

Amplifying Nuclear-Weapon-Free Zone Leadership: Recommendations to Strengthen NWFZs in a Changing Security Environment

Paul Dean, Patricia Jaworek, and Mark Melamed

A Crucial Moment for Strengthening NWFZs

Nuclear-weapon-free zones (NWFZs) are one of the most successful and enduring elements of the global effort to prevent the spread of nuclear weapons. They also show how non-nuclear-weapon states actively help to reduce nuclear risks. Together, the five existing zones—Latin America and the Caribbean, Africa, Southeast Asia, the South Pacific, and Central Asia—span much of the Global South and have helped keep large regions of the world free of nuclear weapons activities.

The achievements of NWFZs cannot be taken for granted. Rising geopolitical competition among nuclear-weapon states (NWS), the expansion and modernization of nuclear arsenals, a return by some states to a “spheres of influence” approach to international relations, and fresh discussion of nuclear proliferation and extraterritorial nuclear basing create new stressors for these zones. Broader developments in the global nuclear landscape may also require adaptation. The growing demand for civil nuclear energy, as well as rapid technological developments affecting nuclear governance and verification, may require zone states to strengthen implementation and cooperation to ensure existing frameworks remain effective.

Note: This paper and its recommendations are informed by a series of consultations convened by the Nuclear Threat Initiative (NTI) over the past year focused on strengthening Nuclear-Weapon-Free Zones. These discussions—including virtual consultations and in-person workshops in Latin America and Africa—brought together experts, government officials, and representatives from regional institutions such as OPANAL and AFCONE.

Each NWFZ experiences these pressures in different ways, shaped by geopolitical settings, governance structures, and levels of institutional capacity. As the global nuclear landscape becomes more uncertain, the strategic value of NWFZs is increasingly clear. In a more contested environment, they provide regional frameworks that help states reinforce norms against nuclear weapons, strengthen the global nonproliferation regime, and reduce nuclear risks.

Three Reasons to Strengthen NWFZs Now

- 1 Increased relevance in a complex geopolitical environment.** Renewed great power competition, expansion and modernization of nuclear arsenals, a return to “spheres of influence” politics, and growing proliferation risks are placing new pressures on regional security arrangements.
- 2 Uneven institutional capacity.** Governance and implementation capacity vary significantly across zones, with some lacking permanent structures to support coordination, implementation, and adaptation to emerging risks.
- 3 Declining awareness.** Awareness of the strategic benefits of NWFZs has declined, requiring renewed efforts to build political support among a new generation of policymakers and experts to sustain the security value that the zones provide.

The Strategic Value of NWFZs in Today’s Security Environment

Each NWFZ is unique. The zones were established at different times, for different reasons, and with different institutional arrangements. However, they also advance common strategic objectives:

- 1. Demonstrate that large regions can remain free of nuclear weapons for decades.** By establishing legally binding prohibitions on nuclear weapons activities—including development, possession, stationing, and testing—the zones provide a regional security model in which states address security concerns without relying on nuclear deterrence. They reinforce the global nuclear taboo and strengthen the broader nonproliferation and disarmament architecture.
- 2. Help countries access peaceful nuclear technology in line with Article IV of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).** Zones facilitate cooperation on safeguards and broader nuclear security, generating practical benefits for member states in support of the UN’s Sustainable Development Goals (SDGs), while strengthening global nonproliferation standards.
- 3. Provide a platform for collective diplomatic engagement with NWS.** Through treaty protocols, zone member states can engage NWS directly on issues such as security concerns and legally binding negative security assurances—commitments not to use or threaten to use nuclear weapons against zone members. Although NWS

have generally supported the zones as instruments for managing competition and reducing proliferation pressures, the extension of negative security assurances to zone members remains incomplete—many of these assurances remain qualified or have yet to enter into force due to pending ratifications.

Recommendations

Practical steps exist that could strengthen NWFZ resilience, reinvigorate engagement within and between them, and create opportunities for leadership.

Reinvigorate and Stress-Test NWFZs

As geopolitical competition intensifies and the nuclear landscape evolves, zones should periodically assess whether existing institutional arrangements remain adequate to meet emerging challenges. NWFZs should:

- » **Conduct a focused risk assessment within each zone** to catalog near-term and over-the-horizon risks, evaluate institutional readiness, and explore potential response options. This could include scenario-based or simulation-based exercises.
- » **Encourage national-level reviews** to identify opportunities for member states to enhance their engagement and leadership within NWFZs.

These assessments could initially be undertaken within individual zones and later serve as a basis for cross-zonal dialogue and shared learning.

Strengthen Governance and Treaty Institutions

Although some NWFZs benefit from well-established institutions and implementation mechanisms, most lack robust structures for governance and treaty implementation. Strengthening governance structures can help zones adapt and react to challenges. NWFZs should:

- » **Assess and strengthen the capacity of NWFZ bodies—including the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL) and the African Commission on Nuclear Energy (AFCONe)—and establish secretariats where they do not yet exist.** Well-resourced regional institutions can serve as focal points for treaty implementation, internal coordination, and engagement with external actors.
- » **Work toward universalization of NWFZ treaties** within their geographic zones.
- » **Explore greater cooperation with regional and international organizations** to build member state capacity on monitoring, verification, and risk assessments.
- » **Increase engagement with non-governmental experts** to expand analytical capacity and provide technical expertise where institutional resources are limited.

Enhance Cross-Zonal Collaboration

Greater collaboration among NWFZs would significantly strengthen their collective impact by sharing lessons learned, improving coordination, and enabling zones to respond effectively to shared challenges. NWFZs should:

- » **Identify designated points of contact across zones** to facilitate dialogue and information exchange and establish an online platform for sharing best practices.
- » **Create an informal “NWFZ Caucus”** in the context of the UN First Committee, the NPT review process, and other relevant forums to coordinate positions and amplify the collective voice of zone states.
- » **Establish a Track 1.5/2 expert network** to support ongoing engagement and provide recommendations to multilateral processes.
- » **Coordinate advocacy strategies** to promote entry into force of legally binding negative security assurances.
- » **Develop shared reference materials (e.g., a NWFZ glossary) and position papers** to support coordination at international meetings.

Strengthen NWFZ Leadership on Key Security Challenges

As the geopolitical threat environment becomes increasingly fraught, zones and member states have an opportunity to strengthen their leadership in reducing nuclear risks. NWFZs should:

- » **Identify champions**—government and non-governmental—to elevate the relevance and security value of NWFZs in diplomatic and public discourse.
- » **Strengthen advocacy against the resumption of nuclear explosive testing**, including sustained support for the Comprehensive Nuclear-Test-Ban Treaty and its International Monitoring System.
- » **Address and manage risks at the intersection of nuclear weapons and new technologies**, including exploring applications of emerging tech to support nonproliferation and disarmament.
- » **Develop innovative verification and monitoring approaches**, potentially in collaboration with the International Atomic Energy Agency (IAEA), Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC), and other regional authorities.
- » **Leverage unique histories with disarmament and verification**, such as South Africa’s experience with nuclear dismantlement, to inform international discussions.
- » **Support the implementation of international nonproliferation obligations** at the national level, including through domestic legislation.