PUGWASH-CARNEGIE BRIEFS ON SCIENCE AND WORLD AFFAIRS

The NPT at a Crossroads:

International Perspectives and Policy Priorities for the 11th Review Conference of the Nuclear Non-Proliferation Treaty 2026

APRIL
2026

The **Pugwash-Carnegie Policy Briefs on Science and World Affairs** are commissioned and published by the Pugwash Conferences on Science and World Affairs. The series provides concise, evidence-based insights on issues at the intersection of science and international politics, supporting informed decisionmaking by policymakers, stakeholders, and the public.

Pugwash is proud to partner with the Carnegie Corporation of New York, a major donor to Pugwash activities for over two decades and express our deep gratitude for their support to the field of international peace and security. The Policy Briefs series and the views expressed therein should in no way be represented as those of the Corporation and its staff.

TABLE OF CONTENTS

Recommitting to the NPT: Urgent Actions to Prevent a New Nuclear Era
Karen Hallberg, Hussain Al-Shahristani, Götz Neuneck 4

NPT at the Edge: Five Critical Issues at the 2026 Review Conference
Cesar Jaramillo 7

Strengthened Review Process: Foundations, Flexibility, and Recommendations for Effective Conference Management
Tariq Rauf 11

Preparing For a Successful 11th NPT Review Conference
Taous Feroukhi 19

Nuclear Threats in the Middle East: Nuclear Proliferation or a Renewed Pursuit of a Middle East NWFZ
Khaled Shamaa and Reza Ziaran 25

Perspectives on the NPT from East Asia
Mark Suh and Tatsu Suzuki 29

European Perspective on the 11th NPT Review Conference
Götz Neuneck 32

The Nordic Nuclear Debate in a Shifting Security Landscape
Thomas Jonter and Katariina Simonen 38

Washington and Article VI in 2026
Steven E. Miller 43

Nonproliferation Cluster of Agreements as a Core of Six Arms Control Paradigms
Alexander Nikitin 48

Three Incentive-Compatible Mechanisms for the Next NPT Review Cycle
Joel N. E. Christoph 55

Scientific Influence and Emerging Nuclear Risk: Transparency and Agency in the NPT
Haneen Khalid 59

Why the promise of Pillar 3 is on shaky ground this NPT Review Conference
Sanaa Alvira 63

Contributors 68

Recommitting to the NPT: Urgent Actions to Prevent a New Nuclear Era

by Karen Hallberg, Hussain Al-Shahristani, Götz Neuneck
Pugwash Council

At the 2026 NPT Review Conference, prospects for a positive outcome remain slim unless clear and credible steps are taken to reduce reliance on nuclear weapons. The Treaty on the Non-Proliferation of Nuclear Weapons remains the backbone of global efforts in non-proliferation, disarmament, and the peaceful use of nuclear energy. It has significantly constrained the spread of nuclear weapons for more than half a century while providing a framework to make progress toward nuclear disarmament. Today, however, this system faces an acute, potentially existential, crisis, as all three pillars of the treaty are under simultaneous strain.

Through quiet and patient science diplomacy, the Pugwash Conferences on Science and World Affairs played an important role fostering the security environment which led to the NPT in 1968. Over the following decades, Pugwash has striven to support and strengthen the non-proliferation regime through workshops, conferences, and publications, as well as political and policy initiatives founded on our model of dialogue across divides. As the present leaders of Pugwash, we are pleased to present this compendium of expert perspectives covering several themes and regional concerns related to the NPT, timed to coincide with its 11th Review Conference. This marks the first in our new series of Pugwash-Carnegie Briefs on Science and World Affairs.

The Dangerous Context

Recent years have witnessed a steady erosion of arms control structures, placing increased pressure on the disarmament pillar of the NPT. The expiration of New START in February 2026, following the earlier collapse of the Intermediate-Range Nuclear Forces Treaty (2019) and the Anti-Ballistic Missile Treaty (2002), has successively removed key constraints on the strategic nuclear arsenals of the United States and Russia and at the same time lifted a normative lid for others: all nuclear-armed states are modernizing, and in some cases expanding, their arsenals, often accompanied by evolving doctrines that increase reliance on nuclear deterrence, including tactical nuclear weapons. The lack of meaningful engagement among the major nuclear weapons states undermines their obligations under the NPT, deepens dissatisfaction among non-nuclear-weapon states, and weakens confidence in the broader non-proliferation regime.

We, as so many colleagues throughout the Pugwash Conferences on Science and World Affairs, are deeply concerned by the deterioration of the international system and the weakening of international law, where the threat and use of force increasingly displace diplomacy. The breakdown of negotiations on Iran's nuclear program, attacks on safeguarded nuclear facilities, and the ongoing war in Ukraine illustrate how nuclear risks are becoming entangled with conventional military operations.

Current confrontations involving nuclear-armed states pose an existential risk to humanity. At the same time, discussions about extending nuclear deterrence arrangements to additional states in Europe, alongside emerging political support for nuclear weapons in Eastern Europe, the Middle East, and East Asia, risk triggering a new and potentially uncontrollable wave of proliferation. Together, these developments severely strain the non-proliferation pillar of the NPT.

Meanwhile, the normative framework underpinning nuclear restraint is eroding. The risk of renewed nuclear testing threatens the credibility of the Comprehensive Nuclear-Test-Ban Treaty, while the repeated failure of recent NPT Review Conferences to reach consensus further undermines the treaty's authority and long-term viability. Emerging technologies and new domains of competition add further instability. The increasing militarization of outer space, including anti-satellite weapons and space-based missile defense systems, risks extending arms competition beyond Earth. Likewise, the integration of artificial intelligence into nuclear command and control systems introduces new uncertainties and escalation risks, particularly in crisis situations.

In sum, the principal threats to the NPT include the expansion of nuclear arsenals and doctrines into new domains; the growing role of nuclear risks in ongoing conflicts; the collapse of diplomacy and arms control; rising regional proliferation pressures; and the emergence of disruptive technologies that accelerate arms competition. These dynamics are mutually reinforcing and risk eroding multilateral disarmament, as well as global and regional security, stability, and confidence.

