection?

Civil protection is not a core task for BEL Defence. We have a couple of entities which could assist civil protection (engineering; chemical, biological, radiological, nuclear; medical personnel; etc.) or contribute to a civil protection mission as an enabler (Communications and Information Systems, transport, security assessment, etc.). In general BEL Defence will not invest in specific capacities for supporting civil protection but provides existing military capacities in dual use if needed.

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

No civil protection tasks are done internally BEL Defence. However, there are regularly contacts on staff level between Civil Protection and BEL Defence in order to facilitate swift assistance and ensure efficient collaboration when military support is requested.

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

Domestic responses:

- First responders: regional and local fire fighter zones
- Specialized capacity: national civil protection organism / Directorate-General Civil Security

Foreign responses:

• B-FAST interdepartmental organization including FPS External Affairs, FPS Internal Affair – Directorate-General Civil Security, Ministry of Defence, and FPS Public Health

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

All civil protection tasks are done by civilian authorities. BEL Defence only provides support when requested. This does not differ in domestic or foreign operations.

The specialties of the Civil Protection are divided into four groups, called "clusters":

- CBRN (Chemical, Biological, Radiological and Nuclear)
- SAR (Search And Rescue)
- HTD (Heavy Technical Deployment)
- ICM (Incident and Crisis Management)

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

In case of a domestic operation, there is a clear hierarchy active, depending on the scale of the operation (operational coordination on municipality level, provincial level or federal level).

In case of a foreign operation, the request would be analyzed, and the actual response would be made in consensus between the different federal entities involved.

#### 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

For foreign support, B-FAST organizes internal training and participates in international exercises with its personnel coming from the different departments and thus involving military personnel as well.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

No.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Yes. This is through an interdepartmental structure called B-FAST, which organizes the dispatching of Belgian emergency assistance abroad. Belgian assistance abroad is coordinated at the European level. At the request of the EU, Belgium then sends a B-FAST team (Belgian First Aid and Support Team).

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

EU Emergency Response Coordination Centre (via B-FAST) NATO Euro-Atlantic Disaster Response Coordination Centre (via Liaison Officer to NATO) UN Office for the Coordination of Humanitarian Affairs (via B-FAST)

# 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

N/A

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

Their core task is to support internally. They are available and dedicated to the task. Military capabilities are not always readily available in BEL due to other engagements or scope (training, deployment, etc.). The military capabilities could merely work as a fallback option or a national reserve.

Civil Protection personnel and assets are protected under International Humanitarian Law and therefore must not be targeted in times of war or conflict.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

N/A

5.4. What effect does military involvement in civil protection have on force readiness?

The focus of BEL Defence is external to the BEL territory. It could provide dual use capabilities in support of civil protection. However, those are not necessarily available due to other engagements (military training, engagements, etc.). That is why those assets are not guaranteed and thus shouldn't be relied upon in case of an acute crisis.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

There is clearly a rising consciousness concerning the need for civil protection and proper readiness after the 2021 Floods in the south of BEL. In response to this disaster and in light of the multiplication of climate and environment hazards, the Council of Ministers decided to create a new independent center <u>Cerac (Climate Risk Assessment Center</u>).

In foreign support, the BEL response to the Turkish earthquake in 2023 was the largest operation in its kind for B-FAST and thus provided a lot of lessons learned which are still being implemented to enhance civil-military cooperation in disaster relief/civil protection.

# 6. REFERENCES

6.1. Please include any references or further reading that should be included in the country profile.

N/A



**BRAZIL** By Colonel Raul Kleber de Souza Boeno (Ret.)

#### **1. FUNDING FRAMEWORK**

#### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

In the Brazilian context, the use of federal military resources within national territory for civil protection and defense actions only occurs after civil authorities (municipal and state) have exhausted their resources and means in the affected region and have recognized their operational incapacity to respond to the disaster.

The "Federal Recognition" is the formal act through which the federal government can authorize the use of federal resources (including military assets) in disasters or contingency situations. This recognition is carried out through the Integrated System of Information on Disasters (S2iD). Through the S2iD, it is possible to request federal government resources for response and recovery actions, register disasters and request recognition. Municipalities make these requests through this system and can also track the processes of resource allocation and federal recognition, as well as access information regarding incidents and risk and disaster management.

The S2iD is the platform of the National Civil Protection and Defense System that integrates various products with the aim of improving the quality and transparency of risk and disaster management in Brazil through process automation and the provision of systematic information.

Federal financial resources for "Response Actions" are allocated to the affected municipalities based on requests submitted through the S2iD.

In the case of using Armed Forces (Army, Navy, or Air Force) resources, especially in "Response Actions," based on the Protocol of Actions signed in 2012 by the Ministry of National Integration, Ministry of Health, and Ministry of Defense (MD), military personnel and assets are deployed according to the Mobilization Support Requests of the MD. At the end of support operations, operation reports are submitted by the respective branches to the MD, where the costs of the operations are quantified and forwarded to the Ministry of Integration and Regional Development (MIDR) – the Brazilian Federal Government agency responsible for the National Civil Protection and Defense System – for financial reporting and fund allocation to the MD.

The use of Brazilian Armed Forces in civil protection outside of the national territory (abroad) is triggered in accordance with international treaties and commitments made by the Brazilian government, in response to cooperation and assistance demands from countries, international organizations and entities. This international involvement (in restricted and specific locations) is coordinated by the Ministry of International Relations, based on Law No. 13,684 of June 21, 2018, in addition to the Brazilian Federal Constitution and its defense documents. Furthermore, the National Congress (Federal Deputies and Senators) must grant authorization to the President of the Republic of Brazil to authorize or order the use of military assets outside the country.

On the global stage, Brazil may be called upon by the United Nations (UN) through the United Nations Office for the Coordination of Humanitarian Affairs (OCHA). In the specific case of the American continent, the Organization of American States (OAS) is the primary international humanitarian protection organization of which Brazil is a signatory, along with the Inter-American Defense Board (JID).

Funding for operations outside of the national territory is provided for in the commitments made. Normally, the requesting country is responsible for reimbursing the supporting nation, as feasible, or it may be funded by the international financing organization, typically the UN offices. See also:

Sistema Integrado de Informações sobre Desastres Proteção e Defensa Civil 1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

Brazil seeks to maintain transparency in the use of public resources. Thus, through the "Transparency Portal," the Federal Government provides information regarding all Ministries. However, specific actions related to the use of military resources in disaster preparedness, response, and recovery were not found on the Transparency Portal. This information is scattered within various processes.

A more centralized control of these activities is carried out by the Ministry of Defense, through the Joint Operations Chief of the Joint Chiefs of Staff of the Armed Forces. The data is not made available on the MD website; however, it is provided upon request from interested parties. The data provided by the MD for this research is included in the annexes.

In the case of the Brazilian Army (EB), it is the Land Operations Command that coordinates the use of EB assets in humanitarian actions within national territory and monitors them abroad through the Peacekeeping Missions Support and Monitoring Group of the EB.

The EB, through the Humanitarian Assistance Force Subproject, initially within the Northeast Military Command (CMNE), has been conducting doctrinal experimentation in the humanitarian field while maintaining the versatility of these troops. The vastness of Brazilian territory (approximately 8,516,000 km<sup>2</sup>), along with the country's peculiarities, the size of the armed forces, and the economic situation, make it challenging to allocate exclusive military personnel for humanitarian purposes. Dual use is the most suitable approach for the current phase of transformation of the Land Force.

Currently, the Brazilian Army has a Humanitarian Assistance Force (with varying strength depending on its activation) in each of the Military Area Commands (Amazon, North, Northeast, South, Southeast, East, and Plateau). It is important to note that these troops have a dual role, both for conventional combat and for support to civil defense in case of disasters.

Furthermore, in the Brazilian Army's Land Military Doctrine regarding threats and risks, climate disasters are identified as threats that can jeopardize security. This, combined with the Army's Strategic Plan - Scenario EB 2035, indicates that, in the Brazilian context, there should not be a shift of civil defense missions to the Brazilian Armed Forces in the coming years. However, this does not mean that the armed forces' involvement will cease (in response actions and only in some phases of disasters).

In addition to the above, the Integrated Disaster Information System (S2iD), mentioned in the previous response, provides the Brazilian Natural Disaster Atlas (records from 1991 to 2012), without specifying the use of military resources in prevention, response, and reconstruction actions in disasters. The Ministry of Integration and Regional Development provides the Digital Atlas of Disasters in Brazil (1991 to 2022) with more comprehensive/detailed content, including information on deaths, property damage, displaced persons, public and private losses, among others. However, it does not provide details on the military resources deployed in the respective disasters.

See also: <u>Portal da Transparência do Governo Federal Brasil</u> <u>Atlas Brasileiro Desatres (1991 a 2021)</u> <u>Atlas Digital de Desastres no Brasil (1991 a 2022)</u> <u>Comando de Operações Terrestres</u> (missões do EB no exterior)

#### 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

It is important to note that, when a natural or man-made disaster occurs that requires the timely deployment of the Armed Forces in the national territory, in view of human lives in imminent danger and/or serious material damage, all Commanders of Military Organizations (OM) located in or near the affected municipality(ies), at the request of the local Civil Defense Agencies, may act in emergency relief in accordance with the pre-established

guidelines of their respective Forces (Army, Navy and Air Force). Currently, the main legal frameworks existing in Brazil, which provide legal support for the use of the Armed Forces (AF) in civil defense support activities, are as follows:

# 1. The role of the Armed Forces in disasters on national territory:

a. Federal Constitution of Brazil (1988) (Art 142 - Armed Forces)

b. <u>Complementary Law No. 97</u> (June 9, 1999), which sets out the general rules for the organization, preparation, and employment of the Armed Forces (as set out in Art. 16, without compromising its constitutional purpose, the Armed Forces are responsible for cooperating with Civil Defense as a general subsidiary duty).

c. <u>Law No. 12.340</u> (December 1, 2010), which provides for the transfer of funds from the Federal Government to the bodies and entities of the States, Federal District and Municipalities for the execution of prevention actions in areas at risk of disasters and response and recovery actions in areas affected by disasters and on the National Fund for Public Disasters, Protection and Civil Defense; and makes other provisions.

d. <u>Decree No. 7.364</u> (November 23, 2010) and Decree No. 7.436 (February 3, 2011) (structuring of the Ministry of Defense)

e) <u>Law No. 12.608</u> (April 10, 2012), which establishes the National Civil Protection and Defense Policy (PNPDC) and provides for the National Civil Protection and Defense System (SINPDEC) and the National Civil Protection and Defense Council (CONPDEC).

f) <u>Protocol of Actions between the Ministries of National Integration (MI), Defense (MD) and Health (MS)</u> (December 31, 2012), aiming at management flows and procedures for federal response actions in disaster situations (PA-MI-MD-MS/2012)

g) <u>Ordinance No. 90</u> (September 3, 2013) of the Ministry of Social Development and Fight against Hunger, which establishes federal co-financing for the provision of the Protection Service in Situations of Public Disasters and Emergencies.

h) <u>Plan for the Employment of the Armed Forces in Cases of Disaster</u> (PEFACaD) (December 18, 2013), of the Joint Chiefs of Staff of the Armed Forces (EMCFA)

i) <u>Law No. 12.983</u> (June 2, 2014), which amends and updates legal provisions on transfers of funds from the Union to bodies and entities of the States, Federal District and Municipalities for the execution of prevention actions in risk areas and response and recovery in areas affected by disasters and on the National Fund for Public Disasters, Protection and Civil Defense.

j) National Plan for Risk Management and Response to Natural Disasters (2012-2014)

k) <u>Normative Ordinance No. 7/GAP/MD</u> (January 13, 2016), Approves the Instructions for Employment of the Armed Forces in Support of Civil Defense - MD33-I-01 (1st Edition/2015)

I) <u>Decree No. 11.219</u> (October 5, 2022) Regulates a few articles of Law No. 12.340 (December 1, 2010), to provide for mandatory transfers of financial resources from the Union to the States, the Federal District, and the Municipalities for the execution of prevention actions in disaster risk areas and response and recovery in areas affected by disasters.

m) National Civil Defense Plan - 2023 - under construction

# 2. The role of the Armed Forces in disasters abroad:

a. Federal Constitution of Brazil (1988)

b. <u>Law No. 13.684</u> (21 Jun 2018), Article 11 of which states that "the Union may provide humanitarian cooperation, under the coordination of the Ministry of Foreign Affairs, in order to support countries or populations that are in a state of armed conflict, natural disaster, public calamity, food and nutritional insecurity or other situation of emergency or vulnerability, including a serious threat to the life, health and human or humanitarian rights of its population".

# 3. As a signatory, Brazil also participates in international decisions on the subject, such as:

a. <u>Resolution 46/182</u>, approved by the United Nations General Assembly on December 19, 1991, which provides for the strengthening of the coordination of emergency humanitarian assistance in the United Nations (UN) system, especially the need to strengthen and make more effective the collective efforts of the international community in the provision of humanitarian assistance.

b. International Strategy for Disaster Reduction (ISDR) in 1999 by the United Nations (UN)

c. <u>Hyogo Framework</u> for Action in 2005, which aims to reduce the risk of disasters.

d. <u>The Sendai Declaration</u> was adopted at the Third UN World Conference on Disaster Risk Reduction, held from March 14 to 18, 2015, in Sendai, Japan, and which generated the document Framework for Disaster Risk Reduction for the period 2015-2030.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

## **CLIMATE CHANGE**

The Ministry of Defense (MD), the entity that coordinates the actions of the Brazilian Army, the Brazilian Navy and the Brazilian Air Force, is part of the federal government's policies. This means that the military sector must develop its activities in full alignment with government policies, including the National Climate Change Policy (PNMC) (Law No. 12.187 of December 29, 2009). However, the MD, a former member of the Interministerial Committee on Climate Change (CIMC) in 2007 (Decree No. 6263, 2007), is no longer a member of the CIMC due to successive presidential decisions (Decrees No. 10.845, of October 25, 2021 and Decree No. 11.550, of June 5, 2023). This means that the MD can be invited to participate in the CIMC, but cannot vote on inter-ministerial decisions, including on the drafting of sectoral plans on climate change adaptation and mitigation. Thus, as it is an institutional body of the federal government, the MD follows the provisions of the PNMC.

In addition, the MD's recent inclusion in the National Commission for the Sustainable Development Goals (Decree No. 11.704, September 14, 2023) is worth mentioning. This means that the MD will be able to contribute to the implementation of the 2030 Agenda in the country and develop actions in line with Sustainable Development Goal No. 13 - Combating Climate Change.

The Armed Forces have, by tradition, a historical commitment to protecting the environment, as demonstrated by Decree No. 14.273 of July 28, 1920, as well as the environmental quality of military training camps and areas under their responsibility. The MD has a reasonable number of institutional publications that provide procedures and guidelines for Military Organizations on the climate issue. In this regard, it is worth noting that, following a Latin American trend, the climate issue is approached mainly from an environmental perspective. Thus, there are various institutional guidelines on climate change that are "sprinkled" throughout environmental publications.

Of particular note is the Ministry of Defense's Green Book on Defense (<u>Defense and the Environment - Preparing</u> <u>with Sustainability</u>), which aims to disseminate, in a modern and accessible format, the good environmental management practices carried out by the Ministry of Defense, the Brazilian Navy, the Brazilian Army and the Brazilian Air Force.

In the case of the Brazilian Army, the most complete approach to its involvement with the climate issue is found in the document called <u>Regulatory Instructions for Environmental Education within the Department of</u> <u>Education and Culture of the Army</u> (EB60-IR-57.011, Ordinance No. 01-DECEx, January 31, 2019).

IR-57.011 was drawn up by experts and is one of the most comprehensive guidelines dealing with the climate issue and its implications for security within the Brazilian Army (EB). Thus, all EB military schools that deal with training, specialization, further training, and high studies must address the issue of "climate change" across the board. Annexes A and B of these IRs deepen the debate on the climate issue and the militarization of disasters, as well as providing subsidies for the topic to be worked on in EB military schools.

Thus, with regard to climate change mitigation, adaptation and resilience, the MD follows national policies on the subject.

#### DISASTER PREVENTION AND RESPONSE

Regarding disaster prevention and response, it is worth noting that Brazil is trying to fulfill its commitment to the SENDAI Declaration, especially with regard to its first priority (understanding disaster risk). This means that the Ministry of Defense, as well as other government institutions, must base itself on an understanding of disaster risk (vulnerability, capacity, exposure of people and property, hazard characteristics and the

environment) in order to plan its actions, such as: strengthening the capacity to adapt to climate-related risks and natural disasters, integrating climate change-related measures into policies and strategies and planning, improving education, raising awareness and human and institutional capacity on mitigation, adaptation, impact reduction and early warning measures in relation to climate change.

In addition, specifically with regard to disaster response, the MD has sought to strengthen its response capacity by investing in the acquisition of dual-use equipment modules (civilian and military), such as engineering materials (tractors and modular bridges), air support (aircraft and UAVs), health support (field hospitals and ambulances), rescue (boats and stretchers), communications (radio stations and communications equipment) and support (tents and emergency shelters), among others.

# DISASTER RECOVERY

In disaster recovery actions, the MD can participate in infrastructure recovery activities, among others. However, its involvement should take place "temporarily", with responsibility for recovery actions passing to other government agencies as soon as possible.

## EQUITABLE DISASTER RESPONSE IMPLEMENTATION

Regarding equitable disaster response implementation, the Armed Forces are included in the Federal Government's Risk Management and Natural Disaster Response Plan of August 8, 2012. This plan is structured along the following lines: Prevention (structuring works in priority regions), Monitoring and Alert System (structuring the monitoring, forecasting and alert network), Mapping (identifying risk areas) and Response (structured actions to prepare for and respond to the occurrence of a disaster). As explained above, the Armed Forces are most involved in the Response axis.

# 3. OPERATIONAL FRAMEWORK

3.3. Which national and subnational military branches are primarily involved in civil protection?

The Brazilian Armed Forces are made up of the Brazilian Army, the Brazilian Navy and the Brazilian Air Force. These forces take part in actions to support civil protection and defense, in accordance with the Ministry of Defense's guidelines and legal framework mentioned in answer 2.1.

The Auxiliary Forces are subordinate to the state governments, such as the Military Police and the Military Fire Brigade. These institutions also work in civil protection, under Law No. 12,608 (April 10, 2012), which establishes the National Civil Protection and Defense Policy (PNPDEC) and provides for the National Civil Protection and Defense System (SINPDEC). In addition to these, there is also the National Public Security Force (FNSP - made up of military police, civilians, firefighters and experts from the states and the Federal District) which can be called in by the Ministry of Justice and Security.

It is important to note that in Brazil, two entities were created during the period in which the Hyogo Framework for Action was in force: the National Center for Risk and Disaster Management (CENAD) and the National Center for Monitoring and Alerting Natural Disaster Risks (CEMADEN), in 2005 and 2011 respectively. These centers alert the authorities so that municipal and state forces can be mobilized initially, and then federal forces for disaster management actions.

#### 3.4. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

All interaction between the Armed Forces and other agencies, with the goal of supporting disaster management actions, must be carried out to reconcile interests that serve the common good, avoiding duplication of actions, dispersion of resources and divergence of solutions with efficiency, efficacy, effectiveness and lower costs. Thus, the main tasks that the Armed Forces can carry out to contribute to civil protection and defense in a disaster situation, both at home and abroad, are as follows:

Capabilities/ Combat Function	Type of Support/Tasks
Command and Control	<ul> <li>establish and maintain reliable systems that allow liaison between the authoritie and agencies involved in disaster management actions</li> <li>establish and operate a reliable communication (transmission) network with a field teams in disaster environments</li> <li>implement rapid and complex contingency plans</li> <li>carry out central planning and decentralized actions</li> <li>carry out damage assessment</li> <li>maintain integration with civil entities responsible for disaster management</li> <li>expand the capacity to plan and conduct interagency operations (with state an non-state actors)</li> <li>provide legal protection for military personnel in humanitarian operations</li> <li>use trained teams to interface between civilian and military populations</li> <li>assign specialists in transportation, business, law, communication, health, an policing</li> <li>isolate critical areas</li> <li>establish shelters</li> <li>protect supply facilities</li> <li>maintain a credible armed presence to reduce the threat of violence</li> <li>carry out (temporary) operations to ensure law and order</li> </ul>
Logistics	<ul> <li>(temporary) water purification and distribution</li> <li>(temporary) cooking and food distribution</li> <li>setting up and operating health care posts (initial care and emergency evacuatio</li> <li>carry out personnel and cargo transportation (air, water and land)</li> <li>setting up an initial mortuary service</li> <li>set up temporary housing for the homeless</li> <li>help provide the means to fight fires</li> <li>provide emergency pre-hospital care</li> <li>keep medical teams on standby</li> <li>establish disease prevention and control procedures</li> </ul>
Intelligence	<ul> <li>use different resources provided by satellites and other technologies to reduce planning uncertainties</li> <li>carry out specialized reconnaissance</li> <li>process data from different sources</li> </ul>
Protection	<ul> <li>isolation and prohibition of areas (risk and sensitive)</li> <li>providing (temporary) security for public property</li> <li>provide security for humanitarian convoys</li> <li>carry out decontamination (in all its dimensions - biological, nuclear, and chemical handling dangerous products</li> <li>maintaining military logistics and engineering units on standby</li> <li>clear access roads and remove debris</li> <li>installing mobile bridges for personnel or vehicles</li> <li>building or repairing essential infrastructure (roads, ports, airports, railroads, an storage facilities)</li> </ul>
Movement and Manoeuvre	<ul> <li>installing and operating helicopter landing zones</li> <li>(temporarily) control the movement of homeless people</li> <li>acquire means to search for people and remove debris</li> </ul>

#### 3.5. Which national and subnational civilian authorities are primarily involved in civil protection?

Law No. 12.608 (April 10, 2012) establishes the National Civil Protection and Defense Policy (PNPDEC) and provides for the National Civil Protection and Defense System (SINPDEC) and the National Civil Protection and Defense Council (CONPDEC). This law regulates the participation of all civil authorities involved in civil protection and describes the actions of federal, state and municipal entities.

In short, it can be inferred that the smallest sphere of action in civil defense is at municipal level, where it is the responsibility of the Mayor (Chief Executive) to draw up the Municipal Civil Protection and Defense Contingency Plan, as well as to set up municipal civil defense bodies, such as the Municipal Civil Protection and Defense Secretariat.

At state level, it is also the responsibility of the Chief Executive, with the Governor coordinating SINPDEC actions in conjunction with the Federal Government and municipalities, as well as setting up the State Civil Protection and Defense Plan and state bodies (State and District Civil Protection and Defense Secretariats).

At the federal level, the Federal Government is responsible for issuing regulations for the implementation and execution of the PNPDEC and coordinating the SINPDEC, in conjunction with the states and municipalities. The National Civil Protection and Defense Secretariat (SEDEC) is the central body of SINPDEC and is therefore responsible for coordinating civil protection and defense actions throughout national territory. Its aim is to reduce the risk of disasters. It also includes prevention, mitigation, preparedness, response, and recovery actions, and is carried out in a multi-sectoral manner and at the three levels of federal, state and municipal government, with broad community participation.

3.6. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

In Brazil, it is the National Civil Protection and Defense Policy (PNPDEC), in terms of risk management, which establishes a systemic approach to prevention, mitigation, preparedness, response and recovery actions. Thus, in each of these phases there are a range of tasks that are carried out by the civil authorities.

For example, in the prevention and mitigation phase (the initial stage of risk management): risk assessment (degree of vulnerability of the territory, identification of threats, mapping of risk areas), training for action in emergency situations, carrying out inspections in risk areas (inspecting buildings and irregular occupations, among others), preventive intervention, keeping the population informed about risk situations (areas and extreme weather events), among others.

In the preparation phase, the main actions are aimed at equipping and mobilizing the institutional structure to deal with emergencies. In this phase, contingency plans are drawn up (personnel and material), supplies are stockpiled (material needed to set up and operate temporary housing, including food and sanitation), and early warning systems are installed to minimize any damage caused by the event.

In the response phase, the extreme event has already taken place. As such, it is only necessary to carry out relief actions (immediate measures for search and rescue, first aid, pre-hospital care, emergency medical and surgical care), assistance to victims (provision of drinking water, hygiene materials, clothing, accommodation, food and basic sanitary conditions, among others) and re-establishment of essential services (basic actions to re-establish electricity, water supply, sewage disposal, urban cleaning, traffic and communications). This is the phase in which the procedures outlined in answer 1.1, on "Federal Recognition" through the Integrated Disaster Information System (S2iD), take place.

In recovery, the last phase, tasks are carried out to rebuild the area destroyed by the disaster, such as public infrastructure, housing reconstruction, road reconstruction, among others. During this phase, preventive measures must be adopted for future events, increasing the resilience of the places and the population affected.

With regard to international operations, it is worth remembering that Brazil participates in the international effort to help friendly nations, in accordance with its commitments.

3.7. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

The Ministry of Defense (MD) has the <u>Interagency Operations Manual</u> (MD33-M-12, 30 AUG 2017), which establishes doctrinal foundations that will guide the Armed Forces in the process of planning, preparing and employing joint operations (Op Cj) involving the participation of public entities, non-governmental organizations, private companies, or agencies of other Powers, in the execution of the actions.

In addition, the MD, through the <u>Instructions for the Employment of the Armed Forces in Support of Civil</u> <u>Defense</u> (MD33-I-01), approved by Normative Ordinance No. 7 of January 13, 2016, regulates the main procedures for the deployment, employment system, command and control, and logistics of the Armed Forces in support of civil defense agencies.

In addition to these normative instructions, each of the forces (Army, Navy and Air Force) have specific manuals on Interagency Cooperation and Coordination Operations (OCCA), such as the Brazilian Army's <u>Interagency</u> <u>Operations Campaign Manual</u> (EB70- MC-10.248, of December 17, 2020).

In short, it can be inferred that in operations of this nature consensus is sought in decision-making. Each agency acts in its area of expertise. In very specific cases, for a given event, one agency is chosen as the "lead agency". For example, disaster response actions on the coast with possible "contamination" of coastal waters, with the Brazilian Navy leading the efforts, due to its status as the Brazilian Maritime Authority. In the event of major fires, the Command and Control (C2) will probably be exercised by the Military Fire Brigade, with the Integrated Multi-Agency National Operational Coordination Center (CIMAN) as the national coordinator. However, regardless of the leadership of the actions, C2 will be exercised by the respective commanders, with no hierarchical bias between the institutions.

In the case of international operations, the leadership of actions is agreed in the agreements and commitments made. For example, in the case of missions under the aegis of the United Nations, the UN designates the country leading the mission.

# 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

In the civil sphere, the training available in Civil Protection and Defense is basically conducted at federal and state level.

At the federal level, the National Secretariat for Civil Protection and Defense (SEDEC) formulates the <u>Continuous</u> <u>Training Plan (2019-2023)</u>.

At state level, some State Civil Defense Coordinators also offer courses, such as the State of Paraná, which has a <u>Civil Defense School</u> with the capacity to run virtual and face-to-face courses, both for civil servants and the general population.

In the military sector, especially in the Ministry of Defense, there is no specific training course for civil defense. The Armed Forces offer some military courses and internships that have subjects in their curriculum that make it easier for military personnel to work in civil defense activities, such as: interagency operations internship, search and rescue, diving, military climber, rescuers, aircraft and boat pilots, chemical, biological, nuclear and radiological defense, among others.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

The Armed Forces traditionally seek to minimize the suffering of the population affected by disasters, participating in actions that can minimize the suffering of the population in times of tragedy.

As mentioned in answer 1.2, within the Ministry of Defense (MD), the Brazilian Army (EB) implemented (2014) the "Humanitarian Aid Force" Project (with varying numbers of troops depending on their deployment) in each of the Area Military Commands (Amazonas, North, Northeast, South, Southeast, East and Plateau).

It is important to note that these troops are dual deployed, both for conventional combat and to support Civil Defense in the event of disasters. Dual employment means acting primarily in defense of the homeland and "temporarily" supporting civil defense as a subsidiary action.

To increase its effectiveness, EB carries out annual "Humanitarian Aid Exercises" in regions that have historically been the scene of natural disasters, such as the Itajaí Valley (Santa Catarina) and the Serrana Region (Rio de Janeiro). These exercises are planned and executed with regional and local civil defense agencies.

The MD also carries out Joint Civil Defense Support Exercises (ECADEC) in conjunction with the State Civil Defense Coordinating Offices and other public administration bodies. ECADECs are also conducted in regions that have been the scene of major tragedies related to extreme weather events.

On the aforementioned exercises (EB and MD), especially during the planning phase, various preparatory meetings are held, such as symposiums and briefings for the military personnel involved, with the aim of levelling knowledge about civil defense.

As mentioned, the MD conducts ECADEC in cooperation with Sedec. ECADEC was held in 4 (four) other editions: Florianópolis-SC (2015), Vila Velha-ES (2016), Petrópolis-RJ (2017) and Curitiba-PR (2021) and aims to improve the planning, procedures and integration of joint efforts between the Armed Forces and the various agencies involved in disaster response, creating synergies that enable better service to the population.

