

Seizing the Moment: Leveraging Shifting Nuclear Attitudes to Strengthen the CTBT

Molly Grace Doyle

INTRODUCTION AND MAIN RESULTS

Nuclear weapons are back at the centre of global security discourse. Running parallel to this, the public sphere that shapes political will is fragmented by misinformation, disinformation and declining trust in traditional arbiters of truth. This twin reality, rising nuclear salience & post-truth information dynamics creates both risk and opportunity for the Comprehensive Nuclear-Test-Ban Treaty (CTBT). With a focused science-diplomacy playbook, the CTBTO can convert today's anxiety into durable public legitimacy and political momentum for the test-ban norm and, ultimately, entry into force.

DISCLAIMER Any views or opinions reflected here are those of the author, expressed in a personal capacity, and do not necessarily reflect those of her current employer

Molly Grace Doyle

P5.3-451

The Dual Challenge: Rising Nuclear Salience in a Post-Truth World

Nuclear weapons back in focus

- Great Power competition and regional tensions drive new nuclear focus.
- Technological advances in weapons design.
- Aging arms control.

Fractured information environment

- Declining trust in traditional arbiters of facts and information.
- Public sphere flooded with misinformation & disinformation causing decision paralysis and fatigue.

Why Care?

High nuclear risk and low trust in information threatens the CTBT's core missions. Renewed nuclear salience and eroding arms control norms undermine the momentum of the treaty, while a fractured information environment risks politicizing or dismissing the science-based verification the CTBT is buttressed by.

The CTBTO is one of the few institutions with the tools able to address both challenges simultaneously. But to succeed, it must adapt how it communicates, collaborates, and builds trust.

Why the CTBT Can Be the Fix: A Science-Diplomacy Asset

What is Science Diplomacy?

Science diplomacy is the strategic use of scientific collaboration, knowledge, and networks to build trust, solve shared challenges, and advance foreign policy objectives. It operates on the principle that scientific facts and methods can serve as neutral ground for international cooperation, even amid political tensions.

Assets:

- Technical Authority in Nuclear Crises: CTBTO monitoring data provides non-politicized, empirical anchors.
- Natural Resistance to Information Warfare: Unlike social media posts, seismic and radionuclide data is harder to fabricate.

Opportunity

Rising nuclear anxieties create a historic opportunity for the CTBTO to position itself as the solution—offering treaty universalization as the path to security. In an era of information chaos, the organization's science-based verification system provides what anxious publics desperately need: objective, irrefutable evidence.

By demonstrating that its monitoring network cuts through manufactured uncertainty with hard data, the CTBTO can make joining the treaty an easy political win—governments can point to concrete, verifiable nuclear restraint, rebuilding public trust while advancing global security.

CTBT Science Diplomacy for the New Information Age

From Information Sharing → Trust Building

Expert-to-Expert → Multilayered Audiences

Data Transparency → Data Literacy

Reactive → Proactive Communication

Neutral Platforms → Visible Benefits

Technical Expertise → Cultural Relevance