A Time for Action

The current situation presents profound challenges that demand immediate action. As noted in the 2025 Declaration of the Nobel Laureate Assembly for the Prevention of Nuclear War: "While the only way to eliminate the risks of nuclear war is to eliminate nuclear weapons, there are important, timely steps that can support this long-term goal."

The heads of state of the five NPT nuclear-weapon states should reaffirm their January 2022 Joint Statement on preventing nuclear war and avoiding an arms race, sending a clear signal of political will to reduce the role of nuclear weapons in international security. A central priority must be the revitalization of arms control, beginning with renewed commitments by the United States and Russia to strategic stability, transparency, and verifiable limits on their arsenals. At the same time, all P5 states must engage in serious multilateral arms control efforts, including restraint measures such as freezing arsenal sizes and enhancing transparency.

In light of the growing role of emerging technologies, all nuclear-armed states should ensure meaningful human control and oversight over nuclear command and control systems, particularly where artificial intelligence is involved, and extend decision-making timelines to reduce the risk of miscalculation. Reaffirming commitments to key international instruments such as the Comprehensive Nuclear-Test-Ban Treaty and the Outer Space Treaty would help rebuild confidence, while practical risk-reduction measures, ranging from limits on tactical nuclear weapons to safeguards on new technologies, could reduce escalation risks.

Equally important is renewed diplomatic engagement in regional crises, most specifically an end to hostilities in Ukraine and Iran. There must be a firm commitment not to attack safeguarded nuclear facilities, actions which violate the UN Charter and IAEA Statute and are prohibited under international humanitarian law.[1] Strengthening the verification and monitoring role of the International Atomic Energy Agency remains essential for ensuring transparency, compliance, and trust. The situation in Iran also underscores the urgency of advancing the long-standing commitment to establish a Middle East zone free of nuclear weapons, as agreed at the 1995 and 2010 NPT Review Conferences.

Progress toward legally binding no-first-use commitments and negative security assurances for non-nuclear-weapon states would further reinforce the credibility of the regime. Ultimately, bridging divisions within the international community and restoring meaningful multilateral dialogue will be essential to preserving the integrity of the NPT.

The NPT stands at a critical juncture. Without decisive action, the combined pressures of geopolitical rivalry, technological change, and institutional erosion could lead to a breakdown of the existing regime. However, through renewed cooperation, concrete arms control measures, and a clear recommitment to the principles and obligations of the Treaty on the Non-Proliferation of Nuclear Weapons, it remains possible to stabilize the system, restore the authority of the treaty, and keep alive the long-term objective of a world free of nuclear weapons.

References

[1] Article 56 of Additional Protocol I (1977) to the 1949 Geneva Conventions

NPT at the Edge: Five Critical Issues at the 2026 Review Conference

by *Cesar Jaramillo*
Pugwash Council

The 2026 Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) will be marked not only by growing dysfunction, but by a widening gap between its stated objectives and increasingly challenging geopolitical realities. The question is no longer simply whether progress can be achieved, but whether the process itself retains credibility as a vehicle for advancing nuclear disarmament.

This review cycle unfolds against a sharply deteriorating global backdrop. The collapse of nuclear diplomacy with Iran, now compounded by direct military confrontation and renewed risks of strikes on nuclear facilities, has reintroduced proliferation risks once thought contained and dealt a serious blow to diplomatic efforts to manage them. It also reinforces a stark paradigm: states without nuclear weapons remain exposed to coercion or attack by nuclear powers, while those that possess them appear shielded. This dynamic is a powerful disincentive to disarmament.

At the same time, all nuclear-armed states are investing heavily in modernizing their arsenals, reinforcing and expanding their role in security policy. France's recent decision to increase its nuclear warhead stockpile for the first time in decades, alongside plans to extend elements of its deterrent posture to European allies, reflects a broader shift toward the normalization and diffusion of nuclear deterrence. The persistence of what can only be described as a doctrine of indefinite deterrence sits uneasily alongside formal commitments to disarmament.

Meanwhile, familiar sources of gridlock remain firmly in place. Entrenched positions, rigid red lines, and procedural maneuvering continue to define the Review Conference process, with little realistic prospect of advancing disarmament in any meaningful way. What distinguishes this moment is not their persistence, but their convergence with a broader erosion of arms control norms and confidence in multilateral restraint.

The NPT has become, in effect, a stage rather than a forum, a place where positions are restated with little prospect of resolution. While it may be true that the world remains better off with the NPT than without it, a more pressing question is whether the Treaty can realistically deliver on its promise of disarmament.

With geopolitical tensions at their highest point in decades, the 2026 Review Conference will test that question more sharply than any in recent memory. The Treaty's three pillars, nonproliferation, disarmament, and peaceful use, are all under strain, with the lack of progress on disarmament undermining the credibility of the entire regime. Two consecutive Review Conferences, in 2015 and 2022, failed to agree on a final document, and a third failure in 2026 would mark not just another disappointment, but a dangerous threshold in the Treaty's legitimacy crisis.

Below are five issues likely to shape the upcoming Review Conference. Each exposes tensions that, if left unaddressed, will continue to erode both the Treaty's credibility and its capacity to serve as a foundation for genuine progress on disarmament.

1. Disarmament Without Accountability

Article VI stands at the core of the NPT: the commitment by nuclear-weapon states to pursue negotiations on disarmament in good faith. More than half a century later, that promise remains largely aspirational. Nuclear-armed states continue to resist concrete frameworks, timelines, verification mechanisms, or measurable benchmarks, that would translate commitment into accountability, even as they invest heavily in the modernization of their arsenals. Documents like the 2010 Action Plan have become less a roadmap than a relic, invoked symbolically but rarely used to assess performance. This reluctance has transformed disarmament from a legal obligation into a matter of political discretion. Without clear metrics, progress cannot be meaningfully evaluated, and good faith cannot be distinguished from repetition.