In view of the cooperation between the Joint Chiefs of Staff of the Armed Forces (EMCFA) and the Armed Forces of other countries, such as Argentina, and the intention to develop mutual support protocols, with the concurrence of ABC/MRE, the scope of ECADEC was expanded to a binational, joint-combined character, thus receiving the new name of Binational Exercise Integration (EBI). After a planning phase in 2022, the 1st EBI will be held in a second phase in the form of a Charter Exercise from 27 NOV to 1 DEC 2023 and a Field Exercise in NOV 2024. The epicenter of the area proposed for the disaster simulations is in southern Brazil.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Brazil has participated in cross-border cooperation with other countries. The most recent example is the Brazilian Army's participation, on August 12-18, 2023, in <u>Operation Paraná III</u> - a humanitarian aid exercise that brings together troops from Brazil and 13 other countries on the American continent in a simulated context of natural disasters. In this third edition of the exercise, hypothetical cases were explored using international efforts to provide aid and protection to the population affected by extreme weather events.

Operation Paraná III is one of the activities planned by the Conference of American Armies (CEA) and was very important for the Brazilian Army. It was possible to demonstrate to the members of the CAA Brazil's capacity to coordinate and lead a major military operation on the international stage.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

The International Federation of Red Cross and Red Crescent Societies has a <u>regional delegation in Brazil</u>. In addition, as a member of the UN, Brazil supports the UNDP Global Risk Identification Program (<u>PNUD no Brasil</u>) and the UN Office for the Coordination of Humanitarian Affairs.

Brazil is also a member of the South American Defense Council (CDS) of the Union of South American Nations (UNASUR) (2011), the Conference of American Armies (CEA) (1960), the South Atlantic Peace and Cooperation Treaty (ZOPACAS) (1986), the Inter-American Treaty of Reciprocal Assistance (TIAR) (1947) and the Inter-

American Defense Board (IADB) (1942) of the Organization of American States (OAS) (1910), among other regional forums dealing with security cooperation in South America.

Regarding the Brazil-Europe relationship, the country has close ties with Portugal, especially in the Community of Portuguese Language Countries (CPLP) and its respective CPLP Defense Ministers' Meeting, and it is worth highlighting common projects in the area of security between Brazil and Portugal (such as the partnership in part of the construction of the KC 390 aircraft in 2014, which has been tested for firefighting).

As for other countries, the main mechanism is the Ibero-American Conference and other institutions that make up the Ibero-American space, such as the Organization of Ibero-American States for Education, Science and Culture (OEI), the Ibero-American Social Security Organization (OISS), the Conference of Ministers of Justice of Ibero-American Countries (COMJIB) and the Ibero-American General Secretariat (SEGIB), among others. All these institutions have the function of strengthening ties and resolving possible conflicts in their respective areas of interest.

Brazil also participates in the Inter-American Defense Board (IADB) and its International Cooperation Exercise on Disasters and Humanitarian Assistance (MECODEX).

#### 5. ANALYSIS

#### 5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

Yes, there are numerous advantages to using military resources (personnel and material) in some actions to support civil protection and defense, particularly in response to disasters. In short, it can be said that the advantages come from the national capillarity of the Armed Forces and their structuring, mobility, logistics, readiness and command and control capacity.

In a territory the size of Brazil, it is practically unthinkable to carry out civil protection and defense support tasks in major disasters without the help of the Armed Forces. With their aircraft, cargo vehicles, great logistical capacity and military personnel trained to deal with adverse conditions, they are becoming increasingly indispensable in these humanitarian missions. This is an additional reason for the military forces to be always kept in excellent operational condition. Because, as seen in the previous answers, their equipment will not only be used for the defense of the homeland, but also for the benefit of society, in initiatives in partnership with Civil Defense agencies (dual employment).

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

Yes, there are great advantages in having civilian agencies to carry out actions in support of civil protection and defense. These agencies traditionally take part in disaster management actions (prevention, mitigation, preparedness, response, and recovery) and have specialists in their ranks. In addition, because they are structured locally, they develop activities with local leaders and the population in general, facilitating their actions, strengthening governance, and reducing costs.

Another advantage, from a security perspective, is keeping the Armed Forces in a permanent state of readiness. This is because the military sector, when employed in disaster management actions, would be temporarily compromising its ability to respond to any external aggression.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

The effects of the military sector's involvement in actions to support civil protection and defense have institutional and personal repercussions.

In the personal sphere, military personnel who have taken part in actions of this nature have increased their ability to act in stressful situations, improving their emotional balance and their flexibility to work with different teams. This is because, unlike combat training, some risks are very high in these situations. For example, air and water rescues, diving in confined spaces, removing rubble and searching for survivors, among other situations.

In the institutional sphere, the effects are also significant. By working with the population at times of great emotion and pain, the Armed Forces are increasingly integrated into Brazilian society. This strengthens the institutional image in the eyes of public opinion, facilitating future recruitment due to the feeling of belonging to a serious institution that helps society.

In addition, military involvement in actions to support civil protection and defense also increases the level of readiness of the armed forces, particularly during training (prevention and preparation phases) for this type of activity.

Another important effect of this involvement is the rapprochement with other agencies. This work on civil protection actions creates the conditions for future actions in other areas of activity. For example, interagency coordination and cooperation operations for border security and against environmental crimes, among others.

## 5.4. What effect does military involvement in civil protection have on **force readiness**?

In addition to the points made in answer 3.3, it is important to note that the involvement of the military sector also influences military readiness. For this reason, it is desirable to keep the military involved only "temporarily" in the response phases and, eventually, in the reconstruction phase. If the military is permanently involved in these phases, it could wear out its personnel and material, weakening its ability to respond with the necessary readiness to any threat to its sovereignty.

Furthermore, in a survey of military personnel from five Ibero-American countries (Argentina, Brazil, Chile, Portugal and Spain), it was possible to identify that the military personnel interviewed believe that the Armed Forces should not *permanently* take on civil protection and defense tasks. However, most respondents said that the Armed Forces should be prepared to carry out disaster response actions on a *temporary* basis. In the survey, it was possible to identify that there is a tendency in Ibero-America to "militarize disasters", including the creation of military units for this purpose. This is the case in Spain (UME), Portugal (RAME) and Brazil (Humanitarian Aid Forces Project).

# 5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

In the case of the Brazilian Army, at the end of each operation, reports are produced on the action taken. These reports serve as a basis for future planning. In addition, the EB also makes various thematic booklets available to active military personnel through the <u>Lessons Learned Portal</u>. In addition, in Military Organizations, especially in the Army, an Officer is assigned to be the Doctrinal and Lessons Learned Monitoring Officer, responsible for the work mentioned.

This means that all military operations, including Interagency Coordination and Cooperation Operations, bring lessons that are incorporated into current military doctrine and disseminated in the form of updated military manuals.

# 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile

Política Nacional sobre Mudança do Clima (PNMC) (Brasil). www.planalto.gov.br/ccivil\_03/\_ato2007-2010/2009/lei/l12187.htm

Plano Nacional de Adaptação à Mudança do Clima (Brasil).

www.gov.br/mma/pt-br/assuntos/ecossistemas-1/biomas/arquivos-biomas/plano-nacional-de-adaptacao-amudanca-do-clima-pna-vol-i.pdf

Ministério da Defesa (Brasil), Manual Operações Interagências (MD33-M-12, 30 AGO 2017). www.gov.br/defesa/pt-

br/arquivos/legislacao/emcfa/publicacoes/operacoes/md33a\_ma\_12a\_opa\_interagenciasa\_2a\_eda\_2017.pdf

Ministério da Defesa (Brasil). 2015. Instruções para Emprego das Forças Armadas em Apoio à Defesa Civil (MD33-I-01). Brasília: Diário Oficial da União. <u>www.gov.br/defesa/pt-br</u> Ministério da Integração Nacional (Brasil). 2012. Instrução Normativa nº 1, de 24-08-2012 (Estabelece procedimentos e critérios para decretação de situação de emergência ou estado de calamidade pública pelos municípios, estados e pelo distrito federal, e para o reconhecimento federal das situações de anormalidade decretadas pelos entes federativos e dá outras providências). Brasília: Diário Oficial da União.

www.defesacivil.se.gov.br/wp-

content/uploads/2020/07/instru%C3%A7%C3%A3o normativa n%C2%BA 01 de 24 de agosto de 2012-2.pdf

Manual de Campanha Operações Interagências (Exército Brasileiro) (EB70- MC-10.248, de 17 de dezembro de 2020).

https://bdex.eb.mil.br/jspui/bitstream/123456789/8201/1/EB70-MC-10.248\_-\_Opera%C3%A7%C3%B5es\_Interag%C3%AAnciasPDF.pdf

Instruções Reguladoras da Educação Ambiental no âmbito do Departamento de Educação e Cultura do Exército (Exército Brasileiro) (EB60-IR-57.011, 31 JAN 2019). Os anexos A e B dessas IR aprofundam o debate sobre a questão climática e a militarização dos desastres, bem como fornecendo subsídios para o tema ser trabalhado nas escolas militares do EB.

https://www.ceadex.eb.mil.br/images/legislacao/VII/Port\_001\_DECEx\_31\_JAN\_19\_IR\_Gest%C3%A3o\_ambien tal.pdf

BRASIL. Estratégia Nacional de Defesa (END). 2012. https://www.gov.br/defesa/pt-br/arquivos/estado e defesa/END-PNDa Optimized.pdf

BRASIL. Lei complementar nº 97, de 9 de junho de 1999. Dispõe sobre as normas gerais para a organização, o preparo e o emprego das Forças Armadas. 1999. http://www.planalto.gov.br/ccivil\_03/leis/lcp/lcp97.htm

BRASIL. Política Nacional de Defesa (PND). 2012.

https://www.gov.br/defesa/pt-br/arquivos/estado e defesa/END-PNDa Optimized

Suggestions of papers on the "militarization of disasters".

BOENO, R.K.S. A militarização dos desastres: a securitização das alterações climáticas e o pensamento das Forças Armadas ibero-americanas. 2018. Tese (Doutorado em Alterações Climáticas e Políticas de Desenvolvimento Sustentável), Universidade Nova de Lisboa, Portugal, 2018.

https://repositorio.ul.pt/bitstream/10451/34865/1/ulsd732219\_td\_Raul\_Boeno.pdf

Boeno, R. K. S, e R. K. Boeno. 2015. Climate deterrence: new element in safety studies. *Defence and Security Doctoral Symposium*. Shrivenham (UK): Defence Academy of the United Kingdom.

Boeno, R. K. S. et al. 2017. Militarização dos desastres. In *International Conference Risks, Security and Citizenship Proceedings,* Setúbal, 30/31.03.2017, Setúbal, Município de Setúbal, 246-257. https://www.smpcb.pt/icrsc2017/download/Proceedings\_ICRSC.pdf

Boeno, R. K. S., J. FERRÃO. 2016. Alterações climáticas e ordenamento do território em estratégias de segurança. *Análise Social*, LI (4.º), n.º 221: 802-821.

https://www.researchgate.net/publication/312498910\_Alteracoes\_climaticas\_e\_ordenamento\_do\_territorio\_ em\_estrategias\_de\_seguranca

Boeno, R. K. S., R. K. Boeno, e V. Soromenho-Marques. 2015. Alterações climáticas e securitização: a construção da dissuasão climática. *Coleção Meira Mattos – Revista das Ciências Militares*, vol. 9, n.º 36: 607-617. https://repositorio.ul.pt/handle/10451/22441

Boeno, R.K. S., R. K. Boeno, e V. Soromenho-Marques. Climate deterrence: disasters and security after COP 21. In *Information Technology in Disaster Risk Reduction*. First IFIP TC 5 DCDRR International Conference, ITDRR 2016, Sofia, Bulgaria, November 16-18-2016. Revised Selected Papers, eds. Y. Murayama et al. Springer. <u>https://link.springer.com/chapter/10.1007/978-3-319-68486-4\_10</u>



**BULGARIA** 

By Crisis Management and Disaster Response Centre of Excellence

#### 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

The Ministry of Defence (MoD) of the Republic of Bulgaria manages the respective costs within its budget through a dedicated programme. The expenditures made by the MoD are reimbursed upon the decision of an inter-ministerial commission.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

Military contribution to domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters is part of Mission 3 of the Bulgarian Armed Forces. In this regard, there are special military formations and units with responsible for dealing with disaster situations. This allocation is made after a thorough analysis of the threats in different areas of Bulgaria at a regional level.

## 2. POLICIES AND PRACTICES

2.1. What is the **legal framework** for the use of the military in domestic and foreign civil protection?

Constitution of the Republic of Bulgaria Defence and Armed Forces Law National Security Strategy National Defence Strategy Bulgarian Armed Forces Doctrine

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Climate change mitigation Climate change adaptation and resilience Disaster prevention Disaster response Disaster recovery Equitable disaster response implementation

#### 3. OPERATIONAL FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

Bulgarian Land Forces Bulgarian Air Force Bulgarian Navy Bulgarian Joint Special Operations Command

#### 3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

The military in Bulgaria might be engaged in the following civil protection tasks in domestic operations:

- Public Awareness and Education
- Emergency Response
- Coordination and Communication
- Resource Management
- Recovery and Restoration
- Early warning for potential risks and threats
- Airspace security and air traffic control activities
- Participation in the protection of strategic objects and objects and systems of the country's critical infrastructure
- Conducting special operations to support counterterrorism
- Supporting migration flow management and border control
- Civil protection and emergency restoration
- Neutralization of unexploded ordnance
- Providing humanitarian aid
- Conducting search and rescue as well as evacuation missions on the territory and in the maritime spaces of the country and beyond

#### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

The General Directorate "Fire Safety and Civil Protection" within the Ministry of Interior. A national unified rescue system is in place, and it is actively supported by:

- All Ministries
- All Municipalities
- Emergency medical centers
- Volunteer organizations
- Private companies
- Bulgarian Armed Forces
- Bulgarian Red cross

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The following civil protection tasks are done by civilian authorities:

- Risk Assessment
- Preparedness Planning
- Public Awareness and Education
- Emergency Response
- Coordination and Communication
- Resource Management
- Recovery and Rehabilitation
- Risk Reduction and Mitigation
- International Cooperation
- Research and Innovation

In international contexts, the tasks and responsibilities may differ depending on the bilateral and multilateral agreements.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

In Bulgaria the main responsibilities for civil protection in case of a crisis and/or a disaster event is among the responsibilities of the General directorate "Fire safety and civil protection" to the Ministry of Interior. Plans for disaster prevention, response and recovery are established at a municipal, regional and national level, based on the specifics of different expected cases. The national plan is revised and approved by the Council of Ministers, while the regional and municipal plans are established according the national one. In the national legislation is mentioned that the militaries are part of the Regional Council for disaster risk reduction.

# 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

It is based on the annual and monthly plans for preparation of the military Unit regarding the military units specialised in disaster management. Additionally, each regional administration plans two exercises per year in order to test the proposed procedures in case of disasters where militaries are included in the reaction mechanism.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

N/A

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Bulgaria participates in the:

- EU Emergency Response Coordination Centre
- International Federation of Red Cross and Red Crescent Societies
- NATO Euro-Atlantic Disaster Response Coordination Centre
- OSCE Strengthening Responses to Security Risks from Climate Change
- UNDP Global Risk Identification Program
- UN Office for the Coordination of Humanitarian Affairs

#### 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

The armed forces have specific capabilities which allow them to contribute effectively to the increase of the level of civil protection. During the last natural disasters in Bulgaria, the assistance of military units was requested by the local and regional authorities through the official mechanisms by referring to the Bulgarian Ministry of Defence for official approval. The adequate level of training and preparedness, the availability of the required equipment, and the timely organization of efforts on behalf of the military personnel were essential during the response and recovery phase after the disaster.

Consequence management, search and rescue missions, recovery and safety tasks were areas where the military contributed actively to the efforts of the civil authorities.

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

In Bulgaria, civil authorities have the primary role in the process of protection of civilians in case of man-made and/or natural disasters. Civilian agencies undergo special trainings in order to ensure that the civilian population is protected.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

In general, the active involvement of the military in civil protection is positively perceived by the wider public. At a local, regional and national level the military contribution to such activities is brought to the attention of the local population though the use of social media channels and official news channels.

The morale of the armed forces is further enhanced by their involvement in activities related to mission three of Armed forces – "Contribution to the national security protection in peacetime". Such involvement allows for a closer and more fruitful collaboration between the civil population, the national authorities, and the Armed forces. As a result, this multilateral collaboration has positive impact over the recruitment, morale and retention processes in the MoD.

5.4. What effect does military involvement in civil protection have on force readiness?

Currently, the MoD is capable of sustaining the required level of efforts concerning the three main missions of the Bulgarian Armed forces: (1) defence, (2) contribution to international peace and security, and (3) contribution to the national security protection in peacetime. The ability to address all strategic objectives and to ensure increased readiness of the military component depends on the level of preparedness which can be actively supported by the NATO planning processes and the current national directives.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

N/A

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.



**CANADA** By Canadian Department of National Defence

#### 1. FUNDING FRAMEWORK

#### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

The Department of National Defence (DND) manages all costs within its own budget. Support to domestic and foreign civil emergencies, designated as an "Operation", will be managed by our Operational Command (CJOC).

See: How we conduct operations

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

See:

**Operation LENTUS** - Canadian Armed Forces (CAF) response to natural disasters in Canada **Operation RENAISSANCE** - Canadian Armed Forces (CAF) plan for rapid deployment to the scene of a disaster overseas, as directed by the Government of Canada

#### 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

Provinces within Canada legally have the responsibility to protect the public during times of crisis within their means. In the event a crisis exceeds provincial capabilities, a formal request for assistance (RFA) is submitted to the federal government for approval.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

See: Department of National Defence (DND), <u>Canadian Forces Joint Publication (CFJP) 3-4</u>, Humanitarian Operations and Disaster Relief Operations (Ottawa, Ontario: DND, 2005)

#### 3. OPERATIONAL FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

- Canadian Joint Operations Command
- Canadian Army
- Royal Canadian Air Force
- Royal Canadian Navy
- Canadian Rangers
- Canadian Special Operations Forces Command

3.2. Which **civil protection tasks** are done by the military? Do these differ in domestic and foreign operations?

- Patrolling coastlines
- Monitoring airspace
- Surveillance and control in the Arctic
- Leading aeronautical search and rescue missions
- Assisting civil authorities with disaster relief
- Supporting major international events in Canada
- Support to counterterrorism

Note that while the Canadian Armed Forces (CAF) do respond to requests for assistance from communities in times natural disasters, the CAF do so as the force of last resort when provincial and territorial resources are not able to address a particular crisis. The appropriate provincial or territorial government is primarily responsible when a natural disaster occurs in their jurisdiction. Federally, Public Safety Canada is the primary authority responsible for working with other federal departments and agencies, provinces and territories, national and regional Indigenous organizations, as well as other stakeholders, to advance an integrated policy, programmatic, and coordinated approach for emergency management, which includes preventing, preparing for, and responding to natural disasters.

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

Provinces within Canada legally have the responsibility to protect the public within their means. In the event a crisis exceeds provincial capabilities, a formal request for assistance (RFA) is submitted to the federal government for approval.

See: Public Safety Canada

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

- Crime
- Border enforcement
- Emergency management

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

See: Department of National Defence (DND), <u>Canadian Forces Joint Publication (CFJP) 3-4</u>, Humanitarian Operations and Disaster Relief Operations (Ottawa, Ontario: DND, 2005)

#### 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

Support to civil authorities is an essential part of military training and is included in many career and tradespecific courses. For example:

See: Canadian Forces School of Search and Rescue

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

The Canadian Armed Forces (CAF) has the primary responsibility of providing aeronautical and maritime Search and Rescue (SAR) services. This is primarily conducted by the Royal Canadian Air Force and the Royal Canadian Navy under the command of the regional Joint Task Force commanders.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Canada sends the **Disaster Assistance Response Team** (DART) to help when natural disasters and emergencies happen in other countries. Canada also cooperates with adjacent and neighbouring countries for SAR operations.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Any specific coordination would be through Global Affairs Canada, our Ministry of External Affairs.

#### 5. ANALYSIS

5.1. Are there advantages to having the military do some civil protection tasks? If so, which ones and why?

Country specific analysis is to be confirmed.

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

5.4. What effect does military involvement in civil protection have on **force readiness**?

5.5. Do specific disasters stand out in terms of **lessons learned** for civil-military cooperation in civil protection?

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

See: Hudson, Jason A., Maj, Confronting Change: The Canadian Army and Domestic Operations. School of Advanced Military Studies, US Army Command and General Staff College. Fort Leavenworth, KS. 2021. https://apps.dtic.mil/sti/trecms/pdf/AD1161081.pdf

See: Report of the Standing Committee on National Defence: <u>Providing Aid to the Civil Power: Disaster Relief</u> and the Canadian Armed Forces' Domestic Operations



#### 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

General budget and finance laws on "civil security":

Finance Bill for 2024: Civil Security

Finance Bill for 2023: Civil Security

Annual Performance Project: Annex to the Finance Bill for 2024, General Budget, Ministerial Mission, Security General Report on behalf of the Finance Committee on the Finance Bill

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

Batsiraï Cyclone in Madagascar:

- Sappers-rescuers from CSCIIU1 (ForMISC)
- Unit commissioned by the Directorate-General for Civil Protection and Crisis Management as part of the European Union's civil protection mechanism, in agreement with the Ministry of Foreign Affairs
- February-March 2022, 60 sappers-rescuers, water purification module, and a drone team
- See: Cyclone Batsiraï: UIISC1 committed to helping the population of Madagascar

Fiona storm in Guadeloupe and floodings in Pakistan:

- Sappers-rescuers from CSIIU1 and CSIIU 7 (ForMISC)
- Directorate-General for Civil Protection and Crisis Management
- October 2022, 80 sappers-rescuers, water treatment modules
- See: UIISC1 and UIISC7 rescuers engaged in Guadeloupe and Pakistan

Huge floodings in Belgium:

- Sappers-rescuers from CSIIU1 (ForMISC)
- Unit commissioned by the Directorate-General for Civil Protection and Crisis Management as part of the European Union's civil protection mechanism, in agreement with the Ministry of Foreign Affairs
- July-August 2021, 40 sappers-rescuers, with 2 dogs, 3 drones, and 12 boats, making up the Flood Rescue Using Boat module
- See: UIISC 1 involved in major floods in Belgium

Forest fires in south of France:

- Sappers-rescuers from CSIIU1 (ForMISC)
- Directorate-General for Civil Protection and Crisis Management
- Summer 2021, 250 sappers-rescuers, firefighting and prevention
- See: <u>UIISC 1 engaged in the fight against forest fires</u>

#### 2. POLICIES AND PRACTICES

2.1. What is the **legal framework** for the use of the military in domestic and foreign civil protection?

See: Internal Security Code Defense Code Decree no. 88-286 of 24 March 1988 Relating to the Command of Military Formations of Civil Security 2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

## **CLIMATE CHANGE MITIGATION**

The French Ministry of the Armed Forces first developed in 2012 a **Ministerial Energy Efficiency Strategy**. The key actions of this strategy include the development of energy efficiency contracts which should allow the Ministry to reduce its CO2 emissions by approximately 37,000 tonnes by 2030, replace all of the most polluting boilers, and develop energy management systems for the most energy-intensive sites. There are also plans to support clean mobility by installing charging stations in support of the clean mobility deployment plan. Regarding renewable energy, the Ministry is particularly connecting sites to urban heating networks and takes part in innovative projects such as hybrid power plants.

In 2020, it also defined a <u>Defence Energy Strategy</u> which now applies to all the armed forces, directorates and departments.

Recently, the French Ministry of Armed Forces has published its <u>Climate and Defence Strategy</u> in April 2022 which details how it can achieve European and national mitigation objectives, and energy transition, and describes the efforts already made in this domain.

# CLIMATE CHANGE ADAPTATION AND RESILIENCE

The **Climate and Defence Strategy** adopted in 2022 also details the launching of a "comprehensive adaptation process." The future adaptations are categorized in seven key focus areas:

- The need to adapt to changing theatres of operations (in cold and hot weathers)
- Integrating climate change into capacity-building process
- Adaptation of force employment doctrine, education and training
- Adaptation of defence bases and facilities
- The interministerial challenge of humanitarian assistance and disaster relief
- Adapting support for the armed forces
- Guaranteeing the armed forces' operational capacity in accordance with regulatory requirements

#### DISASTER RESPONSE

When firefighters can no longer deal with a major crisis alone, the prefects request the mobilization of Civil Security training (ForMISC) and intervention units.

#### 3. OPERATIONAL FRAMEWORK

#### 3.1. Which national and subnational military branches are primarily involved in civil protection?

While the French government's response is interministerial by nature, military personnel contribute on a permanent basis to civil protection.

The **Paris Fire Brigade** (French land forces engineering unit). It serves as the primary fire and rescue service for Paris, the city's inner suburbs and certain sites of national strategic importance (Guiana Space Center in Kourou; the Directorate General for Armaments' Military Rocket Test Centre in Biscarosse, and the Lacq gas field). As with the other fire services of France, the brigade provides technical rescue, search and rescue and fire prevention services, and is one of the providers of emergency medical services. The Brigade is one of two fire services in France that is part of the armed forces. With 8,850 firefighters, it is the largest fire service in Europe.

The **Marseille Marine Firefighter Squadron** (the battalion is a branch of the French Navy), and consists of fully military personnel, like the Paris Fire Brigade). It is the fire and rescue service for the city of Marseille.

The **Military Civil Security Formations** (ForMISC) are units of the Army which belong to the Engineering Arm. The creation of the civil defense corps was decided by General de Gaulle in 1968. In May 1974, the first civil defense unit was created in Brignoles (83), bearing the number 7. UIISC 1 was created in 1978 in Gennevilliers and moved to Nogent-le-Rotrou (28) in 1981. UIISC 5 was created in Corte (20) in 1988. The units were then renamed Military Civil Security Formations by decree 88-286 on March 24, 1988.

They are, in accordance with this specific decree made available for use to the Ministry of the Interior within the General Directorate of Civil Security and Crisis Management (DGSCGC). With 1,402 highly qualified rescuers, they are commanded by a senior officer, commander of civil security military formations.

They maintain specialized and autonomous detachments on permanent alert capable of responding to all natural or technological disasters, in times of peace, crisis or war both in France and abroad. They have rare and specialized equipment in their different areas of intervention, complementary to local or territorial resources. In France, they act urgently to support the firefighters and also to support the police forces. Abroad, they intervene upon request for assistance from countries hit by a disaster. They also carry out numerous training activities for armies and firefighters in France and abroad.

## 3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

Civil protection tasks done by the military are various in nature, and do not differ in domestic and foreign operations. These tasks are organized according to specific units, previously described. Regarding ForMISC:

## Civil Security Instruction and Intervention Unit 1 (CSIIU 1)

Located in Nogent-le-Rotrou (Perche), 571 sappers-rescuers are seconded to the Ministry of the Interior to respond to major risks of all kinds, both in France and abroad, to protect populations and the environment in times of peace, crisis or war. Every summer, the unit is deployed to the south of France and Corsica, where it plays an active role in fighting forest fires. Located 150 km south-west of Paris, UIISC 1 is accessible via the A11 freeway. Specialized, autonomous detachments are always ready to respond to any natural or technological disasters. This unit has four types of civil protection tasks:

- *Natural hazards*: rescue and clearing, forest fire fighting, major floods, cyclones, and storms.
- *Technological hazards*: recognition and identification, intervention in exclusion zones, marine and river pollution control, mass decontamination, and participation in the fight against terrorism.
- *Helping people*: water treatment, projectable medical posts, assistance to nationals, and crisis management.
- Back up for prefectures and joint headquarters.

#### Civil Security Instruction and Intervention Unit 5 (CSIIU 5)

Located in Corte, in the center of Corsica, in a strategic position, UIISC 5 today fulfills the dual mission of Instruction and Intervention.

- Instruction: As a training school for natural hazards, UIISC is accredited to award diplomas specific to the civil protection professions. Every year, from October to June, UIISC 5 trains nearly 700 trainees in first aid, forest fires, rescue clearing and off-road vehicle driving. The trainees include managers and volunteers from the Civil Security Military Training Unit, as well as island firefighters, legionnaires from the 2nd foreign parachute regiment and airmen from 126 air base. As a key player in risk prevention and management, the unit is also involved in a partnership with the University of Corsica, in the field of research (modelling fires in natural areas), and in higher education: Master's degree and University Diploma in crisis management.
- Intervention: From October to June, UIISC 5 provides an operational detachment on immediate standby, with the capacity to project and intervene in all types of disasters and natural and humanitarian risks. Deployed by land, sea or air vectors, Vulcans have been involved in every major island, national or international disaster. Triggering snow and flood plans, providing relief during storms and cyclones, Haiti 2010, Fukushima 2011, and Guinea 2014 are just some of the theaters of operation in which Vulcans have intervened to provide assistance to disaster-stricken populations.
- Specialization in forest firefighting: A permanent risk in Corsica, wildfires ravage the many hectares of scrubland and forests that cover almost 80% of the island every year. Every summer, in order to effectively combat the risk of fire outbreaks and, if necessary, extinguish an established fire, the French Civil Security Forces set up an operational unit in Corsica known as the Organic Group for the Fight against forest fires in Corsica (GOLFF Corse). Distributed throughout the island, this force of nearly 400 firefighters and military personnel is placed under the orders of the UIISC 5 corps commander, who is appointed head of GOLFF Corse. In this capacity, he is the privileged advisor to the authorities for the use of national land reinforcements armed by military formations. Thanks to its local presence and knowledge of the terrain, UIISC 5, composed of 138 rescue engineers, is in charge of the major mission

planned by the Military Civil Security Formations, with more than 40 firefighting vehicles, some of which are specialized in spreading retardant on land.

