



U.S. Army paratroopers assigned to Attack Company, 1st Battalion, 503rd Infantry Regiment, 173rd Airborne Brigade and French soldiers conduct a joint, chemical, biological, radiological and nuclear (CBRN) training in Pabradė, Military Operation Urban Terrain (MOUT), Lithuania, May 19, 2025, during exercise Swift Response 2025, as a part of the broader Defender Europe 25 framework. (U.S. Army photo by Elena Baladelli)

A Future of Rapidly Deployable NATO CBRN Forces

By Major Karl Jahrsdoerfer

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In an era marked by the resurgence of great power competition and the proliferation of unconventional threats, the North Atlantic Treaty Organization (NATO) faces an imperative to bolster its defenses against chemical, biological, radiological, and nuclear (CBRN) hazards. While NATO has established frameworks and units dedicated to CBRN defense, a discernible shortfall remains in the deployment of specialized response forces within critical regions. This gap not only undermines the deterrence posture of the Alliance but also exposes member states to potential vulnerabilities that adversaries could exploit.

NATO's Existing CBRN Defense Framework

NATO's commitment to CBRN defense is encapsulated in its Combined Joint CBRN Defence Task Force, a deployable

asset designed to prevent, protect against, and recover from weapons of mass destruction (WMD) attacks or CBRN incidents. This task force comprises the CBRN Defence Battalion and the CBRN Joint Assessment Team, both of which are integral to the strategic posture of the Alliance. The Defence Battalion provides rapid response capabilities, while the Joint Assessment Team offers expertise in evaluating CBRN threats and advising on appropriate countermeasures.^[1]

Further emphasizing the importance of CBRN preparedness, NATO's 2022 CBRN Defence Policy outlines a comprehensive approach to countering such threats.^[2] The policy mandates that NATO forces be ready to deny access to CBRN materials, disable and dispose of WMDs, respond to any WMD attacks, mitigate the effects of CBRN use, and eliminate an aggressor's WMD capabilities.^[3]

Regional Deployment Deficit

Despite these robust frameworks, a critical analysis reveals a significant deficiency in the regional deployment of CBRN response forces. Many NATO member states maintain high-quality, battalion-sized, rapid-reaction forces capable of swift deployment within the Alliance's area of responsibility. However, the absence of a centralized, multinational rapid-reaction force specifically tailored for immediate CBRN incidents is a glaring omission. The Atlantic Council underscores this concern, noting that while individual allies possess rapid-reaction units, the lack of a cohesive NATO-wide force diminishes the Alliance's ability to respond promptly to CBRN threats.^[4]

This shortfall is particularly concerning given the evolving security landscape. The ongoing conflict in Ukraine has heightened the risk of CBRN incidents, either through deliberate use or accidental release. The Guardian reports that Russian authorities have accused Ukraine of employing white phosphorus munitions, allegations that Ukraine has denied. Regardless of the veracity of these claims, the mere possibility of CBRN weapon usage in the region underscores the necessity for NATO to have readily deployable response forces.^[5]

Strategic Importance of Regional Presence

The absence of regionally stationed CBRN response units hampers NATO's ability to project deterrence and respond effectively to incidents. In the event of a CBRN attack, the time-sensitive nature of containment and mitigation necessitates immediate action. Delays resulting from the need to mobilize and transport units from distant locations could exacerbate the impact of such incidents, leading to greater casualties and environmental contamination.

Moreover, a visible and robust regional presence serves as a deterrent to potential adversaries contemplating the use of CBRN weapons. The knowledge that NATO possesses the capability and readiness to respond decisively to CBRN threats can dissuade hostile actors from considering such actions.

Multinational Cooperation and Training

To address this deployment gap, NATO has initiated efforts to enhance multinational cooperation and training. The establishment of the Network of CBRN Defence Facilities aims to pool resources, standardize procedures, and increase preparedness among allied CBRN defense forces.^[6] This network encompasses a diverse array of facilities, including training sites and laboratories, designed to facilitate joint exercises and knowledge sharing.^[7]

Exercises such as Toxic Trip 23, held in Belgium with participation from 18 NATO countries, exemplify the Alliance's commitment to collective CBRN training.^[8] Similarly, Precise Response, which includes CBRN Soldiers from the 48th Chemical Brigade—specifically the 46th Chemical, Biological, Radiological, Nuclear, and Explosive Company (Technical Escort [TE]) and 10th Chemical Company (Hazard Response [HR])—highlights the importance of live-agent training.^[9] These exercises provide invaluable opportunities for forces to hone their skills, test interoperability, and simulate real-world scenarios.



The 173rd Airborne Brigade is the U.S. Army's Contingency Response Force in Europe, providing rapidly deployable forces to the United States European, African, and Central Command areas of responsibility. Forward stationed in Italy and Germany, the brigade routinely trains alongside NATO allies and partners to build readiness and strengthen the alliance. (U.S. Army photo by Elena Baladelli)

However, while these initiatives—as well as rotational forces with CBRN-capable platforms and systems in the greater Eastern European theater—are commendable, they do not substitute for the physical presence of dedicated CBRN response units in vulnerable regions. Training and cooperation enhance readiness, but without the corresponding deployment of forces, the practical benefits remain limited.

Recommendations for Strengthening Regional CBRN Defense

- **Establishment of Regional CBRN Response Units:** NATO should prioritize the formation and deployment of multinational CBRN response units within strategically significant regions. These units would serve as the first line of defense, capable of rapid response to any CBRN incident.^[10]
- **Enhanced Funding and Resources:** Allocating dedicated funding for CBRN defense initiatives will ensure that response units are adequately equipped and trained. Investment in state-of-the-art detection and decontamination equipment is essential for effective operations.^[11]
- **Integration with Civil Authorities:** Given that CBRN incidents can have widespread civilian implications, NATO should strengthen collaboration with civil defense and emergency response agencies. Joint training exercises and

information sharing will enhance overall preparedness and response efficacy.

- **Continuous Assessment and Adaptation:** The dynamic nature of CBRN threats necessitates ongoing evaluation of defense strategies. NATO must remain vigilant, adapting its policies and deployments in response to emerging threats and technological advancements.

Concluding Remarks

While NATO's commitment to CBRN defense is evident through its existing policies and training initiatives, the lack of formal regionally deployed response forces represents a critical vulnerability. By addressing this gap through the establishment of dedicated units, enhanced funding, integration with civil authorities, and continuous strategic assessment, NATO can fortify its defenses against CBRN threats. In doing so, the Alliance not only enhances its deterrence posture but also fulfills its mandate to protect member states and their populations from the multifaceted challenges of modern warfare. 🇺🇸

Major Jahrsdoerfer is the brigade operations officer (S-3) for 1st Brigade, United States Army Cadet Command. He holds a master's degree in defense and strategic studies and countering weapons of mass destruction from Missouri State University, Springfield, Missouri.

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