2. The Entrenchment and Expansion of Nuclear Deterrence

The persistence of what can only be described as a doctrine of indefinite deterrence sits uneasily alongside formal commitments to disarmament. Few issues better capture the structural contradictions of the NPT than nuclear sharing and extended deterrence arrangements. While the Treaty envisions the progressive marginalization of nuclear weapons, these practices expand their role across alliance systems. They extend reliance on nuclear weapons to states that do not possess them, complicating both the legal and political foundations of the regime.

The deployment of Russian nuclear weapons to Belarus has further exposed the consequences of long-standing ambiguity. Once exceptions are normalized, they are eventually replicated. The growing emphasis on "risk reduction" reflects a broader shift in framing, from eliminating nuclear weapons to managing their dangers. While such measures are valuable, they risk becoming a substitute for disarmament itself, allowing nuclear-armed states to appear responsible without altering the underlying structure of indefinite deterrence.

3. Regional Breakdown and the Normalization of Nuclear Risk

The contradictions of the nonproliferation regime are perhaps most visible in the Middle East. The collapse of efforts to restore the Iran nuclear deal, combined with the growing normalization of threats and even actions against nuclear facilities, marks a significant erosion of safeguards norms. These developments risk sending a clear message: nuclear restraint does not ensure security, but may leave states vulnerable, while nuclear possession appears to offer a more credible form of protection. The war in Ukraine has brought into sharp relief the real-time dynamics of nuclear deterrence. Nearly three years into the conflict, nuclear signaling has normalized a level of risk once considered extraordinary. More importantly, the war has demonstrated that nuclear deterrence does not prevent conflict; it can enable its persistence. A nuclear-armed state can wage prolonged conventional war while limiting the risk of direct intervention by other nuclear powers, reinforcing the perceived value of nuclear weapons. This perception, whether in the Middle East or in Europe, is among the most powerful drivers of proliferation pressure today.

4. The NPT–TPNW Divide

For many states, the TPNW represents a necessary effort to operationalize disarmament commitments long deferred within the NPT. For nuclear-armed states and their allies, it remains largely sidelined. This marginalization is not incidental. Meaningful engagement with the TPNW would expose a central contradiction, the gap between rhetorical support for disarmament and the policy reality of indefinite deterrence. Avoiding that engagement allows the contradiction to persist unchallenged. The divide is not merely institutional, but conceptual. It reflects fundamentally different understandings of the urgency, feasibility, and sequencing of disarmament. As long as these competing visions remain unresolved, the risk is not only continued polarization, but a gradual weakening of the broader normative framework that underpins both treaties.

5. Proliferation Pressures in a Fragmenting Order

For decades, the NPT's greatest success was to limit the spread of nuclear weapons. That success can no longer be taken for granted. The collapse of diplomatic frameworks, the expansion of existing arsenals, and the erosion of arms control agreements have together weakened the normative foundation upon which the Treaty depends. As long as nuclear weapons are treated as essential by some, others will continue to seek them. The logic is difficult to escape: if deterrence is indispensable for a few, it will remain desirable for many.

This dynamic is reinforced by the broader strategic environment. As confidence in collective security mechanisms declines and great power competition intensifies, the perceived value of nuclear weapons as instruments of security and status grows. In such a context, nonproliferation cannot be sustained indefinitely without visible and credible progress on disarmament.

From Fault Lines to Systemic Breakdown

The five issues outlined above are not discrete; they are mutually reinforcing. The expansion of nuclear arsenals, the collapse of diplomatic constraints, and the normalization of nuclear risk in active conflict are not future concerns, they are present realities reshaping the foundations of the nonproliferation regime. The NPT's core bargain has become increasingly hollow. Non-nuclear states have upheld restraint, while nuclear-armed states have reinterpreted their obligations in ways that preserve the indefinite role of nuclear weapons.

The regime now faces a choice: continue as a forum for procedural continuity, or confront the structural contradictions that have long been deferred. Too often, progress has been measured by the survival of process rather than the achievement of outcomes. That distinction is no longer sustainable. Absent a fundamental shift in political will, what lies ahead is not simply another failed Review Conference, but the continued erosion of confidence in multilateral disarmament itself. The NPT may endure institutionally, but endurance without relevance undermines its purpose.

Practical Steps for the 2026 Review Conference

If the 2026 Review Conference is to retain credibility, a limited set of practical measures should be prioritized:

Establish measurable progress under Article VI

Commit to specific, time-bound disarmament steps by each Nuclear-Weapon State, supported by standardized, credible reporting to enable meaningful assessment of progress across review cycles.

Address the expansion of nuclear deterrence practices

Initiate a formal process within the NPT to examine nuclear sharing, forward deployment, and extended deterrence arrangements, with a view to limiting their expansion and clarifying their compatibility with Treaty obligations.

Reaffirm fundamental norms governing nuclear restraint

Adopt a clear political declaration affirming the inadmissibility of attacks on safeguarded nuclear facilities and reinforcing the principle that nuclear risk must not be normalized in active conflict.

Bridge divide between the NPT and TPNW frameworks

Create an institutionalized dialogue mechanism between states-parties to both treaties to reduce polarization and explore practical areas of convergence on disarmament.

Reinforce the credibility of the nonproliferation regime

Commit to a limited set of near-term actions, including greater transparency on arsenals, doctrinal restraint, and risk-reduction steps, to demonstrate that nuclear weapons are being progressively marginalized rather than reinforced.

If the 2026 Review Conference is to matter, it must deliver more than managed consensus. The measures outlined above do not resolve the deeper structural contradictions at the heart of the Treaty, but they would signal a willingness to confront them. It must confront, directly and honestly, the gap between commitment and conduct. Absent even these modest steps, that gap will continue to widen. Success cannot be measured solely by the adoption of a final document, but by whether that document reflects genuine progress rather than carefully negotiated ambiguity. Otherwise, the Treaty risks becoming not a foundation for progress, but a framework for managing decline.