# Civil Security Instruction and Intervention Unit 7 (CSIIU 7)

Located in Brignoles, on permanent alert, it maintains specialized modules and detachments to respond to any natural or technological disaster, in times of peace, crisis or war, both in France and abroad. Previous operations include:

- In France: targeted and prescribed burning campaigns; 2010 forest fire campaign in Corsica and on the mainland; support for prefectures (southern zone) during the influenza pandemic (2009-2010); support for bush fires in New Caledonia (2009-2010); storms Klaus (2009) and Xynthia (2010); water treatment in French Guiana (2009-2010); flooding missions in Var (June 2010) and Bouches-du-Rhône (September 2010); medical support mission in Marseille (2010); fire on Reunion Island (2010); response to a snowstorm in the Lyonnaise region (2010); response to a snowstorm in northeast France (2010).
- *Abroad:* ESCRIM intervention in Sri Lanka; water treatment in Gaza (2010); earthquake in Haiti (2010); canine training in the United Arab Emirates (2010); first aid training and heliborne detachment in Lebanon (2010); rescue and clearance training in Lebanon (2010); Forest fire in Israel (2010).

More recently, the ForMISC intervened in the following missions:

- Earthquake in Turkey (2023)
- Health aid in Turkey (2023)
- Forest fires in Canada (2023)
- Sending convoys to Ukraine (2022)
- Floods in Pakistan (2022)
- Water treatment in Chad (2022)
- Management of nationals in Afghanistan (2021)
- Earthquake in Haiti (2021)
- Port of Beirut explosion in Lebanon (2020)
- Typhoon Haiyan in the Philippines (2013)

# 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

Civilian authorities involved in civil protection include:

- Local prefect
- Departmental fire and rescue service (SDIS): It comprises a headquarters, territorial groups, fire and rescue centers and specialized units. Its missions are prevention (analysis and verification of compliance with safety regulations in buildings intended for public use); forecasting (everything that facilitates the organization of rescue operations must be checked or put in place (risk studies, water points, etc.) and rescue operations. In France, Civil Security relies on 250,000 firefighters and national backups who can intervene throughout the national territory and abroad. At the heart of this system, firefighters represent the first link of the rescue chain.
- Emergency medical service (SAMU): It is a public hospital service responsible for organizing medical emergencies.
- Civil security helicopter base
- Departmental civil protection associations

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The purpose of civil protection (by civilian authorities) is to prevent risks of all kinds, inform and alert the population, and protect people, property and the environment against accidents, disasters and catastrophes by preparing and implementing appropriate measures and resources.

The different types of accreditations are as follows:

• Rescue operations: They provide assistance, under agreed conditions, in addition to the resources of the public emergency services, in the distribution of relief operations motivated by specific needs of

exceptional circumstances, involving, for example: first aid, water rescue, establishment of ancillary transmission networks, underground rescue operations.

- Actions to support disaster victims
- Supervision of volunteers during disaster relief operations: They help police authorities and their public services to coordinate and manage the actions of spontaneous volunteers and members of communal civil security reserves as part of their actions to support disaster-stricken populations.
- Preventive emergency services

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

The local prefects are responsible for preparing and implementing civil defense measures. To implement these measures, they have access to all services in the department (department fire and rescue service, emergency medical service, police, gendarmerie, regional health agency, etc.). In the event of a crisis, accident, or disaster of natural, technological, or health-related origin, the prefect or his representative is responsible for directing rescue operations, supported by the Interministerial Service Defence and Protection Service.

When firefighters can no longer deal with a major crisis alone, the prefects request the mobilization of Civil Security training (ForMISC) and intervention units. These specialists in natural and technological disasters are fully-fledged national reinforcements from the French Army's Engineering Corps, assigned to the Ministry of the Interior. They are capable of intervening anywhere in the world, under the most difficult conditions. Every day, 300 sappers-fighters are on call, ready to go in less than three hours in France and abroad.

## 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

In ForMISC:

- The CSIIU 5 unit has a partnership with the University of Corsica, which has led to the organization of joint exercises with other medical and rescue professionals in the two Corsican departments.
- The CSIIU 7 provides numerous training courses for the armed forces and fire departments, both in France and abroad.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

In ForMISC, three military units make up this formation.

#### Civil Security Instruction and Intervention Unit 1 (CSIIU 1)

The unit is an army corps of engineers. Created on March 1978, The UIISC 1 distinguished itself from its creation by participating in forest fires in the Pyrénées-Orientales in France and acquired its international reputation in 1985 and 1988 during the earthquakes in Mexico and Armenia and more recently, in 2010, continued to the earthquake in Haiti and in 2016 after the passage of Hurricane Matthew. Engaged wherever natural disasters strike, the unit constantly adapts to provide relief quickly and far away, such as in Japan (tsunami) in 2011. 571 rescuers are seconded and placed at the disposal of the Ministry of the Interior to intervene, both in France and abroad.

Organized according to a military regimental structure, the unit comprises:

- 1 staff headquarters
- 1 administration and support command company
- 3 interventions companies
- 1 specialized intervention company (navigation and water treatment section, dog teams, analysis and identification group, maintenance and logistics office, operations and training office, unit medical service)

• A flood detachment shared between CSIIU 1 and CSIIU 7, including 22 reconnaissance and rescue boats, 1.5 km of flood barriers, and 300 m2 of floating platforms

Specialized training to meet operational needs:

- First aid
- Rescue-clearing, levels 1-2 and 3
- Chemical and radiological hazards, levels 1-2 and 3
- Forest fires, levels 1 and 2
- Off-road driving, levels 1 and 2
- Driving courses

Major equipment in service for CSIIU 1:

- Forest fire-fighting equipment
- Equipment to combat chemical and radiological hazards
- Water analysis, treatment and distribution equipment
- Navigation equipment
- Crisis management support module

## Civil Security Instruction and Intervention Unit 5 (CSIIU 5)

This is an operational civil protection unit with a <u>national</u> and <u>insular</u> support role, composed of 138 rescue engineers. The unit was set up in 1988 to help the CSIIU 7 fight forest fires. In 2007, at the end of the summer forest fire-fighting campaign, the Civil Security Military Training Command decided to reinforce UIISC 5 to guarantee its operational autonomy, while at the same time entrusting it with the management of the natural hazards training center. As fully-fledged members of the armed forces, Vulcans share a dual vocation as soldiers and first-aiders. They can reinforce a detachment of continental UIISCs for deployment in mainland France or abroad; be deployed in Corsica to support the island's departmental fire and rescue services; be deployed in complete autonomy, to deal with a "natural hazard" problem in France or abroad.

#### Civil Security Instruction and Intervention Unit 7 (CSIIU 7)

The unit is an army corps of engineers, with 600 highly qualified rescue workers. In France, it acts as emergency backup for the fire department and sometimes for the police force. It maintains autonomous detachments on standby, ready to be deployed abroad at the request of disaster-stricken countries.

CSIIU 7 is organized as follows:

- 1 command, administration, and support company
- 3 natural/technological hazard response companies
- 1 specialized intervention company (support, dog team, etc.)

Military training is divided into three stages:

- General military training (two months) at Nogent-le-Rotrou, including general military knowledge, discipline, physical fitness, civil protection and first aid, first aid team
- Natural hazard training (one month) in Corte, including Rescue and Clearance Level 1 earthquake, landslide and building collapse team member, in France and abroad, Forest fire level 1
- Technological risk training (one month) in Brignoles (Open Circuit Self-Contained Breathing Apparatus), RAD level 1 (Radiological Risk), RCH level 1 (Chemical Risk - team member)

Major equipment in service for CSIIU 7:

- Forest fire tankers (4000, 6000, and 14000 litres)
- 2 retardant manufacturing units: This detachment can complement or supplement the action of civilian authorities' bomber aircraft, particularly at night.
- Public work equipment detachment: This includes various specialized packages (rubble, cyclones, floods, CBRN identification and analysis, mass decontamination, water treatment, etc.) and various types of high-tech equipment for chemical and radiological hazards. Equipped with public works equipment (dump truck, bulldozer), this team is deployed in the event of major natural disasters. In the event of

floods, heavy snowfalls or storms, it can clear away rubble carried by the waters or open up the routes needed for emergency services.

- During a forest fire, it can create 1 kilometer of firebreaks, set up turning platforms and parking lots, reestablish routes or create access tracks, all within a few hours. This detachment is based exclusively at UIISC7 in Brignoles.
- Helicopter intervention detachment: During summer, the French Army provides civilian authorities with three helicopters to transport specialized teams to fight inaccessible forest fires. Equipped with flexible tarpaulins, motor-driven pumps, and several kilometers of lightweight hoses, the fire-fighters are dropped off in steep, hard-to-reach places to halt the progress of the flames. This detachment is based exclusively at UIISC7 in Brignoles.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

## **EUROPEAN UNION**

In December 2017, in the context of floods in Albania, France offered through the EU Civil Protection Mechanism two tons of items consisting of motor pumps, blankets, water boots and lamps. See: EADRCC Situation Report #6 (FINAL) Floods in Albania

In July 2023, following a request for assistance from Greece in the context of forest fires, France sent four firefighting planes.

See: French planes fight fires in Greece: How the European mutual aid mechanism works

In January 2024, after heavy rainfall in the regions of Lower Saxony and Thuringia in Germany, this country requested assistance via the EU Civil Protection Mechanism. 39 responders from France with flood containment barriers and 16 vehicles have started response activities.

See: EU mobilises flood assistance for Germany and France

If France contributes to this mechanism, it is also a beneficiary. Indeed, in August 2022, several devastating fires happened in France, which requested assistance to the EU. Via the EU Civil Protection Mechanism, the EU coordinated 6 firefighting planes from its rescEU fleet positioned in Greece, Italy and Sweden. In addition, more than 400 firefighters with more than 100 vehicles from Austria, Germany, Poland, and Romania supported French first responders.

See: EU solidarity with France: fighting forest fires together

Moreover, at the beginning of 2024, France also faced floods and river overflows and requested assistance via the EU Civil Protection Mechanism. Three High-capacity modules with 4 pumps from the Netherlands, 2 pumps from Czechia, and 2 pumps from Slovakia were sent to France. See: EU mobilises flood assistance for Germany and France

In 2022, 80 sappers-rescuers from the FORMISC responded to the devastation caused by storm Fiona in Guadeloupe, as well as to intense flooding in Pakistan. The UIISC7 and UIISC1 units simultaneously deployed two "water treatment modules" capable of producing up to 225,000 liters of drinking water a day for disaster victims. A detachment of 40 IUCS1 rescue engineers has been working in Pakistan as part of the European Union's civil protection mechanism. Based in the Dadu district, the sappers have been producing drinking water for the local population, in coordination with the Pakistani authorities.

## NATO

In 2010, in the context of huge floodings in Pakistan, the French Ministry of Defence made three flights available transporting 20.74 tons of humanitarian equipment (medicines and medical equipment, blankets, tarpaulin, tents and potable water stations, assembled by the French Ministry of Foreign Affairs and of a value of 296 000 euros. These flights arrived in Islamabad on 7, 9 and 11 September.

## OSCE

France takes part in the OSCE Strengthening Response to Security Risks from Climate Change extra-budgetary project as a donor. More specifically, France has helped to fund several reports from 2023 produced in the framework of this project, such as:

- <u>Cooperation in the Shar/Šara Mountains and Korab Massif Area</u>: Scoping study on addressing shared climate-related security challenges and strengthening resilience (21 March 2023)
- Joint Co-operation Strategy on Climate Change and Security in the Shar/Šara Mountains and Korab Massif Area (9 June 2023)
- <u>Regional consultation on climate change and security in Central Asia</u> (21 June 2023)
- <u>Cooperation in Northern Armenia and Southern Georgia</u>: Scoping study on addressing shared climaterelated security challenges and strengthening resilience in the South Caucasus through fire risk reduction (4 July 2023)

## 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

Versatility and operational readiness to cope with disasters: in France, military units with a mandate centred on civil protection tasks can respond to a wide range of disasters. In particular, ForMISC units are made up of 18 multi-purpose intervention sections, ready to respond to any natural, technological or health-related disaster. Forest fires, cyclones, floods, earthquakes and pollution of all kinds are part of their daily routine. They also have a number of specialized detachments that prefects and the Minister of the Interior can requisition at any time.

FORMISC have expertise in overseas operations. Since their creation, they have been involved in some of the world's greatest disasters in Mexico, Haiti, and Japan. They have become a major player in the European Union's civil protection mechanism. Today, of the eighteen certified French intervention modules, seventeen are armed by FORMISC. We can therefore consider that these units represent the primary state leverage in the event of an international crisis under European mandate. With two heavy-duty search-and-rescue modules certified to United Nations standards, they can operate in an international context. In 2022, the new field hospital has been certified according to World Health Organization standards.

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

Civilian agencies, compared with military forces, have more human resources at their disposal to intervene on the ground. In addition, they are more evenly distributed throughout France, while military units with priority civilian missions are only located in certain parts of France (Paris, Nogent-le-Rotrou, Corte, Brignoles, and Marseille).

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

5.4. What effect does military involvement in civil protection have on **force readiness**?

There are indeed advantages to having the military do some civil protection tasks. In particular, the different ForMISC units are highly responsive forces, with immediate operational readiness. These units guarantee the French government rapid deployment at home and abroad.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

Civil security units: Civil Security Instruction and Intervention Unit 1 Civil Security Instruction and Intervention Unit 5 Civil Security Instruction and Intervention Unit 7 Civil Security Military Training ForMISC: FORMISC UIISC7 The Military Pilar of Civil Security Crisis Management Minutes of meeting no. 61 - Information mission on national resilience UIISC1 and UIISC7 rescuers engaged in Guadeloupe and Pakistan Civil protection: Definition and Organization of Civil Security

Organization of Firefighters in France Paris Fire Brigade

Legal framework:

2023 Act on the Military Programming

Information Report on the presence and use of the armed forces on national territory



**HUNGARY** By MOD / General Staff of the Armed Forces

#### 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

Mainly, funding comes from the Ministry of Defence (MOD), with the possibility of government reimbursement.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

Plans, Standard Operating Procedures (SOPs), and Statements of Intent (SOIs) for domestic response and foreign operations.

#### 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

Ministry of Defense Decree 23/2005 (VI. 16.) on the management and duties of the defense sector regarding disaster relief

Ministry of Defense Decree 2/2012 (III. 6.) on amending Ministry of Defense Decree 23/2005. (VI. 16.) on the management and duties of the defense sector regarding disaster relief

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Yes, in accordance with government planning process, and the Hungarian Defence Forces (HDF) has a Central CONOPS and executable plans.

#### 3. OPERATIONAL FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

Civil protection is primarily carried out by land forces, comprising maneuver and engineering units, as well as a chemical, biological, radiological, and nuclear (CBRN) regiment.

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

Search and rescue operations Road clearance Extreme weather consequence management Evacuation operations

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

National Directorate General for Disaster Management, Ministry of the Interior Disaster Management Training Center Disaster Management Institute of the National University of Civil Service 3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

Identifying and monitoring the critical infrastructure Critical infrastructure protection Civil emergency planning Defense/protection administration Mobilization of the national economy State reserves management Reconstruction and rehabilitation

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

The HDF cannot disclose specifics regarding its present plans.

## 4. TRAINING AND TOOLS

4.1 What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

The MOD and HDF are actively participating in government-level initiatives and training events for Territorial Defense Forces (TDF).

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

No, but it offers unique military capabilities tailored to specific tasks and requirements.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

The HDF contributes with a Hungarian element to the Tisza Multinational Engineer Battalion.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

#### 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

It represents an essential training site for evaluating and enhancing our logistical operations, with a specific emphasis on long-term sustainability capabilities. It enhances our comprehensive situational awareness and contributes positively to our reputation overall.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

As integral components of both the government and local municipalities, they are inherently closer to the local population.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

It results in a positive impact on the acceptance of the military, thereby boosting soldiers' morale overall.

5.4. What effect does military involvement in civil protection have on **force readiness**?

Positive overall.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

Zöldár 2013 (Green flood) Red sludge 2010 Severe winter 2013, 2016

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

N/A



**IRELAND** 

By Brigadier General Dennis Murphy (Ret.)

## 1. FUNDING FRAMEWORK

#### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

Ireland's funding framework for the use of the military in civil protection, both domestically and internationally, is generally managed through government budgets allocated to defense and emergency response. Specific funding mechanisms can vary depending on the nature of the operation and whether it involves international cooperation or EU mechanisms, such as the EU Civil Protection Mechanism, which can mobilize military assets in support of humanitarian assistance and disaster relief.

There is no standalone budget for civil protection. Funding is drawn from the annual defence budget or redirected from other departments (e.g., housing or transport) when emergencies occur. Costs are often absorbed as part of routine military operations. Allocations for specific disaster responses are not always tracked separately.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

In Ireland, specific datasets detailing the military's involvement in civil protection, including disaster event names, types, locations, responding military branches, and other details, are not readily available in a centralized public database. However, information might be found in reports from the Department of Defence and other parts of the government.

#### **Department of Defence Reports and Publications**

The **Department of Defence** publishes annual reports that occasionally describe Defence Forces' support to civil authorities, including:

- Type of support (e.g., flood response, storm support)
- Number of personnel deployed
- Geographical locations of operations
- Nature of requests (logistics, transport, rescue)
- Sometimes, cost breakdowns or resource allocation

See: Department of Defence Publications

#### Joint Civil-Military Coordination Centre (JCMCC) Summaries

The JCMCC, part of Ireland's emergency management framework, facilitates requests from civil authorities to defence forces. Details are usually included in annual reports, Oireachtas (parliamentary) queries, or released during major events. This includes incident logs (not always public) summarizing:

- Event type (e.g., extreme weather)
- Requesting agency (e.g., civil defence)
- Type of assistance provided

#### National Directorate for Fire and Emergency Management (NDFEM)

Maintains "after action" reports for major emergencies, sometimes mentioning defense forces' roles. Information may include:

- Disaster name, location, timeline
- Participating agencies (including military)
- Nature/extent of military involvement

See: Department of Housing, Local Government and Heritage - Emergency Management

#### **Defence Forces Press Releases and News**

- <u>Irish Defence Forces News</u> stories and updates often provide operational details (event, date, units, personnel).
- Twitter/X, Facebook, or other social channels sometimes share real-time updates.

## Parliamentary Records (Oireachtas Debates and Written Answers)

Parliamentary questions often solicit data on:

- Number and nature of civil support missions
- Budget allocation or expenditure per event
- Personnel and equipment deployed

See: Oireachtas Debates

#### **European and International Datasets**

- EU Civil Protection Mechanism (ERCC): If Ireland requests or provides military support via the EU mechanism, some records are held by the <u>ERCC</u>.
- EM-DAT (The International Disaster Database): Records disaster events in Ireland. While not specifically tagging military involvement, some reports may reference military mobilisation.
   See: EM\_DAT Ireland Search

See: EM-DAT Ireland Search

#### **Freedom of Information Requests**

For more granular, incident-specific data (e.g., unit names, funding amounts, after-action reports), Ireland's FOI Act allows requests to the Department of Defence or other agencies.

## 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

The Defence Act 1954 and Statutory Instruments (Ministerial Executive Orders) provide the legal basis for the Defence Forces to provide aid/assistance/support to a variety of state agencies in the event of a major emergency.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

The Office of Emergency Planning (OEP) was established in 2001 to oversee the Ireland Emergency Planning Process. It is a civil-military body within the Department of Defence (MOD) responsible for the coordination and oversight of all emergency planning across the state agencies. It is answerable to the Minister for Defence.

Major emergencies are categorised under 1) severe weather events including flooding, 2) pandemics, 3) animal disease outbreaks, 4) nuclear accidents, 5) major pollution incidents, and 6) major transport accidents (air, sea, rail and road).

## 3. OPERATION FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

All Branches of the Irish Defence Forces are involved is the provision of support to the civil authorities, including the Army, the Irish Air Corps, and the Naval Service.

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

The Army supplies troops, transportation, communications, engineering including specialist equipment, and medical support as required. The Irish Air Corps provides rotary wing and fixed wing assets to assist the civil authorities and state agencies as and when required. The Naval Service is also available to assist as required.

During the COVID 19 Pandemic, a dedicated Military Joint Task Force (JTF) was established to provide aid to the civil authorities and support to government departments and agencies with priority to the Department of Health providing personnel and equipment.

During the recent severe weather alert STORM EOWYN<sup>1</sup> on 24 January 2025, the Irish Meteorological Service issued a RED Weather Warning (the highest level of alert). The storm caused very significant damage to the national electricity grid leaving many rural communities without power for an extended period. All state agencies were mobilised with the Irish Air Corps providing air assets to assist the Electricity Supply Board in identifying damaged power lines in rural and remote areas.

#### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

The Emergence Planning Group (EPG), chaired by a senior civil servant with representatives from government departments and state agencies including the Defence Forces, coordinates a "whole of government response" in the event of a major emergency.

All agencies of the state are represented in the EPG forum including local authorities, police, fire services, health service including the ambulance service, electricity supply service, transport services, and the Irish Meteorological Service (Met Eireann), et al.

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The Emergence Planning Group coordinates a "whole of government response" in the event of a major emergency.

In the case of severe weather events, the Irish Meteorological Service provides critical advance warnings on the severity, duration, location, and likely impact of impending weather. This is essential to enable the authorities to alert the public and to plan and prepare an appropriate response.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

Once a formal request for assistance has been made by a state agency for military assistance at the EPG Forum, the request is considered by the military authorities and is normally approved.

In Ireland, it has been traditional for the military authorities to approve requests for military assistance from local authorities on a case-by-case basis, provided personnel/resources are readily available. In the past, assistance was provided on an ad hoc basis, but now is it formalised and more streamlined.

There is an expectation from the general public that the military will be called upon to assist in the event of a major emergency.

During the pandemic very considerable military resources—personnel, equipment, and expertise—were provided to the health authorities over an extended period.

In Ireland, flooding, both coastal and inland, has been and continues to be a regular occurrence. While the local authorities have primary responsibility for the provision of temporary flood defences, they regularly call on the military for support.

<sup>&</sup>lt;sup>1</sup>During Storm EOWYN (Jan 2025) Electricity Repair Crews from Austria, Netherlands, Finland, France came to Ireland to assist with repairs to the National Grid. In addition, under an pan EU initiative, mobile electricity generators were supplied by the EU.

# 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

There is no dedicated specific training for civil protection. That said, there are two areas where specific training is undertaken as part of mission specific tastings, namely the Irish Air Force undertakes training in Search and rescue (SAR) and the Ordnance Corps, which has specific responsibility for CBRN matters, conducts specific training in line with mission responsibilities.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

Civil protection training within the military or between military and civilian agencies in Ireland may include joint exercises and participation in EU or NATO training programs. These programs aim to enhance coordination and readiness for disaster response.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Ireland engages in cross-border cooperation with other countries' militaries and civilian agencies through EU mechanisms, NATO, and other international organizations. This cooperation includes participation in international coordination mechanisms such as the EU Emergency Response Coordination Centre and adherence to guidelines for effective civil-military coordination in humanitarian assistance.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

While most activity is domestic, Irish Defence Forces have contributed to:

- EU Civil Protection Mechanism Missions (e.g., medical and logistical staff to EU and UN missions during major disasters, including earthquake and epidemic responses).
- Overseas Peacekeeping/Disaster Relief: Examples include Lebanon (UNIFIL), Syria, and training in disaster management as part of international missions.

## 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

In Ireland, the military is primarily involved in logistical support, search and rescue operations, and providing specialized capabilities such as engineering and medical support during civil protection tasks. These roles can differ in domestic versus foreign operations, with international missions often involving coordination with EU mechanisms or other international bodies.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

Civilian authorities in Ireland, such as local emergency services and national agencies, are primarily responsible for disaster management. They coordinate with the military when additional resources or capabilities are needed, particularly in large-scale or complex emergencies

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

### 5.4. What effect does military involvement in civil protection have on force readiness?

## 5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

Yes, there are several notable examples of the Irish Defence Forces' involvement in disaster response. Their participation is typically as a "aid to civil power" (ATCP) or "aid to civil authority" (ATCA), and they are requested when civilian capabilities are overwhelmed, especially during major climate-related or public emergencies.

## Severe Flooding Events

Winter 2015–2016 Floods: Persistent Atlantic storms (including Storm Desmond) led to widespread flooding, particularly along the Shannon River and in counties Galway, Clare, and Cork. Military involvement included:

- Over 1,500 Defence Forces personnel deployed.
- Assisted with sandbagging, evacuations, engineering support (pumping water, reinforcing flood defences), and providing transport for isolated residents.
- Established temporary accommodation and delivered food/medicines.

Storms Ophelia (2017) and Emma (2018): Severe windstorms (Ophelia) and snow/ice (Emma) caused widespread power outages, blocked roads, and cut communities off. Military involvement included:

- Defence Forces cleared roads, provided 4x4 transport for medical staff and patients, delivered essential supplies, and supported emergency shelters.
- Assisted the Health Service Executive (HSE) and local councils with logistics.

Floods in Cork city and county (2009, 2014): Military involvement included:

• Flood response, evacuation, and restoration support.

## Wildfires

Killarney National Park (2021) and other incidents: Large-scale wildfires threatened protected habitats and public safety. Military involvement included:

- Defence Forces helicopter units (e.g., AW139) airlifted fire-fighting teams and dropped water on inaccessible fires.
- Ground personnel supported local fire services in firebreak construction and evacuations.

## Snowstorms

Periodic major snowstorms (e.g., 2010, 2013): Military involvement included:

• Provided emergency transport, cleared critical infrastructure.

#### Lessons Learned and Impact

- Flooding and severe weather events repeatedly demonstrated the value of military engineering and logistics, leading to calls for improved inter-agency protocols.
- Pandemic response highlighted the flexibility and planning skills of the Defence Forces, strengthening ties with health services.
- Wildfires pointed to the need for further air-mobile and remote response capacity in rural and mountainous regions.

## 6. REFERENCES

6.1. Please include any references or further reading that should be included in the country profile.

Irish Defence Forces Press Releases Department of Defence Annual Reports NDFEM Major Emergency Reports



By Joint Defence Staff, Third Department

ITALY

## 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

There is a specific funding authorized by the Government, following the declaration of a "state of emergency." Reimbursement to the Defence follows the quantification of the costs should by the Armed Forces.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

See: Civil Protection Department

## 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

The main legal reference is the "Code of Military Regulations" in which are stated the Armed Forces' four main tasks, that foresee also the provision of support in terms of people and assets in order to protect domestic institutions as well as accomplish other specific tasks to cope with circumstances of crisis and emergencies.

See: Legislative Decree No. 1 of 2 January 2018: Civil Protection Code (art. 13)

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Disaster response Disaster recovery Military react with the Civil Protection Department in case of mass disaster.

## 3. OPERATIONAL FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

Army, Navy, Air Force, and Carabinieri are the military branches involved in case of emergency.

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

The Armed Forces' accomplished tasks may vary in relation to the nature of the emergency itself. Normally, the Armed Forces are called to provide those kinds of expertise which are lacking during the first phase of the emergency, such as: transportation of aids and equipment (by road, air, and sea), medical support and treatments, temporary lodging, communications and command and control of operations, vigilance, infrastructure repairs and building, counter pollution, explosives deactivation, movements in non-permissive environments (flooding, snow storms), etc. The support then evolves as far as the Civil Protection system is fully activated.

Concerning the interventions abroad, the Armed Forces are mainly the enabler which supports the early entry of the Italian Civil Protection assets on the emergency scene.

### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

The National Fire Department is the primary agency that responds in case of civil protection tasks and under the directives of the Civil Protection Department.

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

Everything related to civil defence is the responsibility of the Civil Protection Department and the tasks are established through the Code of Civil Protection (Legislative Decree No. 1 of 2 January 2018: Civil Protection Code).

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

Operational procedures have been tested during several contingencies (national and local emergencies). There are as well dedicated national contingency plans.

In the domestic domain, the military is part of the command-and-control architecture, especially in the immediate aftermath of the disaster thanks to their higher degree of readiness. The degree and the level of integration is coordinated on the military side by the Italian Joint Operations Command (JOC). In the foreign sphere, civil authorities take decision and possibly request military support.

The direction and coordination function of the civil protection belongs to the Civil Protection Department. It is expressed through the attributions recognized to the Head of the Department and within the National Operational Committee of the Civil Protection as well as, limited to local entities (regions, provinces, municipalities, and their aggregations, even partial), within the State-Regions-Local Authorities Joint Committee and the Special Civil Protection Commission.

## 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

There, on a regular basis, combined major training events occur based on the existing contingence plans. Training opportunities exist also at local level. Military personnel are also exposed to civil protection matters during their education path.

Military and civilian personnel (fulfilling specific positions in their respective administration) attend together the civilian-military cooperation qualification course.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

Yes. Military units have wide variety of skills that can be used in civil defence environment. However, there are no specific civil defense courses for the military personnel.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

See: Civil Protection Department

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

## 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

There are advantages in terms of generating a positive attitude towards the armed forces in the public opinion.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

5.3. What effect does military involvement in civil protection have on **force composition**, **recruitment**, **morale**, **and retention**?

There is no real long-term effect because military personnel are involved in civil protection in a supporting role. This means that the support is limited in time and does not affect force composition, recruitment, nor retirement.

5.4. What effect does military involvement in civil protection have on force readiness?

During the last decades there has been a quantitative increase in terms of support by the Armed Forces towards the civilian counterpart but, due to the recent change in NATO posture (and consequently in force readiness), this support can be reversed anytime in case of an armed conflict.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

After each disaster, the military updates its plans for intervention and cooperation with civil defense. Efforts are made to minimize response times.