Strengthened Review Process: Foundations, Flexibility, and Recommendations for Effective Conference Management

by Tariq Rauf
Pugwash Council

This Briefing Note has been prepared for the Eleventh NPT Review Conference (2026) to provide a capsule account of the Strengthened Review Process (SRP) as established in Decision 1 of the 1995 NPT Review and Extension Conference, further elaborated at the 2000 NPT Review Conference, and as reflected in the acquis of the Treaty.

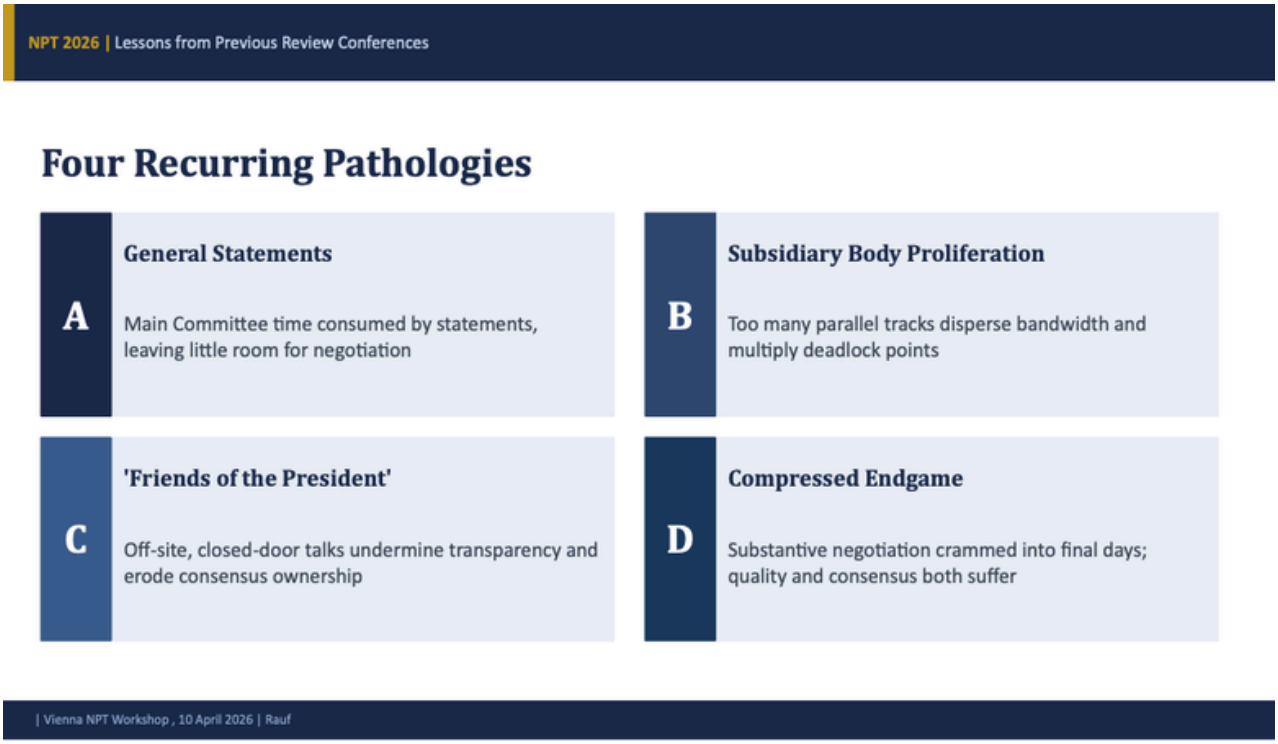
It is essential to recognize that the SRP framework adopted in 1995 and 2000 is inherently flexible and designed to accommodate evolving working methods. Decision 1 of 1995 cannot be substantially changed or amended as it was part of an indivisible package of decisions and resolutions that enabled the indefinite extension of the Treaty without a vote. Tinkering with the SRP risks unravelling the indefinite extension decision, especially as now there is "buyer's remorse" felt by a majority of non-nuclear-weapon States (NNWS) parties that the nuclear-weapon States (NWS) not only did not deliver on their nuclear disarmament obligations and commitments but have hollowed out the nuclear arms control and disarmament (NACD) architecture.

This Note sets out a series of specific recommendations for more effective management of the 2026 NPT Review Conference — including structural reforms to working methods of main committees, negotiating methodology, the shape and scope of the final outcome document, and the range of substantive issues it should address across all three pillars of the Treaty.

Key Findings at a Glance

• The SRP (1995/2000) empowers the President and conference leadership with significant procedural flexibility.
• General statements in Main Committees should be eliminated; substantive negotiation should begin at the start of week two.
• A draft final document should be circulated by the President to the Conference at the beginning of week two and refined through formal negotiating sessions in main committees.
• Subsidiary bodies need not be established; only SB2 on the 1995 Middle East resolution is recommended.
• The final outcome document should be concise, avoid repetitious and IAEA general conference resolutions texts, action-oriented, and cover all three NPT pillars with specific recommendations for 2027–2030.
• The 2030 and future review conferences should be convened in Vienna (Austria).

An analysis of previous NPT Review Conferences reveals a number of recurring pathologies that have contributed to failures to adopt final documents and to the adoption of weak or internally contradictory documents in some instances when consensus was achieved.



2026 NPT RevConf: What to Avoid

Bad practices that have undermined past conferences:

- ✗ Lengthy statements - not observing time limits
- ✗ Introducing issues extraneous to the NPT and review process
- ✗ Repeating statements on issues already made in Sessions I/II
- ✗ Loss of focus on concrete 'Recommendations' to the review conference
- ✗ Loss of habits of dialogue and getting argumentative
- ✗ Secretive negotiations in 'Friends of the President's groups off-site
- ✗ Lack of inclusivity and transparency in President's consultations
- ✗ Unwillingness to agree to President 's well-formulated 'Recommendations'
- ✗ President not taking physical control of draft documents from Secretariat

2026 NPT RevConf: What to Do

Good practices for a successful conference:

- ✓ Concise statements - observing time limits
- ✓ Stick to issues directly related to the NPT and review process
- ✓ Avoid congregating in selective groups to push specific issues
- ✓ Laser focus on formulating concise, actionable 'Recommendations '
- ✓ Come with full plenipotentiary powers to negotiate
- ✓ Advance clearance from capital on fall -back positions
- ✓ Ensure inclusivity and transparency in President's consultations
- ✓ President to consult widely but keeps own counsel, reject back -room deals
- ✓ President takes physical control of draft documents to tailor text

PROPOSED CONFERENCE TIMELINE

The following proposed timeline is designed to enable the Conference to conclude with a substantive agreed final document.

Phase	Activity
Pre- or Early in the Conference	President circulates draft final document to all States parties. Bureau consultations on working methods and committee organization. Distribution of draft to Main Committee Chairs and Bureau.
Week One	Opening plenary. Election of President and Bureau. Organizational session. General Debate in plenary: delegations signal priorities and concerns re the draft. President and Bureau revise draft based on General Debate. Main Committees convene if time permits: organizational sessions and first substantive review of assigned draft sections.
Week Two	Main Committees in full substantive negotiation of assigned sections. Daily Chair briefings. Inter-delegation consultations facilitated by Chairs on key issues. SB2 commences work on Middle East section. Drafting Committee activated.
Week Three	Main Committees finalize negotiation of assigned sections. Agreed text transmitted to Drafting Committee for consistency review and legal editing. President consolidates full draft. Chairs and SB2 report to plenary on status of work. Remaining brackets identified.
Week Four	Drafting Committee Plenary sessions: President presents consolidated draft. Consideration of outstanding brackets. Final negotiation of unresolved text under President's stewardship in plenary and inclusive informal sessions. Drafting Committee resolves drafting issues. Adoption of final document by consensus.

SUMMARY OF SRP RECOMMENDATIONS

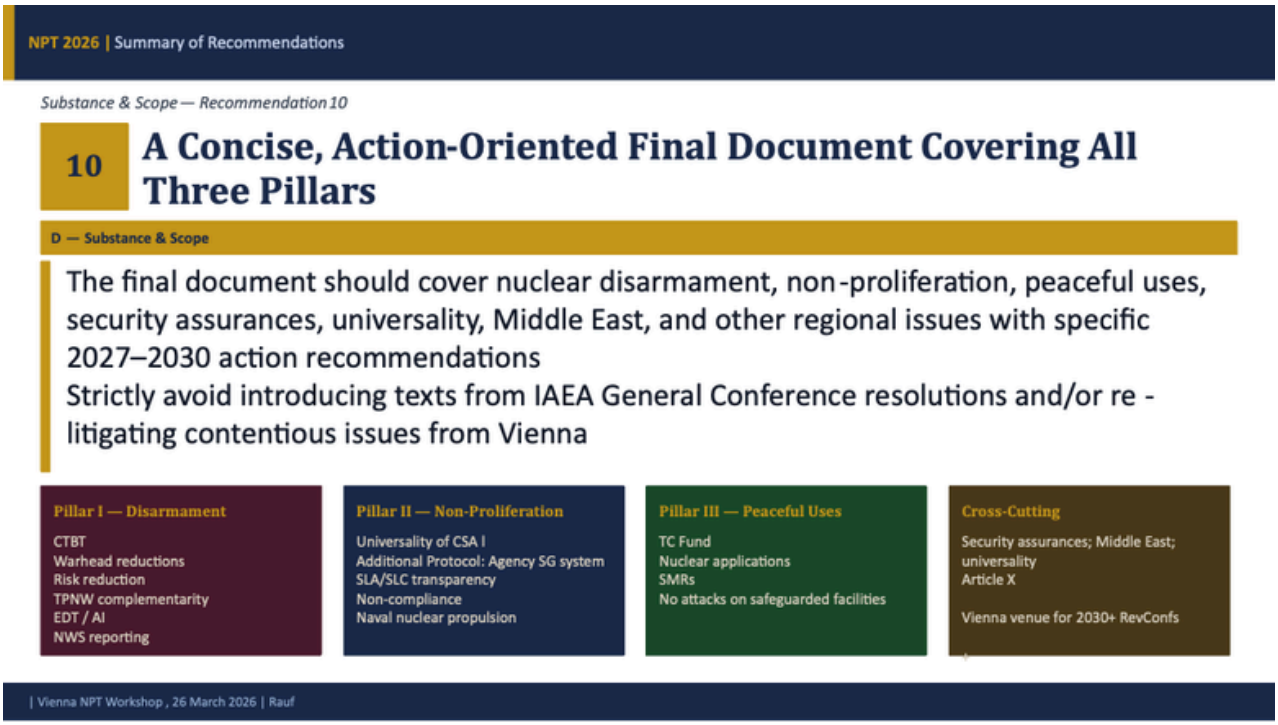
The following is a consolidated summary of ten recommendations for the President of the 2026 NPT Review Conference and States parties for the conduct of the review conference:

1	**Eliminate General Statements in Main Committees** Direct that Main Committee time be used exclusively for substantive negotiation and drafting, not for general statements. Written submissions may serve as the vehicle for delegations to place positions on record.
2	**Circulate a Presidential Draft Final Document Before the Conference** Prepare and distribute a working draft of the final document — covering all three pillars and all key issues — before the Conference opens or early in the Conference, for use as the negotiating text from the outset in Main Committees and SB.2.
3	**Commence Substantive Negotiations from Week One** Main Committees should begin substantive negotiation of the presidential draft immediately upon commencement of their work, without a general statements phase.
4	**Conduct All Negotiations in Formal (or Informal) Sessions** Ensure that substantive negotiation and drafting takes place in formal Committee sessions open to all delegations, with summary records maintained – informal Committee sessions if needed.
5	**Daily Update Briefings by Committee Chairs** Require each Committee Chair to provide a daily briefing to all delegations on progress and the day's schedule.