## 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.



## 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

State budget funding.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

The National Civil Protection Plan, approved in 2020, establishes the competence and action of disaster management entities in the implementation of disaster management measures – prevention, preparedness, response, and mitigation measures relating to national and regional disasters or disaster threats, as well as providing support to the national protection system and determining the functioning of the civil protection system in cases, if there has been a military invasion or a war has begun.

According to National Civil Protection Plan, National Armed Forces are in lead regarding elimination of the consequences of search, rescue, and emergency at sea. Overall, National Armed Forces shall provide support to the civil defence system – in preventive and response measures, emergency measures for the elimination of the consequences of events causing emergency situations, as well as rescue and search activities. The National Armed Forces shall be involved in emergency, firefighting, and rescue operations, as well as emergency measures – the provision of assistance to the civil defence system, if the resources of the civil defence system are insufficient in order to perform emergency measures.

See: <u>National Civil Protection Plan</u> <u>Support to the Civil Defence System</u>

## 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

<u>Cabinet Regulation No. 946</u> (adopted 5 October 2010) "Procedures by which the National Armed Forces shall Participate in Emergency, Firefighting and Rescue Operations, as well as in the Measures for the Elimination of the Consequences Caused by Emergency Situations"

<u>Cabinet Order No. 15</u> (adopted 9 January 2005) "On the involvement of the National Armed Forces in the elimination of the consequences caused by a natural disaster"

National Civil Protection Plan

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

## CLIMATE CHANGE MITIGATION AND ADAPTATION

In order to ensure the application of sustainable development principles and environmental protection requirements in defence sector, one of the priorities that has been identified is adaptation to the effects of climate change, mitigating the adverse effects on climate change, including reduction of greenhouse gas emissions. The guidelines and action plan for environmental protection in the defence sector 2023-2027 have been approved.

#### DISASTER PREVENTION, RESPONSE, AND RECOVERY

All activities regarding disaster prevention, response, and recovery are performed in accordance with the **National Civil Protection Plan**.

## 3. OPERATIONAL FRAMEWORK

#### 3.1. Which **national and subnational military branches** are primarily involved in civil protection?

Depending on the location, battalions of Latvian National Guard can be involved in related activities. Latvian National Guard is a part of the National Armed Forces that is a basic land component, consisting of volunteers who perform traditional national guard duties such as crisis response and support for military operations. It consists of the Staff Headquarters and 4 brigades, which are divided into 18 battalions.

### 3.2. Which **civil protection tasks** are done by the military? Do these differ in domestic and foreign operations?

Flooding prevention Wildfire response Search and rescue missions Disaster recovery after storms Supporting pandemic control measures

Involvement of military personnel that is higher than 50 persons has to be authorised with the order from the Minister of Defence.

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

State Fire and Rescue Service – regional branches

All authorities (ministries, services) that are stated in the National Civil Protection Plan, depending on the type of disaster

Civil protection commissions of related municipalities

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

Ensuring the necessary basic needs for society – food and water, medical care, electricity supply, water supply, waste and sewage supply etc.

Only humanitarian aid in foreign operations

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

Request for support from civil protection authorities. The sort and shape of support has to be approved by Chief of Defence (ChOD).

## 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

Search and rescue missions (Latvia National Armed Forces Coast Guard, Air Force)

Flooding response (NG engineers)

Annual tabletop exercises for civil protection committees (representatives from local battalion of Latvian National Guard, National Armed Forces)

Different annual state-level crisis management exercises (representatives from local battalion of Latvian National Guard, National Armed Forces)

Comprehensive state defence exercise NAMEJS

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

N/A

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Yes, for example, cross-border cooperation occurs if neighbouring countries (Lithuania, Estonia) have massive forest fires where they need additional resources. Overall, it is the competence of the State Fire and Rescue Service.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

EU Emergency Response Coordination Centre NATO Euro-Atlantic Disaster Responses Coordination Centre

# 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

If the resources at the disposal of the civil protection system are insufficient in order to perform necessary emergency measures for the management of the threat situation and liquidation of consequences, the attraction of resources of the National Armed Forces greatly accelerates implementation of emergency measures, reduces potential losses and accelerates rescue of persons.

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

Main advantage is to ensure the prevention, response and recovery of any kind of crisis as well as simultaneously to provide all basic need for society.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

N/A

5.4. What effect does military involvement in civil protection have on **force readiness**?

N/A

5.5. Do specific disasters stand out in terms of **lessons learned** for civil-military cooperation in civil protection?

All main exercises are focused on the threat of a military attack, all lessons learned are acknowledged in order to improve related plans and legislation as well as civil-military cooperation between Armed forces and all municipalities and institutions that are engaged in actions in order to overcome the threat.

# 6. FURTHER READING

6.1 Please include any references or further reading that should be included in the country profile.

It is necessary to realise that the public authorities do not have the full opportunity to ensure the protection of all citizens in the first hours of the crisis or war, or even in days. This means that each individual assumes responsibility for themselves, their families and families during the initial crisis or war. It is the responsibility of the State to offer the public specific self-organising models so that citizens can know and act in accordance with their beliefs, but the main task of the population is to be able to self-organise and overcome individual phases of crisis or war. Accordingly, the Ministry of Defence, in cooperation with other institutions and organisations, has developed and provided the public with a brochure entitled <u>How to proceed in the event of a crisis?</u> aimed at helping every citizen better prepare for potential crisis situations.





## 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

The funding framework based on the Law of the Republic of Lithuania on Crisis Management and Civil Protection (actual version from January 1, 2024). The specific funding allocation is described in Law of the Republic of Lithuania on State Reserve (actual version from June 1, 2024).

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

The information data sets are not publicly available.

# 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

The legal framework is based on the <u>Law of the Republic of Lithuania on Crisis Management and</u> <u>Civil Protection</u> (actual version from January 1, 2024).

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Disaster prevention Disaster response Disaster recovery

The sources do not explicitly detail specific policies, procedures, or guidelines for the military in Lithuania's involvement in emergency and crisis management. However, the main responsibility of harmonizing policies and procedures lies with National Crisis Management Centre.

## 3. OPERATIONAL FRAMEWORK

3.1. Which **national and subnational military branches** are primarily involved in civil protection?

Depends on the nature of the event. However, the land forces are primarily involved in civil protection.

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

While the law does not explicitly detail the military's role in civil protection, it implies that the military could be involved in emergency response and mitigation efforts as part of the broader civil protection system. The Ministry of the Interior, the Fire and Rescue Department, and other state institutions are responsible for strategic decisions on civil protection measures, which could include military assistance.

Upon the decision of the Government, the military can provide the support on the following tasks: participation in the liquidation of crises and emergency situations, removing their consequences, and ensuring the implementation of the decisions of the state and municipal authorities responsible for emergency and crisis management.

In general, the protection tasks will not differ from domestic or foreign operations.

#### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

The crisis management and civil protection system consists of the following entities:

- Government
- National Security Commission
- National Crisis Management Centre
- Ministry of Internal Affairs of the Republic of Lithuania
- Ministries and other state institutions and bodies
- Department of Fire Protection and Rescue under the Ministry of the Interior (hereinafter the Department of Fire Protection and Rescue) and its subordinate institutions
- Municipal institutions and institutions
- Other institutions
- Economic entities
- Emergency operation centres (hereinafter operation centres)
- Civil defense forces

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

Civil protection is described as an activity that includes the preparation of state and municipal institutions and institutions, other institutions, economic entities, non-governmental organizations, residents and other persons specified in the Law of the Republic of Lithuania on Crisis Management and Civil Protection, for emergency situations, actions when they are threatened or occur, management of emergency situations and elimination of their consequences.

According to the law, the civil protection tasks are related to crisis management and civil protection objectives that are listed below:

- Monitor and assess the risk factors, dangers, and threats to the national security interests of the Republic of Lithuania defined in the National Security Strategy approved by the resolution of the Seimas of the Republic of Lithuania (hereinafter threats to the national security interests of the Republic of Lithuania), warn about these threats, and reduce threats to these interests
- Carry out crisis and emergency prevention, education, and training
- Prepare for the liquidation of events, extreme events, crises and emergency situations, and elimination of their consequences
- Perform search, rescue, and emergency work to warn and inform residents, state and municipal
  institutions and bodies, other institutions, economic entities, operators, international humanitarian
  organizations, and non-governmental organizations (hereinafter international humanitarian
  organizations and non-governmental organizations together NGOs) about an impending or emerging
  crisis or emergency situation, to distribute information held by or intended for state and municipal
  institutions and bodies, in order to avoid or mitigate possible damage
- In the event of events, extreme events, crises, or emergency situations, ensure the continuity of the performance of vital state functions, organize and implement measures aimed at restoring the basic necessities of life to state and municipal institutions and institutions, other institutions, economic entities, operators, NGOs, and residents (operating) conditions

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

The responsibility of designing and improving standard operating procedures for civil-military cooperation in civil protection lays with the National Crisis Management Centre. The decision-making chain is described in Section 3.2.

# 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

In order to prepare for the liquidation of events, extreme events, management of crises and emergency situations, elimination of their consequences, search, rescue and emergency work, and the performance of vital state functions during crises and emergency situations, state and municipal institutions and institutions, other institutions, economic entities and activities executors organize crisis management and civil safety training in accordance with the procedure established by the Government. This includes the training content of preparation for military and hybrid threats. The military is actively engaged in those trainings. The profile of military participants (i.e., the components of the military) depend on the specific objectives of the trainings.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

No, there is no dedicated personnel with specialization in civil protection.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

### **REGIONAL COOPERATION**

The Council of the Baltic Sea States (CBSS) is a general political forum for regional intergovernmental cooperation. CBSS consists of ten countries of the Baltic Sea region: Denmark, Estonia, Iceland, Latvia, Poland, Lithuania, Norway, Finland, Sweden, Germany. During meetings of experts and managers, experience is shared, decisions are made on joint actions and projects to ensure the security of the region.

In 2009 the strategy of the EU Baltic Sea Region (hereinafter - the Strategy of the Region) was approved. It is the first macro-regional strategy of the EU, the aim of which is to promote regional cooperation and balanced development of the region in order to solve emerging challenges together. Lithuania representatives participate in the activities of the management group of the security policy area of the Baltic Sea Region Strategy (PA Secure). The group's activities include macro-regional and cross-border cooperation in the field of civil protection. PAGD, together with other countries of the FYROM region, participates in joint Regional Strategy projects and meetings aimed at exchanging best practices.

#### **BILATERAL COOPERATION**

The State Fire Rescue Service of Lithuania cooperates with the neighbouring Republic of Poland, participating in bilateral working groups – the working group for the protection and rescue of residents of the Republic of Lithuania and the Republic of Poland in emergency situations. During the meetings of this working group, Lithuanian and Polish fire services exchange experience and information in the field of preparing for emergency situations and liquidating their consequences, organizing firefighting and rescue operations. The forces and resources available to border services and their use at the border during complex incidents and joint operations are discussed.

State Fire Rescue Service pays great attention to bilateral and trilateral cooperation, especially relations with neighbouring countries:

- 1994: An intergovernmental agreement was signed with Germany on mutual assistance in the event of natural disasters and major accidents.
- 2000: An intergovernmental agreement was signed with Poland on cooperation and mutual assistance in the event of catastrophes, natural disasters and other special events.
- 2001: An intergovernmental agreement with Hungary on cooperation and mutual assistance in the event of catastrophes and major accidents.
- 2003: An intergovernmental agreement with Ukraine on cooperation and mutual assistance in the field of emergency prevention and liquidation of their consequences.
- 2003: An intergovernmental agreement was signed with Sweden in the field of emergency prevention, preparedness and their liquidation.
- 2003: An intergovernmental agreement with Belarus on cooperation in the prevention of catastrophes, natural disasters and major accidents and in liquidating their consequences.

- 2012: An intergovernmental agreement with Azerbaijan on cooperation and mutual assistance in the field of emergency prevention and liquidation.
- 2013: An intergovernmental agreement with Georgia on cooperation and mutual assistance in the field of emergency prevention and liquidation.
- 2016: An intergovernmental agreement with Moldova on cooperation and mutual assistance in the field of emergency prevention and response.
- 2017: An intergovernmental agreement with Estonia and Latvia on mutual aid and cooperation in the field of disaster prevention, preparedness and response.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

EU Emergency Response Coordination Centre

European Fire Service Colleges' Association

European Group of Organizations for Fire Testing, Inspection and Certification

International Association of Fire and Rescue Services

International Atomic Energy Agency (IAEA) Convention on Assistance in the Event of a Nuclear Accident or Radiological Hazard

International Federation of Red Cross and Red Crescent Societies

NATO Euro-Atlantic Disaster Response Coordination Centre

OSCE Strengthening Responses to Security Risks from Climate Change

UNDP Global Risk Identification Program

UN Office for the Coordination of Humanitarian Affairs

## 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

The military's engagement is feasible (and desirable) when the civil protection forces are unable to cope with emergency or crisis.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

The main responsibility of managing emergencies and crises is with civilian agencies and protection system authorities, as described in Section 3.3.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

Presumably it has a very positive effect on force composition, recruitment, morale, and retention. However, this analysis was never done in Lithuania.

5.4. What effect does military involvement in civil protection have on **force readiness**?

Presumably this positively affects force readiness. However, this analysis was never done in Lithuania.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

Covid–19 crisis.

## 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

See: Law of the Republic of Lithuania on Crisis Management and Civil Protection (actual version from January 1, 2024).



MEXICO By Mariana Méndez Mora

# 1. FUNDING FRAMEWORK

### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

Financing for military use in terms of civil protection in Mexico, whether national or international, is through public funds that are assigned to the Department of Defense and the Navy.

The two military plans for civil protection support are DN-III-E Plan of the Department of Defense and the Navy Plan of the Navy.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

There is no platform with open data that provides information on the use of the military in national and foreign civil protection with respect to the preparation, response and recovery of natural disasters. The information that can be found in this regard, when required, are some press releases issued by the Department of Defense and the Navy on the progress in the implementation of the DN-III-E and the Navy Plan's.

## 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

The legal framework for national or international military use in matters of civil protection is the following:

The Department of Defense and the Air Force, in Article 29 of the Organic Law of the Federal Public Administration, section "XIX.- Provide the auxiliary services required by the Army and the Air Force, as well as the civil services assigned to said forces by the Federal Executive" which is carried out through the "Plan for Assistance to the Civilian Population in Cases of Disaster, also known as the DN-III-E Plan, and is a military operation for the Mexican Army and Air Force to carry out activities to assist the civilian population affected by any type of disaster. Also, in accordance with the provisions of article 1/o. of the Organic Law of the Mexican Army and Air Force and articles 21/o. and 73/o. of the General Law of Civil Protection; Likewise, as a member of the National Civil Protection System (SINAPROC), through the Regions, Zones, Military Units and other agencies, in accordance with the provisions of article 1 of the Organic Law of National Defense, in accordance with the provisions of article 1 of the Organic Law of the National Civil Protection System (SINAPROC), Likewise, as a member of the National Civil Protection System of Civil Protection; Likewise, and Air Force and articles 21 and 73 of the General Law of Civil Protection; Likewise, and Air Force and articles 21 and 73 of the General Law of Civil Protection; Likewise, as a member of the National Civil Protection System (SINAPROC), through the Regions, Zones, they cooperate with the three levels of government (Federal, State and Municipal), developing activities aimed at supporting the civilian population in cases, as a member of the National Civil Protection System (SINAPROC), through the Regions, Zones, Military Units and other agencies, they cooperate with the three levels of government (Federal, State and Municipal), developing activities aimed at supporting the civilian population in cases of emergencies and disasters.

Likewise, in the Sectoral Program of the Ministry of Defense we can find the following:

Priority strategy 3.4. Assist the civilian population in cases of disaster, caused by natural or human phenomena, through the application of the DN-III-E Plan, in order to mitigate the effects it produces on the population. Specific action 3.4.1. Maintain an effective response capacity, to guarantee immediate assistance to the population affected by a disaster, in order to safeguard people's lives and their property; as well as, support the reconstruction of the affected areas.

3.4.2. Maintain coordination and cooperation with other government agencies and sectors of society, for emergency response.

3.4.3. Comply with the Internal Training Program of the Laguna Verde Task Force 84 (F.T.L.V.84) of the External Radiological Emergency Plan (P.E.R.E.) within the scope of SEDENA's competence.

3.4.4. Train Army and FAM personnel to respond to incidents with Q.B.R.N.E materials.

3.4.5. Promote inter-institutional exercises to respond to incidents with Q.B.R.N.E substances. 3.4.6. Participate in Humanitarian Aid activities for other nations determined by the Government of Mexico, using the procedures applicable to the DN-III-E Plan. As regards the Secretariat of the Navy - Mexican Navy, the military use for civil protection is mandated in Article 30 of the Organic Law of the Federal Public Administration, section "XXI.-Participate and carry out the actions that correspond to it within the framework of the national civil protection system for the prevention, assistance, recovery and support of the population in disaster situations", which is carried out through the "Navy Plan for Assistance to the Civilian Population in Cases and Zones of Emergency or Disaster" and carries out support actions in national and international events, in order to mitigate the destructive effects of hydrometeorological or anthropic phenomena. Its objective is to concentrate efforts and means to guarantee the protection of people, their property, the production plant and its environment, through our Navy Plan we provide timely, effective and efficient attention in emergency or disaster situations. The Naval Commands will assist the population in cases and areas of emergency or disaster, acting in a coordinated manner with federal, state and municipal authorities, with private organizations that are members of the state and municipal civil protection councils and the organized Civil Society of their jurisdictional area, in order to avoid and/or minimize the effects of a probable, imminent or suddenly occurring destructive agent, according to its established phases: Prevention, Assistance and Recovery.

Regarding the Navy, Article 30 of the Organic Law of the Federal Public Administration, paragraph XXI, mentions participating and carrying out the actions that correspond to it within the framework of the national civil protection system for the prevention, assistance, recovery and support of the population in disaster situations.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Climate change mitigation: Yes, Department of Defense Climate change adaptation and resilience: Yes, Department of Defense Disaster prevention: Yes, Department of Defense and Navy Disaster response: Yes, Department of Defense and Navy Disaster recovery: Yes, Department of Defense and Navy Equitable disaster response implementation: Yes, Department of Defense and Navy

Yes, the National Defense Secretariat, in accordance with national policies for the prevention and mitigation of greenhouse gas emissions, carries out different activities related to the aforementioned policies, highlighting, among other activities, the following:

- It promotes the specialization and professionalization of military personnel in environmental issues, giving lectures and courses on the subject.
- Participation in Fighting Forest Fires.
- Application of the DN-III-E plan, assisting the population in cases of disasters anywhere in the national territory in order to contribute to the national effort to preserve people, their property and their environment.
- It applies tree production and reforestation programs.

Also, the Sectorial Program of the Department of Defense establishes the following:

Priority strategy 4.3.- Contribute to the Sustainable Development Programs to favor the rural sector, through the restoration of the ecological environment. Specific action.

4.3.1. Contribute to the "Sembrando Vida" Program, through the production of fruit and timber trees in military forest nurseries, to promote the economic development of rural populations, generate jobs and preserve the ecological environment. 4.3.2. Participate in the adaptation of facilities for the production of plants within the "Sembrando Vida" Program.

4.3.3. Assist the Ministry of Welfare through the production of trees in military forest nurseries.

Priority strategy 4.7.- Promote SEDENA mechanisms for the preservation of the environment and natural resources. Specific action.

4.7.1. Contribute to the Wastewater Sanitation Program, through treatment plants in the Army and F.A.M. Units, Dependencies and Installations in collaboration with National Water Commission (CONAGUA).

4.7.2. Implement the Compost Production Program, contributing to the enrichment or regeneration of soils within military camps, in collaboration with the competent agencies.

4.7.3. Implement the Annual Reforestation Program, by planting trees within military camps and certain rural locations or deforested urban areas, in collaboration with the competent agencies.

4.7.4. Generate renewable, efficient and low-emission electric energy through the Department of Defense (SEDENA) Wind Farm for the benefit of this State Secretariat and the environment, in collaboration with the competent agencies.

Regarding the Navy, it participates in the Inter-Secretarial Commission on Climate Change, however, in the previous government administration there were no actions to combat climate change in the Special Climate Change Program.

## 3. OPERATIONAL FRAMEWORK

### 3.1. Which national and subnational military branches are primarily involved in civil protection?

At the national level, the Department of Defense and the Navy are involved.

At the subnational level, the Department of Defense has 12 military regions and 48 military zones and the Navy has made up of 6 naval sectors, 13 naval regions and 18 naval zones throughout the Mexican Republic.

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

The tasks carried out by the military at the national level in the area of civil protection are the following:

#### Prevention

- Coordination meetings with authorities from the three levels of government
- Exchange of information with authorities and civil organizations
- Tours and identification of vulnerable areas for the population
- Review and update of risk atlases and telephone directories of civil and military authorities
- Monitoring of disturbing phenomena (hydrometeorological)
- Press conferences to warn the population of possible risks
- Appointment of liaison officers with authorities of the National Civil Protection System
- Cabinet exercises
- Drills aimed at verifying the organization of work teams and the state of the material for an emergency situation
- Verification of the physical state of the facilities designated as collection centers and shelters
- Reaction forces of the operational units are kept organized

#### Aid

- Alert: Support is provided to the civil authorities to alert the threatened population
- Emergency Plans: Specific emergency plans are executed and links are established with the civil authorities for the coordinated attention of emergency situations
- Emergency Coordination: Support is provided in the coordination of aid actions for affected people, transportation tasks and preventive evacuation, administration and provision of temporary shelters
- Damage Assessment: Support is provided in the physical recognition and registration of damages suffered by the population in terms of loss of human life, as well as in the identification of possible risks
- Security: Cooperation is provided with public security forces to preserve the economic activity and the assets of the population
- Search, Rescue, and Assistance: Support is provided in the organization, coordination and execution of search and rescue tasks
- Strategic Services, Equipment, and Goods: Support is provided with transport and communication equipment with available human resources for its operation

- Health: Support is provided in the organization, coordination and execution of health, medical assistance and sanitation tasks by providing the available human and material resources
- Supply: Support is provided in the distribution of basic goods and products of first necessity among the affected population, as well as in the preparation and distribution of food

## Recovery

- Removal of debris and mud; as well as the evacuation of furniture
- Damage assessment
- Provisional recovery of land communication routes (metal bridges)
- Establishment of air bridges to supply basic necessities
- Distribution of food supplies and various items
- Provisional restoration of basic water, electricity and communication services
- Security continues to be guaranteed in the affected areas

At the international level, relief tasks are carried out in the following areas:

- Search, Rescue, and Assistance: Support is provided in the organization, coordination and execution of search and rescue tasks
- Strategic Services, Equipment, and Goods: Support is provided with transport and communication equipment with human resources available for its operation
- Health: Support is provided in the organization, coordination and execution of health, medical assistance and sanitation tasks by providing the available human and material resources
- Supply: Support is provided in the distribution of basic goods and products of first necessity among the affected population, as well as in the preparation and distribution of food

## 3.3. Which **national and subnational civilian authorities** are primarily involved in civil protection?

- Federal Executive Branch (President of Mexico)
- Agencies and Entities of the Federal Public Administration
- State and Municipal Civil Protection Systems

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The tasks carried out by civilian authorities are the following:

- Ensure the proper functioning of SINAPROC and dictate general guidelines to coordinate civil protection efforts for the benefit of the population, its assets and environment, inducing and directing the participation of the different sectors and groups of society within the framework of Comprehensive Risk Management
- Promote the incorporation of Comprehensive Risk Management in local and regional development, establishing strategies and policies based on risk analysis, in order to avoid the construction of future risks and the implementation of intervention actions to reduce existing risks
- Include, in the draft Federal Expenditure Budget for each fiscal year, resources for the optimal functioning and operation of the Risk Management Financial Instruments referred to in the Federal Budget and Fiscal Responsibility Law, in order to promote and support the implementation of preventive actions; as well as those aimed at both assisting the population in emergency situations and addressing damage caused by natural disasters
- Issue declarations of emergency or natural disaster, in accordance with the terms established in the General Law on Civil Protection and in administrative regulations
- Order the use and allocation of resources from Risk Management Financial Instruments, in accordance with the provisions of administrative regulations on the matter
- Promote, in the event of natural disasters, the implementation of actions aimed at a comprehensive risk transfer strategy, through tools such as the identification of the infrastructure to be insured, risk analysis, measures for their reduction and the definition of retention and insurance schemes, among others

- Issue general guidelines on civil protection to induce and promote the principle of Integrated Risk Management and Continuity of Operations as a public policy value and a cross-cutting task so that preventive actions are carried out, with special emphasis on those that have a direct relationship with health, education, territorial planning, urban-regional planning, conservation and use of natural resources, governance and security
- Monitor, through the competent departments and entities and in accordance with the applicable legal provisions, that population centers are not authorized in risk zones and, if applicable, to notify the competent authorities so that they can proceed with their eviction, as well as to determine the responsibilities incurred by the omission and complacency in the face of said irregularities, and
- Promote before the holders of the Executive and Legislative Powers of the federative entities, the homologation of the regulatory framework and the functional structures of civil protection
- Assist in the tasks of civil protection, sharing with the competent authority that requests and justifies its usefulness, the technical information, whether printed, electronic or in real time related to the systems and/or networks of alert, detection, monitoring, forecasting and measurement of risks
- The integration and operation of civil protection systems, in accordance with the provisions of the General Law on Civil Protection and the corresponding local legislation, also in each of its areas, will ensure the correct operation of the Civil Protection Councils and Units, or their equivalents, promoting that they are constituted with a level no less than that of General Directorate preferably and in accordance with the applicable legislation, as organizations with administrative, financial, operational and management autonomy, dependent on the government secretariat, the city council secretariat, and mayors, respectively.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

The procedures for civil-military cooperation in civil protection are found in the National Civil Protection System, managed by the Department of Security and Citizen Protection, in the DN III-E Plan of the Department of Defense, and in the Navy Plan of the Navy.

When there is a declaration of emergency, decisions are made jointly by the national, state, and/or municipal Civil Protection committees, who are in charge of coordinating the actions, and the Armed Forces join forces.

# 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

Training in civil protection between military and civilian personnel is independent.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

The military has specialized personnel trained in civil protection in the three phases of the DN-III-E Plan process and the Navy Plan for prevention, assistance and recovery.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Yes, when emergencies occur in border areas and it is carried out through collaborations between said border countries.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

No.

## 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

Yes, since they are the actors who are trained to react and act in the event of natural disasters, they are the operational part.

5.2. Are there **advantages** to having civilian agencies do some civil protection tasks? If so, which ones and why?

Yes, since they are the actors who coordinate the national civil protection system in Mexico.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

A fundamental effect since it is part of the activities and responsibilities of the military and they are the ones who operationally respond to disasters.

5.4. What effect does military involvement in civil protection have on force readiness?

Their participation is essential since it is part of the activities and responsibilities of the military, and they are the ones who operationally respond to disasters.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

In 1966, the Pánuco River in the state of Veracruz overflowed, increasing the water levels in the area and leaving it flooded. The Army therefore launched a large-scale operation to support the population. Its help was essential in rescuing people trapped on the roofs of their homes. This is where the DN-III-E Plan was born. In 1985, after the strong earthquake in Mexico City, the National Civil Protection System was created, with the collaboration of the Navy and the Navy Plan was created.

## 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

National plans:

Agreement issuing the National Response Plan Mexico of the Federal Public Administration Decree approving the National Civil Protection System and the Civil Protection Program National Civil Protection Program 2022-2024 National Defense Sectoral Program 2020-2024 Marine Sectoral Program 2022-2024 **Navy Plan** Federal Expenditure Budget Fiscal Year 2025 National civil protection system: **National Civil Protection Coordination** What is SINAPROC? What is SINAPROC and How was it Established in Our Country Plan DN-III-E: **Climate Change Plan DNIIIE** Security actions and progress in the implementation of the DN-III-E Plan in Mexico City History, Evolution, and Current Capabilities of the DN-III-E Plan, Social Work, and Humanitarian Aid Monitoring: **CENAPRED Monitoring and Notifications of Natural Phenomena** 

National Meteorological System



**PAKISTAN** By Lieutenant General Tariq Waseem Ghazi (Ret.)

The cooperation between the military and civilian sectors in Pakistan in addressing climate challenges has taken various forms, aimed at enhancing resilience and response capabilities. Here are some key aspects:

- 1. Disaster Response and Relief Operations: The military often plays a crucial role in disaster response during natural calamities like floods and earthquakes. Their logistics, planning, and rapid mobilization capabilities help deliver aid and support to affected areas quickly.
- 2. Community Engagement and Education: The military collaborates with civilian agencies to educate communities about climate change impacts, promoting awareness and encouraging local adaptation strategies.
- **3. Infrastructure Development**: Joint initiatives often focus on building resilient infrastructure, such as flood defenses and sustainable agricultural practices, which can withstand climate-related challenges.
- 4. **Resource Management**: Both sectors work together on projects that promote sustainable resource management, including water conservation and land use planning, which are vital in a country facing severe water stress.
- **5. Policy Implementation**: The military supports the implementation of national policies related to climate action as needed, providing expertise in logistics and security to facilitate government initiatives.

These cooperative efforts help create a more coordinated and effective response to climate challenges, ultimately aiming to safeguard communities and enhance resilience against future environmental stresses.

Pakistan's military and civil cooperation in climate-related activities focuses particularly on disaster relief and environmental conservation. The military conducts relief operations during natural disasters like floods, earthquakes, landslides etc., providing aid and support to affected communities. Civil-military cooperation efforts include tree plantation drives, and the development of sustainable infrastructure projects. These initiatives aim to mitigate the impacts of climate change and build resilience in vulnerable communities.