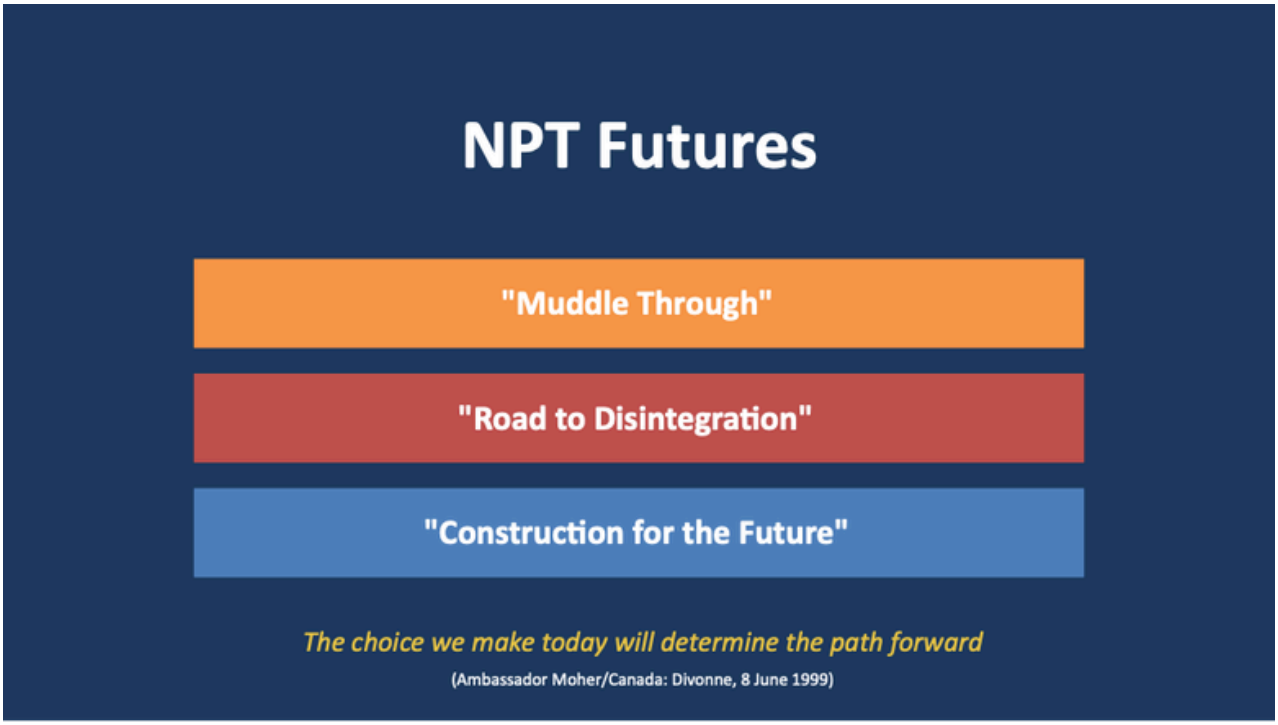
6	**Encourage Inter-Delegation Consultations** Facilitate self-organized, inclusive inter-delegation consultations on key issues within the main committees, with results brought back to formal sessions and transmitted by the Chairs in Main Committees to all States parties.
7	**Establish Only SB2 (Middle East)** Limit subsidiary bodies to Subsidiary Body 2 under Main Committee II, dedicated to the 1995 Middle East Resolution.
8	**Convene Plenary in Week Four for Finalization** Plan from the outset for week four plenary sessions to finalize the outcome document, with Main Committees transmitting agreed text by end of week three.
9	**Rely on the Drafting Committee; Avoid 'Friends' and Off-Site Formats** Activate the Drafting Committee early; avoid establishing a 'Friends of the President' group or convening off-site negotiations in permanent missions. President and Chairs to decline all “hospitality” invitations to lunches and dinners – States parties should desist from issuing such “influence” invitations.
10	**A Concise Action-Oriented Final Document Covering All Three Pillars and Key Issues** The final document should cover nuclear disarmament, nonproliferation, peaceful uses, security assurances, universality, Middle East, and other regional issues with specific 2027–2030 action recommendations – strictly avoid introducing texts verbatim from IAEA General Conference resolutions and/or re-litigating contentious issues from Vienna.

Recommended Structure of the 2026 NPT Review Conference Final Document

Preamble: Reaffirming the Treaty's objectives and purpose; acknowledging the current nuclear threat environment; welcoming progress since 2021.
Section I — Review of Treaty Implementation: A concise review of implementation across all three pillars since the 2021 PrepCom.
Section II — Nuclear Disarmament: Specific action recommendations for 2027–2030.
Section III — Nuclear Non-Proliferation: Specific action recommendations for 2027–2030.
Section IV — Peaceful Uses of Nuclear Energy: Specific action recommendations for 2027–2030.
Section V — Security Assurances: Recommendations on negative and positive assurances.
Section VI — Universality: Recommendations on universal adherence.
Section VII — The Middle East: Recommendations on the 1995 Resolution and the proposed zone.
Section VIII — Other Regional Issues: Recommendations on existing and proposed zones.
Section IX — The Strengthened Review Process: Recommendations on the 2027–2030 PrepCom cycle to implement the proposals in this Note, including convening the 12th and future review conferences in Vienna (Austria).