## 1. FUNDING FRAMEWORK

# 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

In Pakistan, the Armed Forces provide critical support during disasters, especially when civilian capacities are overwhelmed. Their role includes logistical assistance, such as air and land transport for relief goods and personnel, along with conducting search and rescue operations, evacuations, and providing medical aid. They also contribute to restoring essential infrastructure like roads, bridges, and communication networks, and help maintain law and order during relief efforts. Additionally, the military plays a key role in preparedness through joint drills, simulations, and technical training with NDMA and PDMAs to enhance the overall disaster response system.

When requested by a foreign government or deemed necessary, Pakistan's Armed Forces may also be deployed internationally to support disaster response efforts. Their assistance typically includes search and rescue operations, setting up medical camps, transporting relief supplies, and helping restore damaged infrastructure. These international deployments are coordinated through the Ministry of Foreign Affairs and NDMA.

The financial resources required for both domestic and international disaster response operations involving the Armed Forces are typically met through the National Disaster Management Fund (NDMF), which is managed by NDMA. This ensures timely mobilization of funds and enables coordinated, effective deployment of military assets in support of national and international civil protection efforts.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

The Article 245 of the Constitution of Pakistan empowers Government of Pakistan to call upon Armed Forces to aid civil power, whereas Clause 23 (f) of the National Disaster Management Act 2010 particularly deals with requisition and deployment of Armed Forces by the federal government to support in taking measures pertaining to disaster management. Further, National Disaster Response Plan (NDRP) 2019 and Host Nation Guidelines (HNGs) developed by the NDMA, outline the roles of all stakeholders, including Armed Forces, during response to any emergency situation, in recovery and rehabilitation.

For deployment of military resources abroad during emergency situations, NDMA and Ministry of Foreign Affairs act as the primary coordination focal points, offering support to foreign governments on behalf of Government of Pakistan. If offer of support is accepted by the foreign government, military resources are mobilized, as per the requirement.

## 2. POLICIES AND PRACTICES

## 2.1. What is the **legal framework** for the use of the military in domestic and foreign civil protection?

The legal framework governing the Pakistan military's involvement in civil protection is primarily established through a combination of constitutional provisions, specific legislation, and national policies. Here's a more detailed overview:

- Constitutional Provisions. The Constitution of Pakistan provides the foundation for civil-military relations. Article 245 empowers the armed forces to act in aid of civil power during times of internal disturbance, allowing them to assist civil authorities in maintaining law and order. This article is often invoked during emergencies, including natural disasters.
- National Disaster Management Act, 2010. This Act established the National Disaster Management Authority (NDMA) and outlines the framework for disaster risk management in Pakistan. It specifies the roles and responsibilities of various government agencies, including the military, in disaster response and management. The NDMA coordinates the overall disaster response and can request military assistance when necessary.
- Conclusion. Overall, the legal framework for the Pak military's role in civil protection is multifaceted, balancing constitutional authority, legislative mandates, and operational guidelines. This framework is designed to ensure that military assistance in emergencies is effective, accountable, and aligned with national interests and humanitarian principles.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

# 3. OPERATION FRAMEWORK

## 3.1. Which national and subnational military branches are primarily involved in civil protection?

Pakistan Army:

- Provides logistical support, including transportation and engineering services
- Conducts search and rescue operations
- Provides medical aid and relief supplies
- Assists in law-and-order maintenance during disasters

Pakistan Air Force:

- Conducts airlifts of relief supplies and personnel
- Provides medical evacuation services

Pakistan Navy:

- Provides maritime security and search and rescue operations at sea
- Assists in coastal disaster response efforts

## 3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

## Types of Military Involvement

The level of military involvement in climate-related emergencies varies widely depending on the terrain, local capacity, nature of emergency and the specific situation. However, there are some general trends and examples that illustrate the scale of military involvement:

Personnel:

- In major disasters like hurricanes, floods, and wildfires, the military deploys personnel to assist in search and rescue, evacuation, and logistics.
- Military units are not provided special training for disaster response but rather rely on their in-built capacity to mobilise and deploy, and discipline to deliver

### Equipment:

- Heavy equipment: The military has access to heavy equipment like helicopters, trucks, and boats, which can be crucial for transportation, infrastructure repair, and debris removal.
- Specialized vehicles: Some military units have specialized vehicles for search and rescue, medical evacuation, and other disaster response tasks.

#### Funding:

• In some cases, governments may allocate additional funds specifically for disaster response, which can support military involvement.

### **Factors Influencing Military Involvement**

- Severity of the disaster: The scale and intensity of the disaster will determine the level of military involvement.
- Government capacity: The capacity of civilian authorities to respond to the disaster will influence the need for military assistance.
- Military readiness: The readiness and capabilities of the military to respond to disasters will also play a role.

#### **Examples of Military Involvement**

- Disaster Relief and Humanitarian Assistance: The military has been involved in disaster response efforts during natural calamities, such as earthquakes (e.g., the 2005 earthquake in Kashmir) and floods almost every year. The army provides rescue operations, medical aid, and logistical support.
- Pakistan Super Floods (2010, 2022): The Pakistan Army played a significant role in rescue, relief, distribution of relief supplies, deploying troops, helicopters, and other assets.

It is important to note that, while the military can play a crucial role in disaster response, it is often most effective when working in coordination with civilian authorities and other organizations.

See also Section 3.1.

#### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

National Disaster Management Authority (NDMA):

- Overall coordination and planning for disaster response
- Allocating resources and funds for disaster relief efforts
- Developing disaster preparedness and response plans
- Collaborating with provincial and district disaster management authorities

Provincial Disaster Management Authorities (PDMAs):

- Implementing national disaster management plans at the provincial level
- Coordinating with district disaster management authorities
- Mobilizing resources and personnel for disaster response

District Disaster Management Authorities (DDMAs):

- Implementing disaster management plans at the district level
- Conducting risk assessments and vulnerability analyses
- Organizing community preparedness and awareness campaigns
- Coordinating with local government bodies and civil society organizations

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

See Section 3.3.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

In Pakistan, both military and civilian authorities play crucial roles in civil protection, with the National Disaster Management Authority (NDMA) taking a central coordinating and intermediary role. Military personnel are typically called in to assist with both climate-related and non-climate emergencies during significant disasters, such as floods, earthquakes, shortages, riots or severe droughts. The decision to deploy military assistance is generally made by the federal government and always coordinated through NDMA.

While specific details of Standard Operating Procedures (SOPs) for civil-military cooperation in civil protection in Pakistan might not be publicly accessible, we can outline the general framework and principles that guide such collaboration.

## **General Framework**

- National Disaster Management Authority (NDMA): The NDMA is the primary civilian authority responsible for coordinating disaster response efforts
- Pakistan Armed Forces: The military provides support to civilian authorities in various capacities, such as search and rescue, medical aid, logistics, and engineering
- Inter-agency Coordination Committees (ICCs): These committees are formed at various levels (national, provincial, and district) to facilitate coordination and decision-making between civilian and military authorities

### **Key Principles Guiding Civil-Military Cooperation**

- Civilian Supremacy: Civilian authorities retain ultimate decision-making authority. The military operates under the direction of civilian leadership
- Clear Roles and Responsibilities: Each agency has defined roles and responsibilities to avoid duplication of efforts and ensure efficient utilization of resources
- Effective Communication: Clear and timely communication channels are established to facilitate information sharing and coordination
- Joint Planning and Training: Regular joint planning and training exercises are conducted to enhance interoperability and preparedness
- Mutual Respect: Both civilian and military authorities operate with mutual respect and understanding

## **Specific Tasks and Responsibilities**

- Civilian Authorities:
  - o Overall planning and coordination of disaster response efforts
  - Resource allocation and mobilization
  - Policy formulation and implementation
  - Public awareness and education campaigns
- Military Authorities:
  - Search and rescue operations
  - Medical aid and evacuation
  - Logistics and transportation
  - Engineering support (e.g., bridge construction, road repair)
  - Security and law enforcement
  - Humanitarian assistance and relief

## Additional Considerations

- Legal Framework: Adherence to relevant laws, regulations, and international treaties
- Ethical Considerations: Respect for human rights and international humanitarian law
- Environmental Impact: Minimizing environmental damage during disaster response operations
- Post-Disaster Recovery: Supporting long-term recovery and reconstruction efforts

## Domestic vs Foreign Operations

While the primary roles and responsibilities of these authorities generally remain the same in domestic and foreign operations, there are some differences

- Domestic Operations:
  - Civilian authorities take the lead in coordinating disaster response efforts, with the military providing support as needed
  - Military involvement is often focused on specific tasks, such as search and rescue, medical aid, and logistics
  - Coordination and communication between civilian and military authorities are crucial to ensure a seamless response
- Foreign Operations:
  - Civilian authorities often take a more prominent role in coordinating and executing disaster response operations, especially in international relief efforts.
  - Diplomatic channels are used to coordinate with foreign governments and international organizations.
  - Security considerations may be more significant in foreign operations, especially in conflict zones or unstable regions.

Ultimately, the effectiveness of civil protection efforts in Pakistan depends on strong coordination and collaboration between civilian and military authorities, as well as effective planning, preparedness, and response capabilities.

# 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

Pakistan, being highly vulnerable to climate change impacts, has been actively working on enhancing its capacity to respond to climate-related disasters. This includes significant efforts in domestic training and international cooperation.

Military Training:

The Pakistan Armed Forces conduct special training exercises to enhance their capabilities which
provides them the ability to perform well in disaster response, including climate-related emergencies.
These training exercises cover a wide range of skills, such as search and rescue, medical aid, engineering
support, and logistics.

Civilian Training:

- The National Disaster Management Authority (NDMA) and provincial disaster management authorities organize training programs for civil servants, NGOs, and community members on disaster preparedness, response, and recovery.
- These training programs cover topics such as risk assessment, early warning systems, evacuation procedures, and post-disaster recovery.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

There are no specialized units for emergencies. However, as stated previously, military personnel have in-built capacities and organizational structures suited for this task.

## Advantages of Preparing All Armed Forces for Climate-Related Emergencies

The capacities already present within the Armed Forces become available for incremental employment depending on the nature of a climate-related emergency. The advantages of such an approach are:

• Increased Capacity: A larger pool of trained personnel can respond to a wider range of disasters.

- Flexibility: General-purpose forces can be redeployed to disaster zones as needed, providing flexibility in response efforts.
- Reduced Costs: Avoiding the creation of new units which may or may not be optimally used can save significant resources.
- Enhanced Military Readiness: Training in disaster response can improve the overall readiness of the armed forces.

## Disadvantages of Preparing All Armed Forces for Climate-Related Emergencies

- Diluted Expertise: General-purpose forces may not have the same level of expertise as specialized units in specific climate-related tasks.
- Reduced Focus on Core Missions: Training in disaster response may divert attention from core military missions, potentially impacting readiness.
- Logistical Challenges: Mobilizing large numbers of troops for disaster response can be logistically complex.

There is no call for adding additional stress on the military resources and personnel for specialized training as the current training regimes are considered sufficient to respond to disasters. There is, however, an opportunity to enhance operations and capabilities of concerned civilian departments, rescue services, etc. to be able to respond on their own. This will enable the military to become an instrument of last resort, and not as first choice responders or the main option for response.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Pakistan actively engages in regional and international cooperation to address climate change and disaster management challenges. Key areas of regional cooperation include:

- South Asian Association for Regional Cooperation (SAARC): Member countries collaborate on disaster management, including sharing best practices, conducting joint exercises, and coordinating relief efforts.
- Economic Cooperation Organization (ECO): Member countries cooperate on climate change mitigation and adaptation, water resource management, and disaster risk reduction.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Key areas of international cooperation include:

- UN Agencies: Pakistan collaborates with UN agencies like the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), and the World Food Programme (WFP) on climate change adaptation and disaster response.
- Bilateral Initiatives: Pakistan works with countries like China, the United States, and the United Kingdom on climate-related projects and capacity building.
- International Forums: Pakistan participates in international climate change conferences and negotiations, such as the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC).

By strengthening domestic training and international cooperation, Pakistan aims to enhance its resilience to climate change impacts and effectively respond to climate-related disasters.

# 5. ANALYSIS

### 5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

The Pakistani military, with its resources, discipline, and expertise, can play a crucial role in addressing climaterelated challenges. Here are some key advantages:

Rapid Deployment and Response:

- Quick Mobilization: The military can rapidly mobilize large numbers of personnel and equipment to disaster-stricken areas.
- Efficient Logistics: They have well-established logistical networks to ensure timely delivery of supplies and aid.

Specialized Skills and Equipment:

- Engineering Expertise: Military engineers can construct temporary shelters, repair infrastructure, and build protective barriers.
- Medical Facilities: Military medical units can provide essential healthcare services to affected populations.
- Heavy Equipment: The military possesses heavy machinery, such as bulldozers and excavators, for clearing debris and restoring infrastructure.

Discipline and Organization:

- Efficient Operations: Military personnel are trained to work in challenging conditions and follow strict protocols.
- Effective Coordination: They can coordinate with civilian authorities to ensure a smooth and efficient response.

Security and Law Enforcement:

- Maintaining Order: The military can help maintain law and order in affected areas, preventing looting and other criminal activities. They can also ensure efficient and safer relief delivery and distribution.
- Protecting Aid Workers: They can provide security to aid workers and humanitarian organizations.

Experience in Crisis Management:

• Crisis Response: The military has experience in managing crises, including natural disasters, and can apply these skills to climate-related challenges.

By leveraging these advantages, the Pakistan military can contribute significantly to mitigating the impact of climate change and enhancing the country's resilience to natural disasters.

The military in Pakistan has been at the forefront of ALL national emergencies, whether climate related or otherwise. The nation has come to rely on it for providing relief with its efficient, well-practiced and economical disaster management. It is only in recent years that this capacity has started to slowly migrate to the civilian agencies, but there is still a long way to go. Pakistan does not have the resources to field a separate emergency response mechanism and has found the dual-mission capable role of the military both economical and practical. While working under the decision-making authority of the civil leadership, this role is unlikely to see a major change any time soon.

### 5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

While the military can play a crucial role in disaster response, certain tasks are best suited for civilian agencies:

- Long-term Recovery and Reconstruction: Civilian agencies, such as housing authorities and urban planners, are better equipped to handle the complex process of rebuilding infrastructure and communities.
- Social Services and Psychological Support: NGOs and social workers can provide essential support services to affected populations, including counselling, trauma therapy, and community rehabilitation.
- Economic Recovery: Economic development agencies can implement strategies to revitalize affected economies, such as job creation programmes and business support.
- Policy Development and Planning: Government agencies can develop long-term policies and strategies to address climate change and reduce disaster risk.
- Donor Coordination: Civil agencies are better able to build rapport with donor agencies and fulfill the necessary reporting requirements.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

Military involvement in civil protection can have both positive and negative impacts.

Positive Impacts:

- Enhanced Public Image: Successful disaster response operations can improve the public's perception of the military.
- Increased Morale: Involvement in humanitarian missions can boost the morale of troops and enhance their sense of purpose.
- Skill Development: Participation in disaster relief operations can provide valuable training and experience for military personnel. However, this is not the primary function of military but an additional stress and burden.

Negative Impacts:

- Diversion of Resources: Significant military involvement in civil protection can divert resources from core military missions, such as training and equipment procurement.
- Strain on Personnel: Extended deployments for disaster relief can lead to fatigue, stress, and burnout among military personnel.
- Risk to Military Personnel: Disaster response operations can expose troops to hazards, such as extreme weather conditions, disease outbreaks, and accidents.
- Potential for Mission Creep: Excessive involvement in civil protection tasks can dilute the military's focus on its primary mission of national defense.

To mitigate these negative impacts, it is essential to maintain a balance between military and civilian roles in disaster response. The military should focus on tasks that require its unique capabilities, such as search and rescue, logistics, and engineering support. Civilian agencies should be primarily responsible for long-term recovery, social services, and economic development.

5.4. What effect does military involvement in civil protection have on **force readiness**?

NDMA Cannot comment upon effects of Military involvement and civil protection. viz a-viz force readiness.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

In the recent past, national responses to COVID-19 pandemic and Floods 2022 stand out as exemplary examples of civil-military cooperation during emergency situations. The National Command & Operation Center (NCOC) was established during the early response phase to COVID-19 pandemic, which served as the nerve center for the national response, as a policy forum for civil and military leadership to analyse emerging situation and take timely decisions for effective response. The NCOC model for response to pandemic was praised globally, as a best practice for coordinated response.

Similarly, the National Flood Response and Coordination Centre (NFRCC) was set up by the Government of Pakistan immediately after the initial spell and floods in 2022, as a key body responsible for coordinating flood

relief efforts, at federal, provincial and district level. Armed Forces played a critical role in search & rescue operation and delivering relief items, with the support of civil administration.

On both occasions, National Disaster Management Authority (NDMA) Pakistan served as the key entity in both setups, working as the implementation arm for the policy decisions and lead in procurement of relief, coordination of foreign aid and asset mobilization.

National Disaster Management Plans and best practices for reference:\_(https://www.ndma.gov.pk)

### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

National Disaster Management Act 2010 National Disaster Response Plan 2019 Host Nations Support Guidelines



### 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

ROMANIA

The funding framework for the use of the military in domestic and foreign civil protection comprises the following laws:

- Law No. 481/2004 regarding civil protection which states that all civil protection expenditures are allocated in the national/local budget, depending on situation
- Government Ordinance No. 21/2004 regarding Emergency management system which states that all emergency interventions are paid from national/ local budget or from other internal/ external sources
- Government Decision No. 557/2016 regarding the risk management which describes the role/place of MoD forces within the emergency situation management system (including the civil protection)

1.2. Which government datasets provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

The Ministry of Interior (MoI) is the *first responder* in case of emergency and it has all the information regarding this domain. A part of the requested data is not releasable to the public so it should be requested through your chain of command at the Ministry of Defence (MoD).

## 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

The legal framework for the use of the military in domestic and foreign civil protection comprises the following laws:

- Law No. 431/2001 regarding transfer of civil protection structures/ responsibility from MoD to MoI •
- Law No. 481/2004 regarding the civil protection
- Law No. 346/2006 regarding functioning of the MoD
- Government Decision No. 557/2016 regarding the risk management

2.2. Does the military have **policies**, procedures, or guidelines for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Climate change mitigation

Climate change adaptation and resilience

The Strategy on the Adaptation of Romanian Armed Forces for Climate Change and Energy Transition (to be adopted until the end of 2023) includes adaptation measures and actions for our armed forces in order to be well-prepared for more frequent support requests in civilian operations due to climate-related disasters, such as civil protection, including search and rescue and evacuation, and humanitarian aid.

#### 3. OPERATIONAL FRAMEWORK

#### 3.1. Which national and subnational military branches are primarily involved in civil protection?

At national level, the MoI forces are the primary responsible in case of civil protection matters. Depending on the situation, the MoI can ask additional support capabilities from the MoD (e.g. firefighters, engineers, drivers etc.).

### 3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

There are no special civil protection tasks to be done by the military. The MoI is responsible to take all the necessary measures in order to mitigate all emergency situations. For the MoD the civil protection represents a secondary mission. The MoD must provide capabilities based on MoI request and availability. In foreign operations all aspects are managed by the MoI or the MoD based on the signed treaties/ agreements/ protocols/ technical agreements.

3.3. Which **national and subnational civilian authorities** are primarily involved in civil protection?

The Mol through the Department for Emergency Situations.

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The MoI is the primary responsible institution for all the civil protection tasks.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

The civil-military cooperation concerning the civil protection matters is described by the Law no. 15/2015 regarding Emergency management system. The Mol through the Department for Emergency Situations is primarily responsible and the leading institution in civil protection matters, in both internal and foreign operations.

## 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

For emergency situation there are planned activities (at least two/ year) between military and different *Emergency units. (local/ private or national emergency units).* In this training can be involved the military firefighter cell and/or the entire personnel from certain military units, depending on scenario.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

The military units do not have specialized personnel in civil protection except for firefighters.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Cross-border cooperation is available for the MoI forces depending on the regional agreements and/or the international treaties.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Danube-Kris-Mures-Tisa Regional Cooperation

Disaster Preparedness and Preventive Initiative for South-Eastern Europe

EU Emergency Response Coordination Centre

International Federation of Red Cross and Red Crescent Societies

NATO Euro-Atlantic Disaster Response Coordination Centre

UNDP Global Risk Identification Program

UN Office for the Coordination of Humanitarian Affairs

## 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

The main advantage would be the establishment of civilian-military joint rapid response teams and plans for effective response and recovery on- and off-site at the onset of a disaster or crisis. Moreover, it would be an opportunity for providing real-time situational awareness and systematically collect post-event data to produce analyses and lessons learned.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

Civilian agencies could have an important role in addressing the impact of environmental issues and climate change on security and defence that are also related to civil protection. In this regard, RO MoND will seek for an increased cooperation with civilian agencies in order to achieve national objectives on the need to strengthen resilience and preparedness, civilian-military capability development, operational readiness, and coordination for disaster response and humanitarian aid.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

It is important to recognize that armed forces across NATO and the EU are confronted with a changing and increasingly challenging security environment in Europe and beyond. To these evolutions, military involvement in civil protection activities put an additional pressure on the capacity to train, adapt and equip the armed forces for a more frequent assistance to civilian authorities in response to disasters.

5.4. What effect does military involvement in civil protection have on **force readiness**?

Military involvement in civil protection activities has a certain impact on readiness and ensuring operational effectiveness of our core tasks. Following the implementation of the <u>Strategy on the Adaptation of Romanian</u> <u>Armed Forces for Climate Change and Energy Transition</u> (October 2023), our armed forces to be well-prepared for more frequent support requests in civilian operations due to climate-related disasters, such as civil protection, including search and rescue and evacuation, and humanitarian aid.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

## 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.



By Defence Policy General Directorate, Spanish Ministry of Defence

# 1. FUNDING FRAMEWORK

1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

The overarching legislation is the following:

- Organic Law 4/1981, of 1 June, regarding states of alarm, emergency and siege
- Organic Law 5/2005 National Defense, regulating the National Defense and delineates the missions of the Armed Forces and the conditions for deployment abroad
- Law 36/2015 National Security that ensures the coordination among the Public Administrations (currently there is a proposed bill to update this law)
- Law 17/2015, National Civil Protection System
- Royal Decree 399/2007, Emergency Military Unit Protocol

**SPAIN** 

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

See:

Spanish Civil Protection System within the EU Spanish Civil Protection and Emergency Directorate Military Emergency Unit

## 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

- Royal Decree 399/2007, Emergency Military Unit Protocol
- PCI/488/2019 Order, Civil Protection National Strategy
- Civil Protection Emergency General Plan of the State

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

#### CLIMATE CHANGE

- Law 7/2021, of 20 May, Climate change and energetic transition
- Directive 01/2023 Spanish MoD actions on Climate Change
- Climate Change Ministry of Defence Strategy

DISASTERS

• Royal Decree 399/2007, Emergency Military Unit Protocol

## 3. OPERATIONAL FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

Military units whose main role is civil protection are the:

- Military Emergency Unit
- Air Force 43rd Air Group

Army, Navy, and Air Force could support civilian authorities. Military Emergency Unit and 43rd Air Group support on request under extraordinary circumstances.

## 3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

Military civil protection tasks include:

- Intervention during emergencies that have their origin in natural hazards; among these are floods, spillovers, earthquakes, landslides, large snowstorms and other adverse weather conditions
- Intervention fighting forest fires
- Intervention during emergencies derived from technological hazards; among which are chemical, nuclear, radiological and biological hazards
- Intervention during emergencies as a consequence of terrorist attacks or illicit or violent acts, including those acts against critical infrastructures, dangerous installations or with nuclear, biological, radiological or chemical agents
- Intervention during situations of environmental contamination
- Intervention during any other emergency deemed appropriate by the Government

There is no difference between domestic and foreign operations other than command and control responsibilities.

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

- State level: Ministry of Interior, Civil Protection and Emergency Directorate
- Regional level: Autonomous Communities
- Local level: Provinces and Municipalities

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

State-level competences:

- Preparation of civil protection plans at state level
- Studies of risk analysis
- Wider research
- Programmes and studies of civil protection for civilians
- Management of the budget
- Coordination and provision ongoing learning to civil protection bodies at state-level
- Responsibility for leading and coordinating civil protection
- Physical protection of people and goods in the situation of serious collective risks, public disaster, or extraordinary catastrophe where the security and lives of people are in danger
- Management of severe emergencies
- Cooperation with the Autonomous Communities in the management of serious and less serious emergencies, especially via Military Emergency Unit; established in 2007
- Issuance of planning directives for various emergency plans; including objectives, alternatives and determination of time limits to hypothetical emergency situations
- Coordination of different plans for resource contribution
- Provision of information for the Crisis Cabinet
- Representation in NATO Senior Civil Emergency Planning Committee (SCEPC)

Regional-level autonomous community competences:

- Actions in the field of civil protection
- Daily civil protection
- Direction of activities in case of supra-local emergency

Provincial competences:

Securing coordination and provision of municipal services

Municipality competences:

- Protection of citizens
- Direction of activities in case of local emergency
- Prevention activities at local level
- Establishing a Service for Civil Protection (>20 000 inhabitants).

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

Standard operating procedures are the same for civil and military emergency units.

Response actions are carried out through the activation of the different civil protection plans. The National Plan for Civil Protection Emergencies is activated when a national emergency is declared, while regional and local emergency plans are activated when the emergency is to be managed at the autonomous community level or at the municipal level, respectively. the

Autonomous communities hold exclusive competence in the area of civil protection in case of emergencies which have not been declared national emergencies. The national government can support the autonomous communities by deploying and facilitating human and material resources, as agreed by the National Civil Protection Council, and in coordination with the autonomous communities. In case of national emergencies, the Military Emergency Unit commander is designated as operative director under the authority of the Ministry of Interior.

On foreign operations decisions and hierarchy depends on the Host Nation laws and regulations. Of course, security is the main national caveat in case of disagreement.

# 4. TRAINING AND TOOLS

4.1 What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

Civil Protection Training is provided by the National Civil Protection School, under the Ministry of Interior, for both military and civilian agencies. Training covers the actions of the comprehensive risk and emergency cycle: Risk analysis and prevention, planning, operational intervention and rehabilitation. There is a general module for training in the basics of civil protection and an international module compiling activities targeted at professionals from other countries. Components of the Military Emergency Unit and 43rd Air Group participate in this training.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

Yes, they have.

Military Emergency Unit training, resources and capabilities:

- Intervention during emergencies that have their origin in natural hazards; among these are floods, spillovers, earthquakes, landslides, large snowstorms and other adverse weather conditions
- Intervention fighting forest fires
- Intervention during emergencies derived from technological hazards; among which are chemical, nuclear, radiological and biological hazards
- Intervention during emergencies as a consequence of terrorist attacks or illicit or violent acts, including those acts against critical infrastructures, dangerous installations or with nuclear, biological, radiological or chemical agents
- Intervention during situations of environmental contamination
- Intervention during any other emergency deemed appropriate by the Government

43rd Air Group training, resources and capabilities:

• Aerial intervention fighting forest fires

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Yes, Spain does. Through bilateral agreements with France, Portugal, and Morocco, and participating on international coordination mechanisms.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Spain is a contributing member of all of these organization, so there are permanent information sharing and requests, reports, and return procedures established.

## 5. ANALYSIS

5.1. Are there advantages to having the military do some civil protection tasks? If so, which ones and why?

Military and civilian units or teams specialized on civil protection could achieve the same permanent readiness, training, cross functional knowledge of its members, risk aceptation, and discipline standards, through training and experience, so there are no clear advantages to having the military do civil protection tasks.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

Military and civilian units or teams specialized on civil protection could achieved the same permanent readiness, training, cross functional knowledge of its members, risk aceptation, and discipline standards, through training and experience, so there are no clear advantages to having civilian agencies do civil protection tasks.

5.3. What effect does military involvement in civil protection have on **force composition**, **recruitment**, **morale**, **and retention**?

Spanish military units committed to civil protection as their main role are not affected in terms of composition, recruitment, morale, and retention.

5.4. What effect does military involvement in civil protection have on force readiness?

There is no effect on force readiness as the only military units involved in civil protection are Military Emergency Unit and 43rd Air Group.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

Yes, they do. COVID19 pandemic, La Palma island volcanic eruption (2021) are recent examples in Spain.

## 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

See: National Civil Protection Strategy



### **SWEDEN**

By Swedish Civil Contingencies Agency (MSB), Swedish Armed Forces and Annica Waleij, Senior Analyst, Swedish Defence Research Agency (FOI)

#### **1. FUNDING FRAMEWORK**

#### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

In domestic civil protections, if the support is performed in the framework of the Civil Protection Act (<u>Law</u> 2003:778), that defines responsibilities towards civil protection for local authorities and governmental agencies in peacetime, and no additional funding is provided. However, should the support be channelled through the Decree of 2002:375, Swedish Air Force Support to Civil Defence, additional funding will be provided.

Internationally, the Swedish Civil Contingencies Agency (MSB) is coordinating all Swedish civil protection support, which usually does not include the military. If it does include the military, the staff will be subject to MSB command and control.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

Nationally, Swedish civilian authorities provide risk and vulnerability analysis that are used for domestic purposes. In case of the Swedish Air Force (SwAF) being tasked to support international crises management operations, the SwAF Medical Intelligence Network will provide a baseline assessment for the vulnerability of the region in question.

#### 2. POLICIES AND PRACTICES

#### 2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

In accordance with Swedish legislation, civil protection is the responsibility of civilian agencies in peacetime. Swedish civilian agencies, councils and regions are mandated, trained and equipped to respond to crises in peacetime. The Act on Municipal and County Council Measures Prior to and During Extraordinary Events in Peacetime and during Periods of Heightened Alert (Law 2006:544) defines responsibilities with regards to civil protection for local councils and regions. The Civil Protection Act (Law 2003:778) defines responsibilities towards civil protection for local authorities and governmental agencies in peacetime. Governmental Decrees 2006:637 and Decree 2022:524 regulate local councils, regions and governmental agencies' responsibilities towards civil preparedness and crisis management in peace time. The Total Defence Service Act (Law 1994:1809), Total Defence and Heightened Alert Act (Law 1992:1403), and Law 1994:1803 regulate responsibilities in times of conflict.

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

At the moment, no. There are some climate and vulnerability assessments produced for various national military bases. But by and large these topics are still a work in progress. Sweden also participates in NATO Science and Technology Organization (STO) activities on climate change and security (SAS-182) and Carbon Footprint Assessment of Military Organizations and Operations and related Logistics (SAS-184). Activities like this might be able to inform future policy development.

#### 3.1. Which national and subnational military branches are primarily involved in civil protection?

Mostly the Home Guard will assist (nationally).

3.2. Which **civil protection tasks** are done by the military? Do these differ in domestic and foreign operations?

Swedish Air Force, e.g. the Home Guard, will be asked/tasked by the government, probably through MSB, on what the needs are.

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

Sweden operates a sectoral structure for civil preparedness (crisis management and civil defence). Government agencies are divided into 10 sectors. The sector for civil protection is coordinated by the Swedish Civil Contingencies Agency and includes the Swedish Coast Guard, the County Administrative Boards, the Swedish Police Authority, the Swedish Maritime Administration, the Swedish Meteorological and Hydrological Institute and the Swedish Radiation Safety Authority. In addition, municipalities manage local rescue services and form an essential part of civil protection in Sweden.

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The main tasks of the Swedish Civil Contingencies Agency (MSB) operations are to save lives, reduce suffering, protect property, safeguard the environment, enhance freedom and security as well as to increase resilience against crises and disasters in society. The tasks differ somewhat in domestic and foreign operations. For example, nationally MSB works to support municipal and regional crisis response and provide additional resources (e.g., helicopters, planes). Internationally, MSB works to support international organisations (e.g., the United Nations) through seconding staff and logistical support. Internationally, MSB support has had a slightly different profile and, for example, has included emergency accommodation.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

According to MSB, there are no established Standard Operating Procedures for civil-military cooperation in civil protection. Civil protection is the responsibility of civilian authorities during peace-time. Military support is only involved under extraordinary circumstances and as at such times decisions are made on an ad-hoc basis, e.g., during the forest fires in 2018.

#### 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

At the national level, the Swedish Civil Contingencies Agency (MSB) and the Swedish Armed Forces trained in a joint exercise 'SAMÖ' in 2023 and in <u>NATO CMX25</u> in 2025. NATO CMX25 trained the Swedish Government and governmental departments. There are further trainings at the regional level where Swedish Armed Forces train with civilian crisis management structures. For example, the Västmanland region conducted a training in crisis alarm response which included regional armed forces in the beginning of 2024.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

Not really, but the SwAF will assist with their unique capabilities e.g., within logistics, according to the tasking from the civilian counterpart (e.g., MSB).

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Cross-border cooperation exists between civilian authorities at all levels. At the ministerial level, Nordic countries meet at regular basis. One example of cooperation is in the field of CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosive) where joint guidelines and operational routines have been established. There is also collaboration at regional level, e.g., in the field of forest fire prevention and health care in crisis situations, through the <u>Nordred</u> agreement between Nordic countries.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Sweden is active in the EU Emergency Response Coordination Centre. Sweden provides support to the International Federation of Red Cross and Red Crescent Societies, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, and UN Office for the Coordination of Humanitarian Affairs and actively participates in meetings relating to coordination, fundraising, high-level panels, etc.

#### 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

In accordance with Swedish legislation, civil protection is the responsibility of civilian agencies in peacetime. Swedish Defence can only act in a supportive capacity. In certain crises, the Swedish Defence can be a useful supportive partner with provision of staff and specific equipment and vehicles.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

In accordance with Swedish legislation, civil protection is the responsibility of civilian agencies in peacetime. Swedish civilian agencies are mandated, trained and equipped to respond to crises.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

In general, the reward for SwAF is to successfully provide the resources that elevate the civil protection needs and Swedish national security, in a whole of government approach.

5.4. What effect does military involvement in civil protection have on force readiness?

The Swedish Total Defence concept assumes that the civilian and military sides work closely together in a whole of government approach during peacetime, crises nationally and internationally and ultimately armed conflicts. However, given the core task of the military, there might be a risk of draining military resources, creating a "mission creep."

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

The 2014 forest fire in Västmanland provided several lessons for civil military cooperation. The need for improved coordination, joint training and compatible systems for communication were among the lessons highlighted in the after-action report.

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

See:

A Quick Guide to the Norwegian-Swedish ISI Project: A Cross-Border Development Scheme Barents Rescue 2019



## SWITZERLAND

By Swiss Armed Forces, Armed Forces Staff

#### 1. FUNDING FRAMEWORK

#### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

The funding document about the army in Switzerland is the Federal Constitution (<u>SR 101</u>). Article 58 of the Constitution describes how the army operates.

Another central document is the federal law on the army and the military administration (in German: Bundesgesetzüber die Armee und die Militärverwaltung, <u>MG, SR 510.10</u>).

Furthermore, the application is described in the ordinance on domestic military disaster relief (VmKI, SR 513.75).

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

#### Disaster event name, type, and location

Non-exhaustive list of Swiss Army commitments to local authorities 2024, Sierre (VS) and Val Maggia (TI), flooding 2023, La Chaux-de-Fonds (NE), summer storm 2023, Greece, forest fire 2023, Bitsch (VS), forest fire 2022, several places, water supplies for cattle during droughts 2022, Ovronnaz (VS), evacuation of people due to avalanche risks 2021, Cressier (NE), flooding 2021, Greece, forest fire 2017, Bondo (GR), landslide 2015, Scuol (GR), flooding 2011, Kander (BE), flooding 2011, Visp (VS), forest fire 2007, cantons of Vaud, Bern and Fribourg (VD, BE, FR), flooding 2007, Greece, forest fire 2005, several cantons (BE, OW, NW, UR, SZ, GR), flooding 2004, Indonesia, earthquake and tsunami 2000, Gondo (VS), landslide 1999, several places, winter tempest "Lothar"

#### **Responding military branches and units**

Mostly:

<u>Air Force</u>

#### Military engineering and rescue troops

Other troops could also be called for specific needs (e.g. military health service during COVID-pandemic)

#### **Requesting institutions**

Due to its strongly decentralised organisation, local authorities (most part of the time the cantons, but it could be also municipalities) can request the support of the Swiss Armed Forces. Each canton has a command staff comprising the civil emergency services (police, fire brigade, ambulance). The latter is in contact with the cantonal liaison staff, which represents the army. If all civilian resources are exhausted, the cantonal authorities concerned can submit a request to the <u>Joint Operations Command</u> for support from the army. This request is evaluated and forwarded to the Federal Council for approval. This is made possible by the Ordinance on Military Assistance in the Event of Disasters in Switzerland. (<u>VmKI, SR 513.75</u>).

#### Response type, start and end dates, funding source, funding total, and personnel total

The type of respond depends on the demand that is addressed. Helicopters flights are organised for water transport during droughts. Water air droppings are also done during wildfires. During events of flooding or landslide, the material and the military engineering and rescue troops could be used to prevent or to remediate such situations. They are deploying their material that is specially chosen to operate in these conditions. The costs of deploying the armed forces are the responsibility of the local authorities (cantons). The Federal Council may decide to reduce or even cancel the amount of the due invoice.

The personal deployed is summarized in the <u>sustainability report (2022) of the Federal Department of Defence</u>, <u>Civil Protection and Sport (DDPS)</u>, from p.29.

#### 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

For national perspective, please see the answer in Section 1.1.

More pieces of information about the use of the military in foreign civil protection could be found on the home page of the <u>Military Disaster Relief</u> of the Swiss Armed Forces and civil affairs support. Basically, the ordinance on domestic military disaster relief (<u>VmKI, SR 513.75</u>) and the Ordinance on disaster relief abroad (<u>VKA, RS 974.03</u>) are the main guidelines. Moreover, a series of bilateral agreements is also done with all our neighbouring countries (i. e. <u>D</u>, <u>F</u>, J, <u>FL</u> and <u>A</u>).

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

#### **CLIMATE CHANGE MITIGATION**

Several civil laws and documents internal to the federal administration set a series of objectives (e. g. <u>CO2 Act</u>, <u>SR 641.71</u>), some of which are specifically designed for the Swiss Armed Forces (<u>Klimapaket Bundesverwaltung</u>). Within the DDPS, an <u>environmental chart</u> and an <u>action plan</u> set objectives for 2030.

#### **CLIMATE CHANGE ADAPTATION AND RESILIENCE**

At federal government level, a <u>climate change adaptation strategy</u> and <u>action plans</u> have been put in place. The Swiss Armed Forces are a support body for local authorities in the event of disasters (see answer to question 1.1). At the moment no such documents exist specifically for the Swiss Armed Forces.

#### **DISASTER PREVENTION**

As for previous answers, civil laws are also applied to the Swiss Armed Forces, such as the Ordinance on Protection against Major Accidents (MAO, SR 814.012) or the Ordinance on the transport of dangerous goods by road (SDR, SR 741.621).

For the infrastructure, <u>armasuisse (Federal Office for Defence Procurement)</u> edits several standards and norms that are dealing with the specific materials of the Swiss Armed Forces.

For users (troops and civilian personnel), a number of regulations and guidelines have been issued, some under the supervision of the Chief of the Armed Forces. These documents are not publicly available.

#### **DISASTER RESPONSE**

The responses are included in the answer in Section 2.1.

#### DISASTER RECOVERY

This is a matter for the civilian authorities, not the Swiss Armed Forces nor the Department. There is one exception, however, and that is the case of the <u>former ammunition depot at Mitholz (BE)</u>, which exploded in 1947. Following further studies done in 2017, it was decided to proceed to a recovery for this site. The DDPS General Secretariat is supervising this task. The Armed Forces are providing support, particularly in dealing with unexploded ordnance.

#### 3. OPERATIONAL FRAMEWORK

#### 3.1. Which national and subnational military branches are primarily involved in civil protection?

Please consider the answer in Section 1.2.

As supplementary pieces of information, the training unit Military engineering and rescue troops (Lehrverband Genie Rettung ABC) can also make recruit schools available in disaster situations (<u>Rettungsschule 75</u>, <u>Genieschule 73</u>). A "first hours" troop exists since 2004: the <u>Katastrophenhilfe Bereitschaftsbataillon</u>. Members involved at different tasks with the training unit constitute this battalion. Moreover, the territorial divisions can also provide other troops if required.

#### 3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

It all depends on the context of the intervention, but it can take the form of:

- Aerial evacuation of people
- Search and rescue of people from rubble
- Water bombing
- Transporting water
- Provision of earthmoving or construction equipment
- Provision of temporary bridges and footbridges
- Transporting essential goods
- Providing search facilities for missing persons
- Providing perimeter security and access control services
- Supporting emergency services (ambulance, fire brigade)

It should be noted that some missions can only be carried out by professional soldiers, while others can be carried out by conscripts.

#### 3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

The municipal and cantonal authorities organise the police, fire brigade, ambulance and civil protection services according to the predefined distribution within each canton. They also ensure coordination with higher levels, such as the Federal Office for Civil Protection (FOCP).

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

The tasks are accomplished accordingly to the role defined at the answer to question 2.5. The Swiss Armed Forces are only deployed abroad at the request of the competent authorities. The action of deployed Swiss troops is subordinate to the competent local authorities. The difference is that for domestic support operations, all type of troops can be potentially required. Due to our militia system, only volunteers can take part to operation abroad (for the non-professional part).

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

Please consider the answer at the question 1.2, part *Requesting institution(s)*. This describes how the roles are defined. In such cases, the military is always subordinate to the local civilian authorities, independently of the fact that the support is provided in a domestic or international context.

#### 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

<u>Military engineering and rescue troops</u> receive 18 weeks of basic training during recruit school. They learn the military basics and the specifics of their function.

Most training with civilian agencies takes place after this basic training, i.e. when the soldiers are incorporated into their respective units. These are the units that can potentially be mobilised if requested by the local authorities, as they are linked to a perimeter defined by the territorial divisions.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

Please visit the website of the <u>Military engineering and rescue troops</u> (available in D, F or I). There you can discover the spectrum of the formations.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Regular exchange of information takes place at least in the domain of the CBRN defence, where the <u>Federal</u> <u>Office for Civil Protection</u> is also involved. This is made possible by a strong professional component. Disaster relief exercises are also periodically conducted with various partners in neighbouring countries.

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

EU Emergency Response Coordination Centre: No, Switzerland is not a member of the EU.

International Federation of Red Cross and Red Crescent Societies: Switzerland is the host country of the International Committee of the Red Cross in Geneva. Our country is also an active participant.

NATO Euro-Atlantic Disaster Response Coordination Centre: No, Switzerland is not a NATO-member. nevertheless, Switzerland is considered as a partner state but is not taking part to this CoE due to limited resources.

OSCE Strengthening Responses to Security Risks from Climate Change: Yes, Switzerland is a member and donor country.

UNDP Global Risk Identification Program: You may find more information about the involvement of Switzerland regarding the UNDP <u>here</u>.

UN Office for the Coordination of Humanitarian Affairs: Yes, Switzerland is a member and donor country.

#### 5. ANALYSIS

5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

Pool of trained personnel Military units with their own equipment Logistics chain (fuel, food, equipment, etc.) in place Means of action not always available to the civilian authorities (e.g. helicopters) Public acceptance 5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

24/7 on-call service Extensive experience Very high level of training Decentralised distribution of resources Dependent on other chains of command

5.3. What effect does military involvement in civil protection have on **force composition**, **recruitment**, **morale**, **and retention**?

The militia system made conscription compulsory for part of the population. The personnel requirements of the various units are therefore taken into account at the time of recruitment. However, <u>Military engineering and</u> <u>rescue troops</u> enjoy a high level of acceptance among the population and politicians. Its usefulness is not questioned, unlike certain other formations within the army.

5.4. What effect does military involvement in civil protection have on force readiness?

Currently, the <u>Military engineering and rescue troops</u> are an integral part of the armed forces and are designed from the outset to be made available. The question is therefore irrelevant. However, it should be borne in mind that if the number of troops in this corps were to be increased in the future because of more frequent disasters (a possible scenario in the Swiss context), this would be at the expense of the other formations.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

Each operation is evaluated once it has been completed. This helps to improve control and coordination. The most instructive recent operation was the COVID pandemic. These were different troops who were mobilised, on a larger scale and for a longer period than the Military engineering and rescue troops.

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.



## **UNITED STATES**

*By Jessica Olcott Yllemo, Member, Global Military Advisory Council on Climate Change (GMACCC)* 

#### 1. FUNDING FRAMEWORK

#### 1.1. What is the **funding framework** for the use of the military in domestic and foreign civil protection?

Domestically, the National Guard (NG) Bureau ("owned" by each State's governor) is funded by both the federal government and the individual state. The federal government funds the NG if the deployment is federalized but kept under state control. States fund the state-level deployment and operations.

For foreign humanitarian assistance/disaster relief (FHA/DR), funding comes via the annual National Defense Authorization Act (NDAA) congressional appropriations and via mechanisms such as the <u>Overseas Contingency</u> <u>Operations (OCO) Fund</u>.

1.2. Which **government datasets** provide information on the use of the military in domestic and foreign civil protection with regard to preparing for, responding to, and recovering from natural disasters?

National Guard Annual Reports FEMA Annual Reports

Department of State/U.S. Embassy (in whatever country the disaster has occurred)

I don't believe there is a single repository for this kind of info, nor is there a requirement to do so (or report to Congress). It's often done as part of a broader reporting requirements, but it is not the main focus of any standalone reporting.

#### 2. POLICIES AND PRACTICES

2.1. What is the legal framework for the use of the military in domestic and foreign civil protection?

18 USC 1385 Posse Comitatus Act

10 USC: DOD

JP 3-28: Defense Support of Civil Authorities

**Robert T. Stafford Disaster Relief and Emergency Assistance Act** ("Stafford Act") – which largely changed the nomenclature of "civil defense" to "emergency preparedness" for the US

DODD 3020.44 Defense Crisis Management

JP 3-07 Joint Stabilization Activities

JP 3-29 Foreign Humanitarian Assistance

<u>UNCLOS</u> (although the US has not signed/ratified, the majority of UNCLOS tenants are embedded into tactics, techniques, and procedures throughout the USG)

Sandy Recovery Improvement Act of 2013

2.2. Does the military have **policies**, **procedures**, **or guidelines** for its involvement in climate change mitigation, climate change adaptation and resilience, disaster prevention, disaster response, disaster recovery, or equitable disaster response implementation? If so, explain.

Climate change mitigation Climate change adaptation and resilience Disaster prevention Disaster response

2019 Report on Effects of a Changing Climate to the DOD 2021-2022 U.S. Defense Climate Highlights DOD Climate Resilience Portal DOD Tackling the Climate Crisis Portal (includes DOD Climate Adaptation Plan & Progress Report; Climate Risk Analysis; each service branch climate plans) 2022 DOD Sustainability Plan 2022 DOD Greenhouse Gas Emissions Reduction Plan

#### 3. OPERATIONAL FRAMEWORK

3.1. Which national and subnational military branches are primarily involved in civil protection?

National Guard Bureau (in Washington, DC) and 54 National Guard Units (in states and territories); no Naval or Marine Corps components of the National Guard <u>Air National Guard</u>

Army National Guard Divisions, BCTs, and Joint Force Headquarters

3.2. Which civil protection tasks are done by the military? Do these differ in domestic and foreign operations?

Yes, they differ between domestic and FHA. Domestic civil protection tasks are directed by governors or, if a Stafford Act Disaster Declaration has been made, the President of the United States. They are then coordinated with FEMA.

FHA is only executed based on a formal request for assistance (RFA) through a US Embassy at a Host Nation. That request is routed through the Department of State to the rest of the USG interagency; it really depends on the location and request.

Once formally tasked by the DOD, military assets can deploy. For FHA/DR, it depends on the location and request. For example, during the 2010 Haiti earthquake response, the US Navy & Marine Corps evacuated 16,412 US citizens, delivered 2.6 million litres of water and 17 million pounds of food, performed 1,000 surgeries, and treated more than 9,000 patients, and helped reopen the airport and port facilities.

Tasks are typically:

- Search and rescue
- Airlift/sealift/air mobility
- Expeditionary capabilities (medical, search and rescue, salvage, etc.)
- Medical (mortuary affairs, disaster medicine, epidemiology, vector-borne disease tracking)
- Power and water generation
- Survey and salvage
- Engineering
- Security

3.3. Which national and subnational civilian authorities are primarily involved in civil protection?

Domestically, the primary civilian authorities are police, firefighters, emergency managers at the lowest possible Government level. If it is declared a federal disaster, FEMA will get involved (first at the region; then the federal level) and be coordinated through the National Response Coordination Center (using the National Response Framework).

3.4. Which **civil protection tasks** are done by civilian authorities? Do these differ in domestic and foreign operations?

Civil protection tasks are guided by the tenants in the National Response Framework (NRF) and FEMA. It depends on the state, but generally there are Community Emergency Response Teams (CERTs) that handle small to medium disasters.

At the federal level (for FHA/DR), US Agency for International Development (USAID) Office of Foreign Disaster Assistance (OFDA) can/will send a <u>Disaster Assistance Response Team</u> (DART) which are trained specialists to assist with disaster Response.

3.5. What are the **standard operating procedures** for civil-military cooperation in civil protection? How are decisions made, and which hierarchy prevails in the case of disagreement? Does this differ in domestic and foreign operations?

See the answer in Section 2.1. Yes, it differs in domestic versus FHA/DR but generally, the military will defer to the Incident Commander and/or civilian in charge. See <u>Incident Command System</u> for additional details.

#### 4. TRAINING AND TOOLS

4.1. What **civil protection training** exists within the military or between the military and civilian agencies? Which components of the military participate in this training?

There are ample trainings—it's a bit impossible to determine which components of the military participate in training since virtually all of them do. National Guard units train regularly with their state level counterparts as well as federal partners. As an example, the Department of Health and Human Services (HHS) conducts exercises around the country, and NBG (and DOD more broadly) participate in these. See <u>Cascadia Rising 2016 AAR</u>. FEMA also conducts <u>National Level Exercises</u> which DOD assets and NGB participate in. There are also ample Professional Military Education (PME) courses and FEMA <u>Emergency Management Institute</u> trainings available.

Similarly, both US civilian and military personnel train and exercise with partner nations via a variety of programs to foster civ-mil relations. Examples include: <u>National Guard Bureau State Partnership Program</u>; <u>FEMA International Programs and Activities</u>; and various activities via the <u>service branches</u>.

4.2. Does the military have units or personnel with **specialization** in civil protection? If so, what specialized training, resources, or capabilities do they have?

Not sure how to answer this question. Yes, the military has specific <u>military occupational specialities</u> (MOS) that would fall under civil protection.

4.3. Does your country engage in **cross-border cooperation** with other countries' militaries or civilian agencies in civil protection operations? If so, how?

Yes. The US, Canada, and Mexico have several cooperation agreements in place, specifically on difference aspects of a potential response. This includes an agreement of <u>Trilateral Collaboration on Conservation Efforts</u>; <u>US Canada Partnership</u>, coordination on wildfire firefighting via the <u>National Interagency Fire Center</u>, And several agreements/efforts specifically for <u>health emergencies</u>. There has also been a TNTV update to the <u>Columbia River Treaty</u> b/w the US and Canada. There is also a significant effort underway to protect civilians—see the DOD Civilian Harm Mitigation and Response Action Plan (CHMR-AP).

(While not explicitly about civil protection ops, these do have climate elements that I think may be relevant. FWIW, Canada is considered a "domestic source" for the US for things like critical minerals.)

4.4. Does your country engage in **international coordination mechanisms**, such as the EU Emergency Response Coordination Centre, the International Federation of Red Cross and Red Crescent Societies, NATO Euro-Atlantic Disaster Response Coordination Centre, OSCE Strengthening Responses to Security Risks from Climate Change, UNDP Global Risk Identification Program, UN Office for the Coordination of Humanitarian Affairs, or other mechanisms? If so, how?

Yes, US forces engage with several of these entities during a disaster response, though the extent depends on the nature and location of the disaster. Typically, US military forces typically provide the following capabilities during a response: airlift/sealift/air mobility; construction and engineering, power and water generation; and survey and salvage. Forces coordinate with the on-scene commander, typically a civilian via the Incident Command System domestically, and an emergency manager or NGO (e.g. World Food Program) during a foreign humanitarian assistance support mission.

#### 5. ANALYSIS

#### 5.1. Are there **advantages** to having the military do some civil protection tasks? If so, which ones and why?

Yes. Generally speaking, militaries are trained and equipped to operate in austere conditions and are taught (via war college or other training) core command and control (C2). For the US Navy and Marine Corps in particular, their ability to "seabase" (i.e. live on the ships instead of taking up space and resources on the ground) is very beneficial in the immediate aftermath of a disaster. The US military also has a large number of personnel with the skill sets that are needed for humanitarian operations. Firefighting and search and rescue (SAR) are two of the tasks that militaries are uniquely suited to execute, as they are already trained and ready to execute based on their day jobs. Likewise, their rapid logistics (specifically rotary wing) capabilities are extremely beneficial in moving goods. Military involvement in a disaster response also gives the servicemembers irreplaceable training opportunities.

5.2. Are there advantages to having civilian agencies do some civil protection tasks? If so, which ones and why?

Yes, insofar as a core tenant of western militaries remains "civilian control" of the military, and that the military's mission is to protect the national security of a country, vice provide disaster response resources. Militaries have the capability to rapidly deploy and can do so, but likely may not have the interagency coordination or "soft" skills that civilians working in emergency preparedness/disaster response have.

5.3. What effect does military involvement in civil protection have on **force composition, recruitment, morale, and retention**?

Unknown. For example, (F)HA/DR only became a "core mission" of the US Navy a few decades ago. I have not seen anything that speaks to these, though there is growing concern that it is problematic from an operational and corps d'esprit perspective.

See: Overuse of National Guard Threatens to Undermine Preparedness

5.4. What effect does military involvement in civil protection have on **force readiness**?

Unknown. As far as I know, there is no clear DOD reporting mechanism that would allow any kind of analysis on the impacts of using military assets during emergency response. You could, in theory, go through old SITREPs, but getting Those would likely be a near-impossible ask.

5.5. Do specific disasters stand out in terms of lessons learned for civil-military cooperation in civil protection?

US responses in 2017 to Hurricanes Harvey, Irma, and Maria. For Maria, USNORTHCOM was supporting FEMA (Puerto Rico) while USSOUTHCOM was supporting USAID in the broader Caribbean.

#### 6. FURTHER READING

6.1. Please include any references or further reading that should be included in the country profile.

See:

Council on Foreign Relations: <u>What Does the U.S. National Guard Do?</u> Mark Nevitt: <u>The Legal Crisis Within the Climate Crisis</u> Mark Nevitt: <u>On Environmental, Climate Change & National Security Law</u>

# **2.3** Tracking Military Involvement in Climate Emergencies

#### By Dr. Ashley McIlvain Moran<sup>1</sup>

A central challenge to examining the extent and evolution of civil-military cooperation in climate emergencies has been the dearth of systematic data on military involvement in such disasters. No country we surveyed for inclusion in the project currently has a national dataset tracking such military operations. There is also no cross-national dataset that tracks all such operations by national militaries. This project thus develops a system to start tracking such activities, providing a framework for maintaining systematic information on military roles in climate emergencies.

#### **Cross-National Data**

The broadest cross-national data currently available on country responses during emergencies are data reported to the Organization for Economic Co-operation and Development (OECD) Donor Assistance Committee (DAC). These data provide critical information tracking Official Development Assistance to developing countries. The data have several limitations, however, for tracking country responses to emergencies generally and climate emergencies specifically. As noted, these data only include responses by countries reporting to the OECD DAC, only for *cross-border* responses to emergencies, and only those in *developing countries*. The data thus capture a small slice of responses where the military may be involved, since national militaries could provide aid in developing but also developed countries, and abroad but also at home. Further, the OECD data do not track the specific type of humanitarian crisis eliciting the response and thus do not provide readily available information on military involvement specifically in *climate*-related humanitarian crises.

This project thus sought to use these OECD data as a starting point to understand the information they can provide now about military involvement in climate emergencies and how they might be improved upon in the future. We collected data for all countries reporting to the OECD DAC from 2002 to 2022,<sup>2</sup> narrowing the selection to aid for humanitarian assistance and disaster response (HA/DR)<sup>3</sup> provided by military agencies of reporting countries.<sup>4</sup> We then reviewed each response to determine if it was related specifically to a climate-related emergency or not.<sup>5</sup> This allows us to assess which countries reporting to the OECD DAC involve their militaries in climate emergencies, the kind of activities in which militaries engage, and whether this military involvement has increased in recent years.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> The author would like to thank Aden Ariola, Esther Essien, Anikha Guda, and Richard Guzman from the University of Texas at Austin for their excellent research assistance on this project's dataset on military involvement in climate emergencies.

<sup>&</sup>lt;sup>2</sup> 2002 is the earliest year available for the OECD's current aid tracking structure, which went through revisions in 2000-2001. 2022 is the most recent year for which disaggregated response data are available by responding agency, which is needed to identify military responses; see OECD, "CRS: Creditor Reporting System (flows)," *OECD Data Explorer* (OECD, 2025). At the time of this publication in May 2025, the OECD has released 2023 and 2024 data only at the country level, not yet by individual responding agencies; see OECD, "DAC1: Flows by Provider," *OECD Data Explorer* (OECD, 2025).

<sup>&</sup>lt;sup>3</sup> This includes the OECD-DAC sectors related to Humanitarian Aid (sector 700)—which includes aid for Emergency Response (sector 720), Reconstruction Relief and Rehabilitation (sector 730), and Disaster Prevention and Preparation (sector 740)— and Disaster Risk Reduction (sector 43060). See *sector* field in Project CASA, *Dataset on Military Involvement in Climate Emergencies* (Environment & Development Resource Centre, 2025).

<sup>&</sup>lt;sup>4</sup> This is identified by the *donor agency* or *long description* fields of the data; ibid.

<sup>&</sup>lt;sup>5</sup> This determination is noted in a new *climate focus* field we added to the data; ibid.

<sup>&</sup>lt;sup>6</sup> An important prior study on military assistance during disasters, conducted by the Stockholm International Peace Research Institute (SIPRI), used OECD DAC data to assess country-level Overseas Development Assistance and Emergency Assistance. This did not, however, separate assistance specifically by the military or specifically for climate emergencies. Our augmentations thus allow detailed analysis of countries' military responses for climate emergencies that appear in these data. See Sharon Wiharta, Hassan Ahmad, Jean-Yves Haine, Josefina Löfgren, and Tim Randall, *The Effectiveness of Foreign Military Assets in Natural Disaster Response* (SIPRI, 2008), 8.