Summary: 2026 Review Conference FD proposed actions
Concise. Action-oriented. Covering all three pillars. Specific 2027 –2030 recommendations.
I
Nuclear Disarmament
CTBT ratification; arsenal reductions; EDT/AI; risk reduction; TPNW complementarity; NWS reporting
SA
Security Assurances
Legally binding NSAs; NWFZ protocol ratification; positive assurance reaffirmation
II
Non-Proliferation
Universality of CSA; Additional Protocol Agency SG system; Naval nuclear propulsion; SLA/SLC transparency; non-compliance
ME
Middle East & Regions
1995 Resolution implementation; WMD-free zone progress; NWFZ recognition; Korean Peninsula diplomacy
III
Peaceful Uses
Technical Cooperation funding; nuclear applications for development; SMRs; no armed attacks on facilities
U+S
Universality & SRP
Universal adherence call; SRP working-method reforms embedded; Secretariat: UNODA + IAEA; Article X withdrawal; Review Conferences in Vienna 2030+


NPT Futures
"Muddle Through"
"Road to Disintegration"
"Construction for the Future"
The choice we make today will determine the path forward
(Ambassador Moher/Canada: Divonne, 8 June 1999)

Preparing For a Successful 11th NPT Review Conference

by Taous Feroukhi
Pugwash Council

This paper based on lessons learned from the 2015 NPT RevCon I had the honour and privilege to chair is conceived as a humble contribution for a successful outcome of the 11th Review Conference scheduled to take place in New York (April-May 2026).

The following subject matters are considered with recommendations:

- the dynamic of the Conference;
- the interactive dialogue;
- the assessment of compliance and fulfilment of commitments vis-à-vis the Treaty;
- the 1995 resolution on the establishment of a Zone free from nuclear weapons and other arms of mass destruction in the Middle East.

Conducive Dynamic if the Review Conference

Among the various challenges facing the 2026 NPT Review Conference is the current turbulent geopolitical shift that could negatively impact the dynamic of the Conference and risk reaching a consensus document. Lessons learned from the 2015 NPT Review Conference showed that very high expectations in conjunction with renewed tensions among major actors could weaken the intrinsic dynamic of the Conference while hampering the emergence of negotiation skills and spirit of compromise. Indeed, the atmosphere of the 2015 conference was marked by the absence of coordination among key actors, in contrast to the enthusiastic adherence of the overwhelming majority of State parties to the process of "Humanitarian impact of nuclear weapons" perceived as an alternative to the impasse on Article VI of the Treaty.

Another concern for the upcoming RevCon is the normalization of the idea not to achieve consensus as a result of two successive failures of back-to-back Review Conferences in 2015 and 2022. However, this "intellectual laziness" has the potential to undermine both the dynamic of the Conference and the review process exercise.

Against this background, identifying at the earliest stage possible – at the commencement of the Conference or even before – a potential "bridge-builder" able to paper over contending views will help ongoing efforts[1] aimed at upholding a conducive atmosphere, spirit of compromise and negotiating skills throughout the duration of the Review. By the same token, a structured interactive discussion on prioritized issues in the respective three main Committees is required to avoid duplication, while facilitating a more constructive debates on major intertwined issues such as nonproliferation, nuclear disarmament, and peaceful uses of nuclear energy.

In doing so, State parties should be encouraged to:

- Exercise maximum restrains to avoid sterile discussions on attempts to re-open agreed issues, while fully engaging on the process under review and providing meaningful measures or recommendations for the next quinquennial Review cycle.
- Discuss measures/recommendations aimed at improving the review process being an exercise in progress, not designed to be a negotiating forum for legally binding measures on nuclear disarmament and nonproliferation, neither to invent new ones every five years.
- Preserve the balance between the three intertwined pillars of the Treaty crucial for the sustainability and credibility of: i) the nonproliferation regime; ii) the concretization of nuclear disarmament obligations: iii) ensuring unimpeded access to nuclear energy for peaceful purposes.

Interactive Dialogue on Substantial Issues

Regrettably, State parties witnessed at the very first days of the 2015 NPT Rev. Con, two key actor's depositaries of the Treaty making public their discrepancies. This is the first time in the context of the NPT where the delegations of the United States and the Russian Federation exchanged mutual accusations in relation with the crisis related to the arms control negotiations.[2] This unhappy development particularly among major players revealed a lack of a shared vision on how the Treaty will look after more than 25 years of the indefinite extension of the NPT, while thwarting the emergence of an appeased and constructive dialogue on substantial issues.

Recent significant moves counter to the aims of the Treaty are raising questions on whether the NPT holds the same significance for State parties in a context marked by a renewed nuclear competition with increasing strategic competition between major powers whereby nuclear arsenals are undergoing expansion/modernization:

- The recent announcement by President Macron that France would increase the size of its nuclear arsenal[3] poses the risk of nuclear proliferation in Europe.
- The statement by the Polish Prime Minister Donald Tusk about acquiring nuclear weapons could challenge the EU's commitment to nuclear nonproliferation.
- The weaponizing of the Zaporizhzhia Nuclear Power Plant and the threat to use nuclear weapons against a non-nuclear-weapon State.
- The unilateral repeated attacks against safeguarded facilities in Iran, a non-nuclear State party to the NPT.[4]

The remaining attractiveness of the NPT to State parties resides on two crucial elements: their shared interests in international peace and security, and their common commitment to disarmament and nonproliferation. A renewed commitment for the NPT common goals coupled with interactive dialogue on major issues that remained unattended is imperative for the authority and credibility of the Treaty.

Accountability of State Parties

It is important to recall that the NPT is the unique multilateral arms control treaty which has provided for regular reviews of its implementation at the interval of five years period.

The merit of the review, conceived as a dynamic exercise in progress, resides on the related transparency of the accountability of State parties' undertakings regarding "the operation and the implementation of all aspects of the Treaty". To facilitate the assessment exercise, a framework with indicative targets is outlined in the package of decisions adopted at the 1995 NPT Review and Extension Conference - and the 2000 NPT Review Conference.

The above-mentioned assessment framework is composed of two parts:

- the backward-looking part of the exercise focused on the accountability for compliance with and fulfilment of commitments under the Treaty.
- the forward-looking part devoted to possible measures for progress over the next review cycle taking account of the rapid changing international security environment.