Twenty-four countries—nearly half of the 50 countries reporting to the OECD DAC during this period—report that their militaries provided humanitarian assistance to developing countries between 2002 and 2022. Of these, 14 report that their militaries were involved in humanitarian assistance specifically related to climate emergencies in developing countries. These are Australia, Austria, Canada, Estonia, Greece, Iceland, Italy, New Zealand, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

Tables 2.4 and 2.5 show countries with the highest levels of cross-border military assistance for climate and non-climate emergencies in developing countries. These data convey the divergent focus of national militaries' humanitarian assistance abroad. The militaries of Canada and Australia, for example, focus a large majority of their humanitarian assistance in developing countries on climate-related emergencies, as Table 2.4 shows. Canada's spike in military assistance abroad in 2013 responded to Typhoon Haiyan in the Philippines, and Australia's spike in military assistance abroad in 2015 responded to Cyclone Pam in Vanuatu. The militaries of the United States, Sweden, and the United Kingdom (UK), on the other hand, focus nearly all of their humanitarian assistance in developing countries on non-climate emergencies, as Table 2.5 shows. For example, the UK military responded to the earthquake in Nepal and migrant search and rescue in the Mediterranean in 2015, and the Swedish military provided consistent assistance for general civil protection activities in roughly two dozen countries each year from 2012-2022.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	% of All Emergency Response in Dev. Cos.
Canada		\$28.1			\$0.2	\$0.6	\$1.0	\$0.1				\$30.1	86%
United States	\$3.9	\$1.9	\$1.5		\$0.1	\$15.9	\$1.4	\$0.1		\$0.2		\$24.9	1%
Australia		\$0.5		\$17.6	\$2.1		\$0.0				\$0.0	\$20.2	60%
Slovenia	\$0.3	\$0.0	\$0.5	\$0.0	\$0.0	\$0.0	\$0.1	\$0.0		\$0.5	\$0.2	\$1.5	31%
Switzerland						\$0.9	\$0.6		\$0.0			\$1.5	38%

Table 2.4. Cross-Border Military Assistance for Climate Emergencies in Developing Countries (in millions)

Source: OECD DAC data refined in Project CASA, Dataset on Military Involvement.

Table 2.5. Cross-Border Military Assistance for Non-Climate Emergencies in Developing Countries (in millions)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Total	% of All Emergency Response in Dev. Cos.
United States	\$136	\$32	\$95	\$105	\$216	\$75	\$175	\$90	\$111	\$1,206	\$934	\$3,175	99%
Sweden	\$18	\$19	\$14	\$13	\$20	\$14	\$14	\$14	\$16	\$23	\$4	\$170	100%
United Kingdom		\$0	\$4	\$11	\$0	\$1	\$0		\$0	\$2		\$17	99%
Australia	\$0	\$2	\$3	\$3	\$2	\$2	\$2					\$14	40%
Canada				\$4	\$0		\$0	\$0	\$0			\$5	14%

Source: OECD DAC data refined in Project CASA, Dataset on Military Involvement.

While the OECD data provide cross-national data collected each year, the narrow focus on cross-border responses in developing countries does not provide a full picture of the scope of even included countries' possible military involvement in emergency response at home and abroad. Our addition of a climate metric helps assess the focus of cross-border assistance on climate versus non-climate emergencies as the number and severity of climate emergencies grow globally. However, the OECD data are still missing key components that prevent a robust cross-national analysis of military involvement in climate emergencies.

Notably, the OECD data do not include the start and end dates for responses, and they often do not include descriptions of response activities, making it difficult to link all responses to specific disasters and thus disaster types—retroactively. There are thus a large number of military deployments for humanitarian assistance and disaster response in the OECD data—29%—that cannot be identified definitively as being related to climate or non-climate emergencies. In our dataset, we tagged these conservatively as "unknown" and analyze them as part of the non-climate set of responses. Our new climate metric thus likely undercounts the number of climate-related responses even within this narrow set of cross-border response data. There is thus a need for more detailed data collection at the national level to track the *type* of crisis eliciting military responses, and to do so in both foreign *and domestic* responses, in developing *and developed countries*.

#### **National Data**

This project develops a framework to track military involvement in climate-related emergencies in an effort to start collecting systematic data on this important aspect of emergency response. The framework accounts for national military activities in both domestic and cross-border civil protection related to climate emergencies. This aims to provide a foundation for building a robust cross-national dataset on military involvement in climate-related emergencies.

In exploring the need for this, we sought to collect comprehensive data at the national level, through officials in countries' government and military, through our own research of publicly available information, and (in one case) through a formal freedom-of-information request. Most countries, however, do not track these data or make them publicly available in a comprehensive way. We thus developed a framework for tracking the full scope of information needed to assess military roles in climate emergencies and piloted the process with available data from a country that does track and publish aspects of these responses, the United States.

The United States did not track responses to disasters until mandated to do so by the Sandy Recovery Improvement Act of 2013, passed in the aftermath of Hurricane Sandy which struck Caribbean nations, the United States, and Canada in 2012, causing an estimated US\$ 65 billion in damages in the United States. The US law now requires the Federal Emergency Management Agency (FEMA) to publish the US Government's mission assignments for disaster responses within 24 hours of their issuance.<sup>7</sup> The US Government now tracks information about each disaster response within the United States, including the disaster type, responding agency, response activities, and a range of other information.<sup>8</sup> Separately, the United States also publishes information about its contributions to humanitarian responses outside the United States, as part of its reporting of foreign assistance to all countries.<sup>9</sup>

This project thus used these domestic and foreign response data from the United States to pilot our framework for tracking national military responses to climate emergencies. We collected data for all US humanitarian assistance and disaster responses<sup>10</sup> within the United States from 2012 to 2023,<sup>11</sup> and outside the United States dating back to 2000.<sup>12</sup> We then narrowed the selection to aid provided

<sup>&</sup>lt;sup>7</sup> US Federal Emergency Management Agency (FEMA), "Sandy Recovery Improvement Act of 2013," www.fema.gov/disaster/sandy-recovery-improvement-act-2013.

<sup>&</sup>lt;sup>8</sup> US FEMA, *OpenFEMA Dataset: Mission Assignments - v2* (FEMA, 2025). Retrieved from www.fema.gov/openfema-datapage/mission-assignments-v2 on January 25, 2025. This product uses the Federal Emergency Management Agency's OpenFEMA API, but is not endorsed by FEMA. The Federal Government or FEMA cannot vouch for the data or analyses derived from these data after the data have been retrieved from the Agency's website(s).

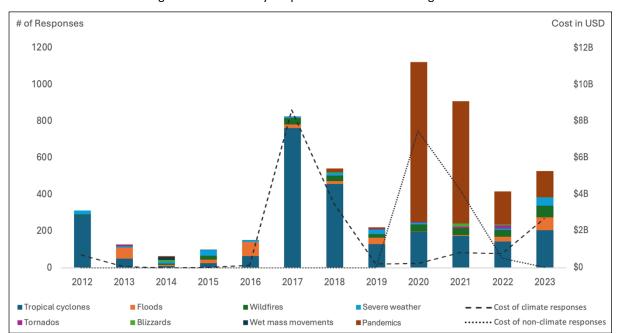
<sup>&</sup>lt;sup>9</sup> US State Department, ForeignAssistance.gov (US Government, 2025).

<sup>&</sup>lt;sup>10</sup> The United States uses the same classification system as the OECD, so US HA/DR likewise includes sectors related to Humanitarian Aid (sector 700)—including aid for Emergency Response (sector 720), Reconstruction Relief and Rehabilitation (sector 730), and Disaster Prevention and Preparation (sector 740)—and Disaster Risk Reduction (sector 43060). See *sector* field in Project CASA, *Dataset on Military Involvement*.

<sup>&</sup>lt;sup>11</sup> 2012 is the first year the US Government started tracking domestic disaster responses; see US FEMA, *OpenFEMA Dataset*.

<sup>&</sup>lt;sup>12</sup> US State Department, *ForeignAssistance.gov*.

by military agencies specifically for climate-related emergencies,<sup>13</sup> using climate emergency types defined by the EM-DAT Disaster Classification System, as described in chapter 1.4. This allows us to assess when the US military has been deployed in climate emergencies at home and abroad, the kinds of emergencies eliciting these responses, and whether military involvement has increased in recent years.





Source: US FEMA data refined in Project CASA, Dataset on Military Involvement.

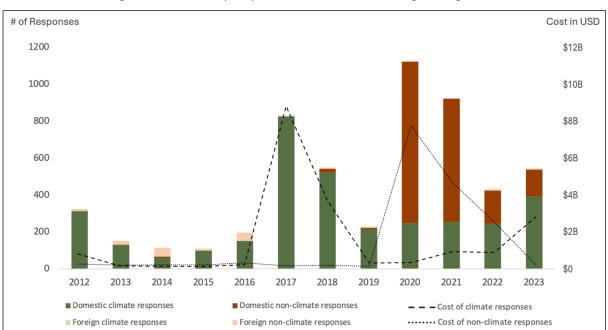


Figure 2.3. US Military Responses to Domestic and Foreign Emergencies

Source: US FEMA and US State Department data refined in Project CASA, Dataset on Military Involvement.

<sup>&</sup>lt;sup>13</sup> See the responding military agency and US disaster description fields in Project CASA, Dataset on Military Involvement.

Analyzing military responses to emergencies within a single country reveals the scope and focus of those responses over time. Figure 2.2 shows the number of US military responses to domestic emergencies from 2012 to 2023. It reveals the US military was most often engaged at home in responses to tropical cyclones (in dark blue) and non-climate events related to COVID-19 (in brown), with spikes in climate-related responses in 2012, 2017, and 2018 and a steady rise in climate responses since 2019. The US military reported 5,353 responses to emergencies—3,453 specifically for climate emergencies—in the United States during this 12-year period.<sup>14</sup>

Figure 2.3 shows all of the US military's domestic climate responses in one category (in dark green) and domestic non-climate responses in another (in dark brown). It also adds US military responses to *foreign* emergencies related to both climate hazards (in light green) and non-climate hazards (in light brown). This reveals that the vast majority of US military responses to climate—and non-climate—emergencies remain within the United States. The scope of US military responses abroad is not insignificant—with 181 responses in 51 countries and several regions, totaling US\$ 3.3 billion over these 12 years.<sup>15</sup> But this is eclipsed by the much larger scope of US military involvement required domestically, with 5,353 military responses to emergencies in the last 12 years, totaling US\$ 29.5 billion.<sup>16</sup>

Most US military responses to domestic emergencies, year on year, have been climate related, as Figure 2.3 and Table 2.6 show. The stark exception is the high number of COVID-19 responses from 2020 to 2022. Outside of these years, however, US military responses to climate emergencies range from 98 to 100% of its domestic emergency response costs each year, as Table 2.6 shows. Further, the cost and number of these responses have increased in recent years, with US military responses on climate emergencies domestically costing US\$ 211 million for 212 responses in 2019, US\$ 764 million for 244 responses in 2022, and US\$ 2.6 billion for 393 responses in 2023.

US Military		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
All emergencies	#	313	130	66	98	152	826	542	222	1122	921	423	537
All emergencies	\$M	\$693	\$75	\$10	\$32	\$137	\$8,402	\$3,458	\$213	\$7,541	\$4,986	\$1,277	\$2,670
Climate emergencies	#	313	128	61	99	152	826	522	212	249	254	244	393
climate emergencies	\$M	\$693	\$75	\$9	\$32	\$137	\$8,402	\$3,451	\$211	\$240	\$816	\$764	\$2,627
Military climate emergency costs as % of all military emergency costs		100%	100%	98%	100%	100%	100%	100%	99%	3%	16%	60%	98%
US Government													
Climate emergencies	#	810	446	226	326	450	1967	1329	604	703	679	807	1054
Climate emergencies	\$M	\$997	\$114	\$23	\$60	\$211	\$9,643	\$4,114	\$344	\$389	\$905	\$889	\$2,909
Military climate emergency costs as % of all government climate emergency costs		69%	65%	42%	54%	65%	87%	84%	61%	62%	90%	86%	90%

Table 2.6. US Military and Government Responses to Domestic Emergencies

Source: US FEMA and US State Department data refined in Project CASA, Dataset on Military Involvement.

<sup>&</sup>lt;sup>14</sup> Ibid.

 <sup>&</sup>lt;sup>15</sup> Note that the US\$ 3.3 billion amount cited here is slightly higher than the roughly US\$ 3.2 billion reported in Tables 2.4-2.5 because Tables 2.4-2.5 only include US military assistance for emergencies in developing countries. Figure 2.4 includes US military assistance for emergencies in all foreign countries. See Project CASA, *Dataset on Military Involvement*.
 <sup>16</sup> Ibid.

Table 2.6 also reveals that the US military is shouldering a large portion of the climate emergency response overall in the United States, and this is increasing. The US military's share of climate emergency response—as a percentage of all climate emergency responses by the US Government domestically—was 69% in 2012, the first year the United States started tracking these data. This increases when civilian agencies are stretched thin, rising to 87% in 2017 when the number of domestic climate responses overall increased four-fold from the prior year, and holding steady around 90% during and after covid. As in the qualitative assessment explored in chapter 2.1, the country-level data explored in this chapter reveal an expanding remit for national militaries in emergencies generally and in climate emergencies specifically.

#### Conclusion

Comparing the three sources of data raised in this chapter—first, the OECD, as the only current crossnational reporting mechanism tracking humanitarian assistance and disaster response; second, national reporting of all foreign responses; and third, national reporting of all domestic responses reveals the narrow slice of national (and particularly military) responses available in current international sources, as well as the potential richness of information available at national levels for climate response analysis. For the 2012-2022 years available in all three data sources, and looking only at the United States, the OECD data reveal 18 US military responses in developing countries during climate emergencies, at a cost of US\$ 24.9 million. The US Foreign Assistance data reveal more deployments and more funding for military responses during climate emergencies over the same period, accounting for responses in *all* countries, not just developing countries, with 19 US military responses at a cost of US\$ 54.7 million. The US FEMA data reveal an even broader swath of additional military responses by tracking *domestic* responses to climate emergencies, identifying 3,060 US military responses domestically during climate emergencies over the same period, at a cost of US\$ 14.8 billion.<sup>17</sup>

This underscores that data currently collected at the international level (via the OECD) severely undercount national military outlays in responding to climate emergencies both in cross-national and in domestic emergencies. This is understandable since this of course is not the aim of the OECD DAC reporting system, but it also drives home that these data cannot effectively be used for this purpose. This pilot data collection effort underscores the need to rely on national-level government data to provide the most comprehensive picture. It also reveals the need to spur broader collection of these national data—a point we return to in the project recommendations in part 3.

<sup>&</sup>lt;sup>17</sup> Ibid. Note that, because these figures seek to compare the robustness of US national data with OECD cross-national data (which is only available through 2022), they only include responses through 2022 and thus do not include the most recent year for which US national data are available, 2023, in which US military responses to climate emergencies jumped to 393 responses costing US\$ 2.6 billion in 2023.

## Part 3: Conclusions and Recommendations

It's clear that climate change is a threat to all types of security and at all levels from the local to the global.<sup>1</sup> The impacts of a changing climate range from short-term events which can be disastrous, to medium-term phenomena which can undermine systems and stability, to long-term long-lasting effects which even can have existential consequences. It is also clear that the military plays an important and increasing role in addressing climate change in all aspects of the disaster risk reduction cycle. International / intergovernmental organizations and mechanisms are also essential players. Partnerships involving cooperation, coordination, and sharing of good practices are essential between all levels of government, the military, local communities, CSOs, and international humanitarian organizations. Good practices can also be advanced from the bottom-up by local authorities and citizens.

Given the retrenchment from mitigation efforts in some countries and therefore the reducing prospects for keeping average global warming below the target of 1.5 degrees, as well as the increasing severity of the climate threat, more and more attention is now being given to adaptation and including resilience, readiness, and response. Also given reductions in development assistance budgets and increasing costs for traditional defense, when it comes to the impact of climate change, the importance of cooperation and coordination among civilian agencies and citizens, the military, and international humanitarian organizations cannot be overstated.

While climate and security action is needed at all levels and in all time frames, this study has primarily focused on the need to predict, prevent, prepare for, and recover from extreme events and, more specifically, on when and how the military becomes involved domestically and abroad. Even more particularly, the aim has been to help increase our understanding of the structures and consequences of cooperation between military and civilian actors at all stages of the disaster risk reduction (DRR) cycle but especially in the response phase.

The original aim of this project—as recalled in chapter 1.3—was to better understand the extent to which there exists coherent and actionable data on military involvement in natural disasters in the interest of improving civil-military cooperation in climate-related emergencies.

As explained in chapter 1.4, this involved exploring patterns in military involvement in climate emergencies, the mechanisms militaries have in place to plan for and respond to these emergencies, and the impacts that participation in these emergencies has had on force structure and operations. This included compiling country profiles on civil-military cooperation in climate emergencies for selected countries, developing a process for creating a new dataset on national militaries' involvement in climate-related emergencies, capturing systematic and comparative data on the scope and nature of military involvement in such disasters, and compiling profiles of international / intergovernmental organizations (IGOs) and mechanisms facilitating civil-military cooperation in these emergencies

Through answers to survey questions provided by officials of government departments and ministries, as well as non-governmental civilian experts, we can draw a range of conclusions.

<sup>&</sup>lt;sup>1</sup> See chapter 1.2 for a more extensive discussion of these issues.

#### Conclusions

The country profiles developed for this study provide useful new comparative information on core frameworks shaping the use of national militaries in civil protection during climate emergencies. They reveal both alignment and stark differences in how countries have structured their legal and policy frameworks, operational frameworks, military training, military and civilian roles in civil protection, and international coordination. Some countries use a general legal framework to guide the overall state disaster response without specifying guidelines for use of their militaries, while others also provide specific guidance on the use of their militaries in civil protection generally or in climate activities specifically. States likewise vary in whether they engage specialized personnel, specialized units, or the full military force in civil protection, and whether they provide military training in specific civil protection tasks or the full suite of civil protection activities.<sup>2</sup>

The civil protection activities done by military and civilian agencies vary widely across countries, but there are some similarities. Militaries are most often involved in the early stages of emergency response, providing services like firefighting, flood response, and other hazard containment; evacuation, aerial support, temporary construction, and other immediate relief; engineering support, and security. Civilian agencies, on the other hand, most often focus on longer-term processes like prevention, preparedness, and recovery. There is wide variation, however, in whether countries' military or civilian agencies (or both) engage in activities related to search and rescue, medical assistance, relief distribution, and infrastructure restoration. Further, the scope of military responses can vary depending on whether the military is engaged in domestic or cross-border civil protection. The oversight of civil protection operations likewise varies across countries, with some charging civilian agencies with this task, others charging the military with overseeing aspects of civil protection, and still others forming joint civil-military control structures.<sup>3</sup>

The country profiles highlight several advantages of giving the military a significant role in civil protection. Many note key skills and assets that make the military well suited to the task of supporting national and international disaster response efforts, particularly the ability to mobilize and deploy rapidly, the ability to operate and communicate in difficult terrain and austere conditions, logistical and engineering capacity, and the ability to augment civilian medical systems. The profiles reveal broad agreement that military responses to emergencies positively impact public perceptions of the military. Similarly, they can have a positive impact on the morale of units involved in responses, as they offer an opportunity to provide direct support to local populations in a time of need. Beyond this, such operations also offer a valuable opportunity to sharpen skills needed for key mission areas in a real-life but non-combat setting. Seen from this perspective, military contributions to civil protection can potentially *increase* readiness.<sup>4</sup>

The country profiles also highlight several disadvantages of military involvement in civil protection. Chief among these is the risk of undermining the military's ability to respond to other, potentially higher priority, threats. Involvement in an increasing number of response operations can also take a toll on personnel and equipment and therefore *decrease* readiness. Countries with military units dedicated to disaster response generally perceive lower risks to readiness, as their military responses to disasters would not affect parts of the force dedicated to other missions. Where this is not the case, relying on the military to provide significant support to civil protection and related operations could also lead to critical gaps in national response capacity, should the military be deployed for other national defense missions and therefore unavailable.

The country profiles note that civilian institutions also offer distinct advantages, underscoring the importance of developing integrated civil-military responses. Whereas military capabilities tend to be

<sup>&</sup>lt;sup>2</sup> See chapter 2.1 and 2.2 for discussion of legal and policy frameworks, operational frameworks, and military training.

<sup>&</sup>lt;sup>3</sup> See chapter 2.1 and 2.2 for discussion of military and civilian roles in civil protection.

<sup>&</sup>lt;sup>4</sup> See chapter 2.1 and 2.2 for discussion of advantages and disadvantages of increased military involvement in civil protection.

concentrated in a few key locations, to be deployed when required, local governments and NGOs are located throughout countries and are generally perceived as having a closer connection with local communities. Civilian agencies also have specialized capacities that are critical in responding to emergencies but less likely to be part of military responses, including providing social services and psychosocial support. They are also likely to be better equipped to manage the coordination of donor support during international response operations. Civilian authorities have a longer-term perspective, focusing not only on immediate response and recovery, but also on prevention, preparedness, reconstruction, and economic development. Citizens themselves are also seen as key to future responses, underscoring that communities are the first line of defense when it comes to preparing for and responding to a range of emergency situations. Overall, this comparative information across countries deepens our understanding of the increasing demands placed on national militaries amid expanding climate emergencies, as well as the range of approaches countries are using to manage these.<sup>5</sup>

A central challenge to examining the extent and evolution of civil-military cooperation and military involvement in climate emergencies has been the lack of systematic data on military deployments in such disasters. Comparing the three sources of data explored in this study—first, the OECD, as the only current international reporting mechanism tracking humanitarian assistance and disaster response; second, national reporting of all foreign responses; and third, national reporting of all domestic responses—reveals the narrow slice of national (and particularly military) responses available in current international sources, as well as the potential richness of information available at national levels for climate response analysis. For the 2012-2022 years available in all three data sources, and looking only at the United States, the OECD data reveal 18 US military responses in developing countries during climate emergencies, at a cost of US\$ 24.9 million. The US Foreign Assistance data reveal more deployments and more funding for military responses during climate emergencies over the same period, accounting for responses in *all* countries, not just developing countries, with 19 US military responses at a cost of US\$ 54.7 million. The US FEMA data reveal an even broader swath of additional military responses by tracking domestic responses to climate emergencies, identifying 3,060 US military responses domestically during climate emergencies over the same period, at a cost of US\$ 14.8 billion.6

This underscores that data currently collected at the international level (via the OECD) severely undercount national military outlays in responding to climate emergencies both in cross-national and in domestic emergencies. This is understandable since this of course is not the aim of the OECD DAC reporting system, but it also drives home that these data cannot effectively be used for this purpose. This study's pilot data collection effort underscores the need to rely on national-level government data to provide the most comprehensive picture. It also reveals the need to spur broader collection of these national data in countries that do not currently track or publish such information on military deployments in climate emergencies.

From what we have learned from a limited but representative overview of civil-military cooperation in climate emergencies, it is safe to draw several overarching conclusions: The role of the military is essential. The need for military involvement is increasing in frequency and extensiveness. Such involvement can provide benefits for the military but also reduce its ability to fulfill its primary mission of providing national security in the traditional sense. Increasing demands on the military and the defense sector at large—for example within NATO—may limit the ability of the military to prepare for and respond to climate-driven impacts that are predicted to become more common. The data infrastructure and coordination mechanisms supporting effective planning and response will need to expand commensurately with the growing challenge.

<sup>&</sup>lt;sup>5</sup> See chapter 2.1 and 2.2 for discussion of comparative advantages of civilian agencies.

<sup>&</sup>lt;sup>6</sup> See chapter 2.3 for discussion of data on military deployments.

On the basis of the findings reported in part 2, as well as insights from this project's advisory and expert groups and project events, we can suggest several broad recommendations for action at the national and international levels. The following are ideas which are hopefully helpful ideas will require further discussion among practitioners and policy makers, but are intended to be practical, affordable, and politically achievable.

#### Recommendations

**1. Track detailed military response data at the national level:** Many countries do diligent work in reporting the sector involved in their responses to emergencies, which can be used to track the military's involvement in high-level categories like 'humanitarian aid' and 'disaster response.' Some countries also track response activity types that provide additional information that can identify whether humanitarian responses relate to a disaster—as opposed to conflict or some other type of crisis—and, in some cases, what kind of disaster, which is needed to identify whether the response relates specifically to a climate emergency. Yet, while Canada and the United States are notable exceptions, most countries' response data do not track and/or publish information on the specific type of crisis eliciting their humanitarian response. This is a major limitation on the information available to military and civilian responders in assessing crisis trends and planning for future responses.

National governments should track detailed data about their responses to domestic and foreign emergencies, including the type of crisis eliciting the response (ideally using the EM-DAT Disaster Classification System<sup>7</sup>), the type of response, the responding agency, the start and end dates for the response, and the EM-DAT disaster number for the associated event. This would link national response data to international disaster data, allowing for systematic tracking of national responses and easier comparison across country responses to the same disasters.

**2. Compile cross-national data on military responses to climate emergencies:** The OECD DAC Creditor Reporting System provides valuable cross-national data collected annually. However, the dataset's narrow focus on cross-border responses in developing countries does not provide a full picture of the scope of countries' possible military involvement in emergency response at home and abroad. This project's addition of a climate metric to these data helps assess the focus of cross-border assistance on climate versus non-climate emergencies, but the OECD data are still missing key components that prevent a robust cross-national analysis of military involvement in climate emergencies.

The OECD should include additional questions on its annual DAC survey—notably, collecting information on the type of crisis eliciting the response, the type of response, the start and end dates for the response, and the EM-DAT disaster number for the associated event—to allow these cross-national data to be used for more detailed analysis of climate-related assistance in developing countries. Since the OECD DAC focuses only on cross-border aid to developing countries, a broader international data collection effort is also needed. An intergovernmental organization—such as NATO, the EU, or a UN body—could collect these data for all domestic and cross-border responses by member countries.

**3.** Enhance integration of response data with broader contextual data: Tracking detailed response data should include the systematic collection and integration of diverse and decentralized data sources on key contextual factors that can shape responses. This should include environmental indicators (e.g., weather patterns, deforestation), public health indicators (e.g., disease outbreaks, malnutrition), and security indicators (e.g., migration trends, resource disputes). Furthermore, it should leverage open-source information, scientific data, data from local monitoring networks, citizen science, local expertise, and indigenous knowledge—all of which is crucial to supporting effective planning and response. It is also recommended to develop standard protocols for data sharing across agencies and potentially across borders.

<sup>&</sup>lt;sup>7</sup> CRED/UCLouvain, *EM-DAT Documentation*.

As climate-related emergencies continue to worsen, data collection and integration should include a clear connection to national defense planning processes and a systematic approach to forecasting implications for required military responses/readiness and associated budgets. Early warning systems could also be enhanced by explicitly integrating environmental, health, and security indicators— providing a more holistic risk assessment and actionable insights for preemptive disaster response— and by integrating advanced analytical tools, such as AI decision-support tools.

**4.** Integrate strategic climate intelligence principles: Civil-military cooperation frameworks should explicitly incorporate principles of strategic climate intelligence. This involves shifting from a purely reactive focus to one that emphasizes proactive, anticipatory warning and analysis. Strategic climate intelligence aims to inform decision-makers about perceived security issues or dangers well in advance to prevent or minimize damage, potentially even decades ahead. It involves identifying critical vulnerabilities where combinations of hazards and risks could overwhelm vital systems and interpreting weak signals from the peripheries that might otherwise be missed. Integrating this strategic focus can help anticipate and respond to cascading risks, from food insecurity to migration and conflict.

**5. Promote participatory scenario planning and validation:** The use of scenarios to validate and refine disaster response strategies is crucial for anticipatory response and is a strong capability of military organizations. Critically, these scenarios should be constructed with the participation of key decision-makers and diverse stakeholders—including military, civilian, and community members—to ensure scientific, political, and cultural accuracy and foster buy-in, especially when dealing with high uncertainty.

**6. Prioritize collaborative, interdisciplinary approaches:** Establish formal collaborative governance structures that explicitly balance military, civilian, and community priorities. To overcome challenges like bureaucratic stove piping, fostering expert networks and cooperation with scientists outside traditional intelligence structures is essential for accessing and interpreting critical data.

Interdisciplinary training is also critical for military and civilian analysts and responders involved in climate/disaster intelligence and response. This training should focus on analyzing diverse datasets, understanding complex and cascading risks, improving interagency coordination, and developing "soft skills" for culturally sensitive, gender-responsive engagement with affected communities. Particular attention should be paid to providing equitable assistance including indigenous communities and vulnerable populations, and to using communication protocols and technologies that enable both warning and participation. Training should also include an explicit focus on media and communication strategies, given the importance of clear communication in crises and the increasing risks associated with disinformation.

**7. Strengthen civil-military partnerships throughout the DRR cycle:** In general, military participation in the preparedness, mitigation, resilience, and recovery aspects of disaster risk reduction varies significantly among countries, ranging from clearly defined roles to broader national remits. Militaries should consider their role in preparedness and resilience activities/strategies and build these aspects into planning where possible. Many militaries recognize the positive community perception of their role in disaster response, which could potentially be amplified by greater civil-military integration throughout the DRR cycle.

As demands for military contributions to disaster response (and DRR) increase, it may also be important to strengthen partnerships not only between the military and civilian authorities, but also between the military, CSOs, and local communities. Processes to build partnerships should consider power differences between the military and other stakeholders and be well-facilitated spaces with clear mandates to ensure the empowerment of local actors and avoid the militarization of DRR. Ultimately, more proactive measures in preparedness and prevention could lessen the strain on military resources to respond to disasters, and lead to improved coordination and collaboration.

8. Facilitate learning and exchange across countries and international mechanisms: Militaries continue to raise valid concerns regarding the potentially negative impact of increasing disaster response requirements on readiness, particularly where these tasks are seen as a distraction from core warfighting roles. At the same time, military participation in disaster response and similar operations often holds significant value to participating units in terms of practicing core military planning and operational skills in a complex civilian environment, and one in which they are subordinate to civilian authorities. International deployments in support of disasters provide further opportunities for operational learning around working with foreign military and civilian capacities. Structured military approaches to capturing and integrating lessons learned can also contribute to broader civil-military efforts to improve planning for and responses to a range of climate emergencies. While some operational details (and lessons) may be classified, lessons learned should be widely shared wherever possible, both within and across the various international, regional, and sub-regional coordination structures that exist today.

A strong first step would be to convene an international forum analyzing the spectrum of approaches countries take today in each of the areas explored in this study—e.g., legal and policy frameworks, operational frameworks, military and civil-military training, delineation of military and civilian roles, and international coordination. Convening military, government, multilateral, and civic leaders, such a forum could share lessons learned and assess which contexts are best suited to the different approaches countries take in each area. Such exchange is critical to sharing good practices across countries, particularly as states face growing climate challenges and a potential need to take new steps outside of what has worked in the past.

There could also be new mechanisms for learning and exchange at the regional and international levels. While the extent of the current interconnections between the relevant parts of the EU, NATO, and the UN is already invaluable, it could be useful to develop a process through which officials, practitioners, and other experts in the EU (including the Directorate-General for Climate Action, EU Civil Protection Mechanism, and ERCC), NATO (including the EADRCC, CCASCOE, and CMDR COE), various UN and international bodies, and humanitarian organizations could jointly assess their common and separate challenges. The goal would be to consider if any new communication channels or networks—above and beyond the priority given to response coordination in the first place—could help to develop and implement this and other recommendations in this report.

#### **Next Steps**

A golden thread running through the above conclusions and recommendations is the recognition of the value of and need for ever more information sharing, cooperation, and coordination in the face of these growing challenges. This cooperation and coordination should extend to future research, governance, capacity building, mobilizing human and financial resources, and operations in the field.

This is key for both top-down and bottom-up approaches to addressing the climate crisis, facilitating information sharing, cooperation, and coordination between local authorities and communities, between civil and military actors, between countries, within and between regions, and globally. We cannot over-emphasize the need for scientists, policymakers, and practitioners to be working together.

The aim of Project CASA has been to provide actionable data for decision makers, stakeholders, and the wider public on how militaries are working together with civilian emergency management agencies within countries and across international borders.

We hope that Project CASA and this report can help stimulate further study and interaction.

The five Project CASA partner organizations, the 60 team members, and the over one hundred other followers and participants in our activities stand ready to continue to work together and with others in sharing knowledge and ideas on any and all aspects of climate and security action.

## Part 4: Annexes

# **4.1** International / Intergovernmental Organizations and Mechanisms

Many international and intergovernmental organizations and mechanisms play an important role in addressing the climate change crisis and climate change adaptation. The following is a list of selected ones which deal especially with climate-related emergencies including several involved in civil-military cooperation.

#### **Capacity for Disaster Reduction Initiative (CADRI)**

The Capacity for Disaster Reduction Initiative (CADRI) is a global partnership composed of 20 organizations working towards the achievement of the Sustainable Development Goals by providing countries with capacity development services to help them reduce climate and disaster risk. UNDRR is an advisory partner.

#### Caribbean Disaster Emergency Management Agency (CDEMA)

The Caribbean Disaster Emergency Management Agency (CDEMA) is a regional intergovernmental agency for disaster management in the Caribbean Community (CARICOM) and comprises eighteen Participating States. The Agency was established in 1991 as CDERA (Caribbean Disaster Emergency Response Agency) with primary responsibility for the coordination of emergency response and relief efforts to Participating States that require such assistance. It transitioned to CDEMA in 2009 to fully embrace the principles and practice of Comprehensive Disaster Management (CDM).

#### Climate Risk and Early Warning Systems (CREWS)

CREWS, launched in 2016, supports LDCs and SIDS in substantially reducing disaster mortality by 2030 and significantly increasing access to early warnings and risk information. The CREWS initiative contributes to the implementation of the Sendai Framework global targets A and G. UNDRR, WMO and World Bank/GFDRR serve as Implementing Partners of the CREWS Initiative.

#### Coalition for Disaster Resilient Infrastructure (CDRI)

The Coalition for Disaster Resilient Infrastructure (CDRI) launched at the 2019 Climate Action Summit under the leadership of Government of India and with the support of UNDRR is envisaged as a knowledge, exchange and capacity development partnership that will bring together national governments, private sector, academia, multilateral development banks, and UN agencies as key stakeholders. CDRI intends to play the role of a knowledge, innovation and institutional development platform that connects global resources with regional and sectoral demands for infrastructure resilience.

#### Crisis Management and Disaster Response Centre of Excellence (CMDR COE)

Among the CMDR COE's top priorities is the maintenance of its stand as an indispensable source of expertise and advice in the field of crisis management and disaster response. Therefore, the Centre's essential success indicators place significant emphasis on the ability to establish and foster collaborative partnerships across the international CMDR community of interest.

#### **European Union**

Many European Union Institutions and bodies play important roles in addressing climate change in several different and overlapping ways. Of special importance is the 2024 European Environmental Agency publication of the first European Climate Risk Assessment (EUCRA) and the 2015 Preparedness

Union Strategy to support Member States and enhance Europe's capability to prevent and respond to emerging threats.

#### **EU Civil Protection Mechanism**

In October 2001, the European Commission established the EU Civil Protection Mechanism. The Mechanism aims to strengthen cooperation between the EU countries and 10 participating states on civil protection to improve prevention, preparedness, and response to disasters. Any country hit by a disaster, in Europe and beyond, can request emergency assistance through the Mechanism. The Commission plays a key role in coordinating the disaster response and contributing to the transport and/or operational costs of deployments.

#### EU Emergency Response Coordination Centre (ERCC)

The ERCC is the heart of the EU Civil Protection Mechanism. It coordinates the delivery of assistance to disaster-stricken countries, such as relief items, expertise, civil protection teams and specialized equipment. The center ensures the rapid deployment of emergency support and acts as a coordination hub between all EU Member States, the 10 additional participating states, the affected country, and civil protection and humanitarian experts. The ERCC operates 24/7. It can help any country inside or outside the EU affected by a major disaster upon request from the national authorities or a UN body.

#### **EU-LAC Partnership on Disaster Preparedness and Risk Management**

The EU-LAC Memorandum of Understanding is a landmark agreement between the EU on the one hand and three intergovernmental organizations (CDEMA, CEPREDENAC, SG CAN) across Latin America and the Caribbean, as well as three individual country states (Chile, Cuba, Mexico) on the other.

#### G20 Disaster Risk Reduction Working Group (G20 DRRWG)

Through sharing expertise and good practices and the development of guidance documents and common approaches, the Disaster Risk Reduction Working Group supports G20 countries to develop and implement national policies that reduce risk today and build resilience against future shocks and to promote disaster risk reduction in the work of international financial institutions and across the global financial system.

#### Global Alliance for Disaster Risk Reduction & Resilience in the Education Sector (GADRRES)

GADRRRES aims at strengthening global coordination, increase knowledge, and advocate on risk reduction education and safety in the education sector. In support of the Sustainable Development Goals and in line with the Sendai Framework for Disaster Risk Reduction and Education 2030: Incheon Declaration and Framework for Action, GADRRRES promotes a comprehensive approach to DRR education through the Comprehensive School Safety Framework. This approach is based on education policy, plans, and programs that are aligned with disaster management at national, regional, district and local school site levels. UNDRR is a partner of the multi-stakeholder mechanism composed of UN agencies, international organizations, and global networks.

#### International Federation of Red Cross and Red Crescent Societies (IFRC)

Every year, disasters and crises have devastating impacts on people, communities and entire societies around the world. The IFRC and its 191 National Societies respond to, and work to prevent or lessen the impacts of, all types of crises and disasters.

#### International Recovery Platform (IRP)

The International Recovery Platform (IRP) is a global partnership working to strengthen knowledge and share experiences and lessons on building back better in recovery, rehabilitation, and reconstruction. It is a joint initiative of United Nations organizations, international financial institutions, national and local governments, and non-governmental organizations engaged in disaster recovery, and seeking to transform disasters into opportunities for sustainable development. IRP supports progress against Priority 4 of the Sendai Framework for Disaster Risk Reduction 2015-2030, enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

#### North Atlantic Treaty Organization (NATO)

NATO recognises that it faces many environmental challenges, particularly due to the risks posed by climate change, and has been acting on these challenges for many years. Key milestones in the last few years include its Climate Change and Security Action Plan (2021), the accreditation of the NATO Centre of Excellence (COE) for Climate Change and Security in Montreal, Canada (2024) and the third edition of its Climate Change & Security Impact Assessment - The NATO Secretary General's report (2024).

#### NATO Climate Change and Security Centre of Excellence (CCASCOE)

The CCASCOE supports the efforts of NATO Allies and partners to adapt to the implications of climate change on their security and mitigate their own impact on climate change while strengthening operational effectiveness.

#### NATO Euro-Atlantic Disaster Response Coordination Centre (EADRCC)

The EADRCC is NATO's principal civil emergency response mechanism in the Euro-Atlantic area. It is active all year round, operational on a 24/7 basis, and involves all NATO Allies and partner countries. The Centre functions as a clearing-house system for coordinating both requests for and offers of assistance mainly in case of natural and man-made disasters.

#### OSCE Strengthening Responses to Security Risks from Climate Change

The project "Strengthening Responses to Security Risks from Climate Change in South-Eastern Europe, Eastern Europe, the South Caucasus and Central Asia" aims to reduce climate change-related security risks in the four project regions by raising awareness, developing capacities, and sharing knowledge within and among the project regions. It also aims to do so through the implementation of climate change adaptation measures in the geographic areas that are most vulnerable to climate change.

#### Partnership for Environment and Disaster Risk Reduction (PEDRR)

UNDRR is a member of Partnership for Environment and Disaster Risk Reduction (PEDRR), a global advocate for increasing investments in ecosystem-based approaches to reducing disaster- and climate risks. Formally established in 2008, PEDRR is a global alliance of UN agencies, NGOs and specialist institutes, acting as the clearinghouse for knowledge, training, advocacy and practice on Ecosystem-based Disaster Risk Reduction (Eco-DRR).

#### **Risk-informed Early Action Partnership (REAP)**

REAP was launched at the UN Climate Action Summit in September 2019 and brings together a wide range of partners across the climate, humanitarian, and development communities with the aim of making 1 billion people safer from disaster by 2025.

#### The Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework)

The Sendai Framework works hand in hand with the other 2030 Agenda agreements, including The Paris Agreement on Climate Change, The Addis Ababa Action Agenda on Financing for Development, the New Urban Agenda, and ultimately the Sustainable Development Goals. It aims to achieve the substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries over the next 15 years. <u>UNDRR</u> is tasked to support the implementation, follow-up and review of the Sendai Framework.

#### UN Climate Security Mechanism (CSM)

Established in 2018 as a joint initiative between the UN Department of Political and Peacebuilding Affairs (DPPA), the UN Development Programme (UNDP) and the UN Environment Programme (UNEP), then joined by the UN Department of Peace Operations (DPO), the Climate Security Mechanism (CSM) seeks to help the UN system address climate-related security risks more systematically. The CSM supports field missions, UN Resident Coordinators and regional organizations to conduct climate security risk assessments and develop risk management strategies. The CSM has also established a UN Community of Practice on Climate Security as an informal forum for information exchange and

knowledge co-creation. The group – which convenes colleagues from now 30+ UN entities – meets every few weeks and is open to all UN staff interested in this topic.

#### **UNDP Global Risk Identification Program**

The Agenda 2030 provides a common framework for both humanitarian and development actors to work together with the objective to successfully address the needs of the most vulnerable and at-risk populations, leaving no one behind. There is a consensus around the importance to confront risk and to focus on resilience to achieve the Agenda 2030.

#### UN Office for Disaster Risk Reduction (UNDRR)

The UN Office for Disaster Risk Reduction, UNDRR convenes partners and coordinates activities to create safer, more resilient communities. Its mission is to provide leadership and support to accelerate global efforts in disaster risk reduction to achieve inclusive sustainable development and the goal of the Sendai Framework.

#### UN Office for the Coordination of Humanitarian Affairs (OCHA)

The OCHA supports humanitarian organizations to respond effectively to the needs of people caught in crises, to understand and analyze their needs, and to mobilize international assistance. We provide tools and services to help humanitarian organizations ensure that no one affected by a crisis is left behind. (The profile includes a link to <u>Guidelines On The Use of Military and Civil Defence Assets To</u> <u>Support United Nations Humanitarian Activities in Complex Emergencies, March 2003 / Revision 1 - January 2006.</u>)

#### World Food Programme (WFP)

In recent years, the WFP has managed complex emergencies, natural disasters, epidemics, and pandemics. Emergency preparedness and response is rooted within WFP policies and is crosscutting within all levels of the organization at country, regional, and global levels. As military forces are increasingly deployed in humanitarian settings, the UN's Inter-Agency guidance on Civil-Military Coordination provides the standards for its operational interactions with national and international militaries.

## 4.2 Acronyms

ACSC	Association Canadienne sur la Sécurité Climatique
	(Climate Security Association of Canada)
ASP	American Security Project
BDCD	Brussels Dialogue on Climate Diplomacy
B-FAST	Belgian First Aid and Support Team
BGB	Border Guard Bangladesh
BIPSS	Bangladesh Institute for Peace and Security Studies
C2	Command and Control
CADRI	Capacity for Disaster Reduction Initiative
CDEMA	Caribbean Disaster Emergency Management Agency
CAF	Canadian Armed Forces
CASA	Climate and Security Action (Project CASA)
CBRN	Chemical, Biological, Radiological, and Nuclear
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosives
CBSS	Council of the Baltic Sea States
CCASCOE	Climate Change and Security Centre of Excellence (NATO)
ССМ	Convention on Cluster Munitions
CCS	Center for Climate and Security
CCW	Convention on Certain Conventional Weapons
CDRI	Coalition for Disaster Resilient Infrastructure
CDS	South American Defense Council
CEA	Conferencia de Ejercitos Americanos
	(also abbreviated as CAA for Conference of American Armies)
CECIS	Common Emergency Communication and Information System
CEMADEN	Centro Nacional de Monitoramento e Alertas de Desastres Naturais (Brazil)
CEIVINDEIN	(National Center for Monitoring and Alerting Natural Disaster Risks)
CENAD	Centro Nacional de Gerenciamento de Riscos e Desastres (Brazil)
	(National Center for Risk and Disaster Management)
Cerac	Climate Risk Assessment Center (Belgium)
CIM	Comitê Interministerial sobre Mudança do Clima (Brazil)
-	(Interministerial Committee on Climate Change)
CIMAN	Centro Integrado Multiagências de Coordenação Operacional Nacional (Brazil)
	(Multi-Agency National Operational Coordination Center)
CJOC	Canadian Joint Operations Command
CMDR COE	Crisis Management and Disaster Response Centre of Excellence (NATO)
COE	Center of excellence
CONAGUA	Comisión Nacional del Agua (Mexico)
	(National Water Commission)
COMJIB	Conferencia de Ministros de Justicia de los Países Iberoamericanos
	(Conference of Ministers of Justice of the Ibero-American Countries)
CONPDEC	Conselho Nacional de Proteção e Defesa Civil (Brazil)
	(National Civil Protection and Defense Council)
СОР	Conference of the Parties
COVID	Corona Virus Disease of 2019
CPLP	Comunidade dos Países de Língua Portuguesa (Brazil)
	(Community of Portuguese Language Countries)
CREWS	Climate Risk and Early Warning Systems
CSAC	Climate Security Association of Canada

CSIIU	Civil Security Instruction and Intervention Unit (France)
CSM	Climate Security Mechanism (United Nations)
CSOs	Civil Society Organizations
CSOS	
CRED	institute of the Council on Strategic Risks Center for Research on the Epidemiology of Disasters
DAC	Donor Assistance Committee (OECD)
DAC	
DDMA	Disaster Assistance Response Team District Disaster Management Authority
DDMA	District Disaster Management Authonty District Disaster Management Committee
DGSCGC	General Directorate of Civil Security and Crisis Management (France)
DUSCUC	Department of National Defense (Canada)
DPPI SEE	Disaster Preparedness and Prevention Initiative for Southeastern Europe
DART	Disaster Assistance Response Team (USAID Office of U.S. Foreign Disaster Assistance)
EADRCC	Euro-Atlantic Disaster Response Coordination Centre
EB	Exército Brasileiro (Brazilian Army)
EC	European Commission
ECADEC	•
ECADEC	Exercício Combinado de Apoio à Defesa Civil (Brazil) (Joint Civil Defense Support Exercises)
ECF	European Climate Foundation
ECO	•
EDRC	Economic Cooperation Organization Environment & Development Resource Centre
EESC	European Economic and Social Committee
EM-DAT	Emergency Events Database (CRED)
EMCFA	Chefe do Estado Maior Conjunto das Forças Armadas (Brazil)
LIVICIA	(Joint Chiefs of Staff of the Armed Forces)
EPG	Emergency Planning Group
ERCC	Emergency Response Coordination Centre (EU Civil Protection Mechanism)
ESCRIM	Élément de Sécurité Civile Rapide d'Intervention Médicale (France)
LJCININ	(French Civil Protection Field Hospital)
EU	European Union
EU CPM	European Union Civil Protection Mechanism
EU ERCC	European Union Emergency Response Coordination Centre
EUROMIL	European Organisation of Military Associations and Trade Unions
EUR-OPA	European and Mediterranean Major Hazards Agreement
FEMA	Federal Emergency Management Agency (United States)
FNSP	Força Nacional de Segurança Pública (Brazil)
	(National Public Security Forces)
FOCP	Federal Office of Civil Protection (Switzerland)
FOGGS	Foundation for Global Governance and Sustainability
ForMISC	Les Formations Militaires de la Sécurité Civile (France)
	(Military Civil Security Formations)
FPS	Federal Public Service
FYROM	Former Yugoslav Republic of Macedonia
GADRRES	Global Alliance for Disaster Risk Reduction & Resilience in the Education Sector
GMACCC	Global Military Advisory Council on Climate Change
GOLFF Corse	Groupement Organique de Lutte Contre les Feux de Forêts en Corse (France)
	(Organic Group for the Fight Against Forest Fires in Corsica)
GRIP	Global Risk Identification Program (UNDP)
G20 DRRWG	G20 Disaster Risk Reduction Working Group
HDF	Hungarian Defense Forces
HTD	Heavy Technical Deployment

IADB	Inter-American Defense Board (Organization of American States)
IAEA	International Atomic Energy Agency
ICM	Incident and Crisis Management
IDB	Inter-American Defense Board (Organization of American States)
IES	Institute for Environmental Security
IGOs	Intergovernmental Organizations
IGSD	Institute for Governance & Sustainable Development
IFRC	International Federation of Red Cross and Red Crescent Societies
IMCCS	International Military Council on Climate and Security
IPCC	Intergovernmental Panel on Climate Change
IPS	Institute for Planetary Security
IRP	International Recovery Platform
ISDR	International Strategy for Disaster Reduction (UN)
JCMCC	Joint Civil-Military Coordination Centre (Ireland)
LENTUS	Canadian Armed Forces' Natural Disasters Response (Operation LENTUS)
M4CE	Militaries for Civil(ian) Emergencies
MD	Ministry of Defense
MECODEX	Mechanism for Disaster Cooperation Exercise
MIDR	Ministério do Desenvolvimento Regional (Brazil)
	(Ministry of Integration and Regional Development)
Mirch	Military Responses to Climate Hazards
MoD	Ministry of Defence / Ministry of Defense
Mol	Ministry of Interior
MSB	Myndigheten för samhällsskydd och beredskap (Sweden)
	(Civil Contingencies Agency)
NATO	North Atlantic Treaty Organization
NCWES	North-Atlantic Civil-Society Working-Group on Environment and Security
NDAA	National Defense Authorization Act (United States)
NDFEM	National Directorate for Fire and Emergency Management (Ireland)
NDMA	National Disaster Management Authority
NDRP	National Disaster Response Plan
NFRCC	National Flood Response and Coordination Centre (Pakistan)
NGOs	Non-governmental organizations
NRF	National Response Framework (United States)
OAS	Organization of American States
OCHA	Office for the Coordination of Humanitarian Affairs (UN)
000	Overseas Contingency Operations
OECD	Organisation for Economic Co-operation and Development
OEI	Organización de Estados Iberoamericanos para la Educación, la Ciencia, y la Cultura
	(Organization of Ibero-American States for Education, Science, and Culture)
OEP	Office of Emergency Planning
OFDA	Office of Foreign Disaster Assistance (USAID)
OP Cj	Joint climate operations
OPLAN	Operational plans
OSCE	Organization for Security and Cooperation in Europe
PAGD	Poznań, Gniezno, Kalisz, and nearby areas
PALACI	Canadian Armed Forces Control of Avalanches in Rogers Pass BC (Operation PALACI)
PEDRR	Partnership for Environment and Disaster Risk Reduction
	Provincial Disaster Management Authority
PEFACaD	Plano de Emprego das Forças Armadas em Casos de Desastres (Brazil)
	(Plan for the Employment of the Armed Forces in Cases of Disaster)

PNMC	Política Nacional sobre Mudança do Clima (Brazil)
<b>NUDDE</b>	(National Climate Change Policy)
PNPDEC	Política Nacional de Proteção e Defesa Civil (Brazil)
DCI	(National Civil Protection and Defense Policy)
PSI	Planetary Security Initiative
QBRNE	Químico, biológico, radiológico, nuclear, y explosivo
	(chemical, biological, radiological, nuclear, and explosive)
RASARAC	Regional Aeronautical Search and Rescue Advisory Committee
REAP	Risk-informed Early Action Partnership
rescEU	EC strategic reserve of disaster response capabilities and stockpiles
SAARC	South Asian Association for Regional Cooperation
SAR	Search and Rescue
SCEPC	Senior Civil Emergency Planning Committee (NATO)
S2iD	Sistema Integrado de Informações sobre Desastres (Brazil)
65D50	(Integrated System of Information on Disasters)
SEDEC	Secretaria Nacional de Proteção e Defesa Civil (Brazil)
	(National Civil Protection and Defense Secretariat)
SEDENA	Secretaría de la Defensa Nacional (Mexico)
	(Secretariat of National Defense)
SEGIB	Secretaría General Iberoamericana
CLIADE	(Ibero-American General Secretariat)
SHAPE	Supreme Headquarters Allied Powers Europe (Brazil)
SINAPROC	Sistema Nacional de Protección Civil (Mexico)
	(National Civil Protection System)
SINPDEC	Sistema Nacional de Proteção e Defesa Civil (Brazil)
601	(National Civil Protection and Defense System)
SOI	Statements of interest
SOP	Standard operating procedures
STO	Science and Technology Organization (NATO)
SwAF	Swedish Air Force
TIAR	Tratado Interamericano de Asistencia Reciproca
	(Inter-American Treaty of Reciprocal Assistance)
UAV	Unmanned arial vehicles
UCPM	Union Civil Protection Mechanism (European Union)
UN	United Nations
UNASUR	Unión de Naciones Suramericanas
	(Union of South American Nations) United Nations Convention on the Law of the Sea
UNCLOS UNDP	
	United Nations Development Programme United Nations Framework Convention on Climate Change
UNFCCC	United Nations Office of Disaster Risk Reduction
UNDRR UNMAS	United Nations Office of Disaster Risk Reduction
UNIVIAS UN OCHA	United Nations Office for the Coordination of Humanitarian Affairs
USAID UzDMC	United States Agency for International Development
WFP	Upazila Disaster Management Committee (Bangladesh) World Food Programme
ZOPACAS	Zona de Paz y Cooperación del Atlántico Sur
LUFACAJ	(South Atlantic Peace and Cooperation Treaty)
	(Journ Adamie Feace and Cooperation Treaty)

## **4.3** About the Authors

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## **4.4** Project Partners and Participants

#### **Partner Organizations**

#### **Climate Security Association of Canada (CSAC)**

The goal of CSAC is to ensure that collaborative responses to climate change and insecurity are based on solid evidence and promote communication and exchange of research findings across policy, practice, and academic disciplines.

#### Crisis Management and Disaster Response Centre of Excellence (CMDR COE)

Among the CMDR COE's top priorities is the maintenance of its stand as an indispensable source of expertise and advice in the field of crisis management and disaster response. Therefore, the Centre's essential success indicators place significant emphasis on the ability to establish and foster collaborative partnerships across the international CMDR community of interest.

#### Environment & Development Resource Centre (EDRC)

EDRC's aim is to contribute to the achievement of global sustainable development that is environmentally sound, socially just and respectful of cultural diversity. EDRC serves as the lead partner in Project CASA.

#### Foundation for Global Governance and Sustainability (FOGGS)

FOGGS is a think-and-do tank, serving also as a research and ideas-generation center, discussion forum, and advocacy mechanism on key issues of global governance, global sustainability, and global citizenship.

#### Global Military Advisory Council on Climate Change (GMACCC)

FOGGS is a think-and-do tank, serving also as a research and ideas-generation center, discussion forum, and advocacy mechanism on key issues of global governance, global sustainability, and global citizenship.

#### **Coordinating Group**

The Coordinating Group (CG) consists of ten members representing the project partners. They work together to oversee and implement all aspects of the project.

- Ms. Lauren Brennan (The Netherlands / United States) FOGGS
- Dr. Tom Deligiannis (Canada) CSAC
- Mr. Ronald A. Kingham (The Netherlands) EDRC / CG Coordinator
- Ms. Bozhidara Kiryakova (Bulgaria) CMDR COE
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- Dr. Ashley McIlvain Moran (United States) GMACCC
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- Ms. Abigail Robinson (The Netherlands / United States) GMACCC
- Mr. Alexander Verbeek (The Netherlands) EDRC
- <u>Ms. Jessica Olcott Yllemo</u> (United States) GMACCC

*CG* members participate as representatives of their respective Project CASA partner organizations and not in any way on behalf of the governments of their respective countries of citizenship or residence.

#### Advisory Group

The Advisory Group (AG) consists of experts working in civil and military emergency response, research, and policymaking with knowledge of a wide variety of topics and countries covered by the project research. The project has been developed and implemented with their guidance.

- Ms. Anna Brach (Poland / Switzerland)
- Ms. Blair Brimmell (Canada)
- Lieutenant Colonel David Burbridge (Canada)
- Ms. Alice C. Hill (United States) AG Co-chair
- Ms. Irina Novakova (Romania)
- Mr. Mark Ritchie (United States)
- Dr. Jamie Shea (United Kingdom) AG Co-chair
- Ms. Anca Elena Ursu (Italy / Romania)

Members of the Advisory Group may serve in their individual capacity and not as representatives of their organizations or countries.

#### **Expert Group**

The Expert Group involves the active participation of additional experts on climate change and security. It includes other representatives from the five partner organizations as well as experts from the CMDR COE Community of Interest, the BDCD, NCWES, and other researchers, policymakers, and practitioners from the international to the local level who exchange information, contribute to the research, provide feedback, and help disseminate the project results.

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- Ms. Jordan Koop (Canada)
- Mr. R. Andreas Kraemer (Germany)
- Dr. Gintaras Labutis (Lithuania)
- Ms. Malena López Bremme (Netherlands / Spain / Germany)
- Dr. Karolina MacLachlan (Poland / United Kingdom)
- Mr. Michaël C.E.N. Matongbada (Benin / Mali)
- Mr. Galen Miller (France / United States)

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Members of the Expert Group may serve in their individual capacity and not as representatives of their organizations or countries.

## **Resilience, Readiness, and Response**

Report of the project on Climate and Security Action through Civil-Military Cooperation in Climate-Related Emergencies (Project CASA)



As climate emergencies beset communities with increasing frequency and severity, national militaries play a key role, working alongside civilian responders and often facing calls for greater involvement when civilian capacity is strained. Whether militaries should be involved in preparing for and responding to climate emergencies is a matter of considerable debate, and views vary depending on the context, country, political culture, and whether involvement is within national borders or beyond. What is clear, however, is that national militaries are already engaged in these roles and, with the rising number of climate

emergencies globally, the pressure for military involvement in such emergencies is also likely to increase when civilian agencies cannot respond at the speed or scale required.

Despite these challenges, there has been very little systematic cross-national information on country approaches to military involvement in climate emergencies. Project CASA seeks to help fill this gap by assessing the nature, extent, and impact of military involvement in such emergencies across a range of countries. It has done so by consulting with government and military officials in countries in NATO and beyond to compile information on their approaches to engaging the military in preparing for and responding to climate emergencies, as well as the impacts this has had on force structure and operations.

This project's country profiles and dataset provide new comparative information on core frameworks shaping the use of national militaries in domestic and cross-border operations for civil protection during climate emergencies. This includes information on countries' current legal and policy frameworks, operational frameworks, military training, delineation of military and civilian roles, and international coordination. It also includes their perspectives on the potential advantages and disadvantages of increasing military involvement in civil protection, as well as the comparative advantages of civilian and military agencies. The aim is to understand the increasing demands placed on national militaries amid expanding climate emergencies globally and to share the range of approaches countries are using to manage these.