It is expected that the Working Group on enhancing the Review process established by the 2022 NPT Rev. Con[5] will provide relevant outcomes on the State parties reporting, in relation to the promotion of the universality of the Treaty, the 1995 Resolution on the Middle East and possible measures for the next quinquennial Review cycle. Indeed, more structured framework and well-defined modalities with enforcement mechanisms would certainly help initiate the practical implementation of the review focused on the following three objectives:

- Preserving the balance of obligations, taking account of the inextricable link between nonproliferation and disarmament and the unimpeded access to peaceful use of the atom.
- Assessing the effective operation of the Treaty.
- Providing measures/recommendations for further progress.

However, the existing imbalance in the obligations is unsustainable: non-nuclear weapon States are implementing full-scope IAEA safeguards to prove nonproliferation; while nuclear weapon States stick to mere reaffirmation of past commitments without any timeframe to disarm.[6] Recently, and for the first time in the context of the IAEA General Conference, member States were unable to adopt the traditional resolution on international cooperation, thus impacting negatively the inalienable right for peaceful uses of nuclear energy (Article IV of the Treaty). So far, strict compliance with IAEA full scope safeguards and the additional protocol fulfilment didn't change course as regard the implementation of disarmament obligations nor for enhancing international cooperation for access to peaceful use of the atom in a context of growing needs on energy, human health, agriculture and the protection of the environment.

The long-standing impasse on nuclear disarmament could push non-nuclear weapon States to envisage a provocative option to reciprocate the excuse invoked by nuclear armed States when consensus is not reached on the Final document to escape their undertakings until the next quinquennial review.

The proposed provocative option could consist of virtual suspension (timeline to be determined) of the IAEA comprehensive safeguards agreements. The aim of a such provocative proposal is, on the one hand, to use the nonproliferation pillar as a leverage to shed light on the dangerous consequences on collective security and international order of the current impasse on nuclear disarmament which is factually decoupled from the nonproliferation pillar.

On the other hand, the objective of a such provocative approach is to reach the following outcomes:

- A timeline for the implementation of past agreed measures on Article VI of the Treaty.
- The early entry into force of the CTBT.
- Negative security assurances to non-nuclear weapon States and nuclear weapons Free Zone States parties.

The 1995 Resolution on the Middle East

The creation of a Zone free of nuclear weapons and other arms of mass destruction in the Middle East (NWFZMD) remains one of the oldest nuclear disarmament projects in both the UN agenda and the Committee on Disarmament. The project is based on two parallel processes sharing the same goal conceived as reinforcing each other:

1. The UN process initiated upon official requests received by the UN Secretary General from both the Ligue of Arab States Council decision (Sept. 1974) and the letter from the Shah of Iran (UN Doc. A/9693/Add.3, Sept. 1974).
2. The NPT process based on the 1995 Resolution on the Middle East adopted at the NPT Review and Extension Conference (NPTREC) co-sponsored by the State depositaries of the Treaty: The United States, the Russian Federation and the United Kingdom[7].

On December 9th 1974, the UN General Assembly adopted the Resolution 3263 (XXIX) on the creation of the Zone in the region of the Middle East. Since then, a resolution is passed at each ordinary annual session of the UNGA reiterating the call for the establishment of the Zone. In the meantime, efforts were deployed under multilateral innovative initiatives such as the Working group on Arms Control and Regional Security (ARCS) created by the 1991 Madrid Peace Conference[8]. However, it failed to complement the 1995 Resolution on the Middle East. More than fifty years after the launching of the UN process and the indefinite extension of the NPT, the project of the Zone is still alive despite lack of progress in launching a process for its creation.

Indeed, the overwhelming majority of the UN member States and State parties to the Treaty continue to call and re-call for the implementation of the following objectives:

- the UN resolutions on the Zone could serve as a starting point for facilitating the establishment a NWFZ in the Middle East. [9]
- all States of the region not party to the NPT to accede to the Treaty.
- all nuclear facilities in the region should be placed under the International Atomic Energy Agency comprehensive safeguards.

The UN process[10] was revived by the proposed language on the creation of the Zone contained in the draft Final document of the 2015 NPT Rev. Con that caused the collapse of the Conference. The UN Decision 73/546 issued on December 2018 (not adopted by consensus) outlined four requirements/conditions[11] for holding a UN conference on the establishment of the Zone no later than 2019, with the mandate to finalize a legally binding Treaty establishing the Zone.

However, the irreconcilable positions of the Arab states and Israel showed that regional security interests go far beyond the concerns posed by nuclear proliferation in the Middle East.

For the Arab states, the creation of the Zone is one of the factors intrinsically related to durable lasting stability [12] but not a pre-condition to the Middle East peace process. The constant Arab position consists of de-coupling the peace process from the establishment of the Zone as reaffirmed in disarmament and nonproliferation fora.

For Israel, which is not party to the NPT, peace settlement is a pre-condition for the creation of the WMDFZ and the Zone could only be envisaged as the final step in a comprehensive peace process in the Middle East. Moreover, during the UNGA 72nd session (2017) First Committee general debate on all disarmament and international security agenda items, Israel introduced new elements[13] to the peaceful Middle East, end to all forms of terrorism and aggression and mutual state recognition.

The unprovoked current tragic events taking place in the Middle East region that are creating turmoil in the international order show contradicting regional security interests:

- Arab states adhered to the NPT and remain strongly engaged for the concretization of the Zone to free the region from all weapons of mass destruction.
- Israeli undeclared nuclear capabilities remain outside the NPT and the IAEA comprehensive safeguards agreements.
- Targeted killing of nuclear scientists and engineers deprive State parties of the region of human resources needed for access to peaceful uses of the atom and the implementation of IAEA full scope safeguards obligations.
- The repeated unilateral U.S./Israeli military aggression against nuclear safeguarded facilities in Iran, State party to the NPT, in violation of the resolution 533 (1990) of the IAEA and the 2010 NPT Final Document.

Under the current circumstances where regional security is at stake, time has come to give new momentum to the creation of the Zone with the objective that no State in the region should possess nuclear weapons, neither Israel nor Iran. There is a need for a careful organization of a Conference on regional security to discuss security interests and perceptions aimed at reaching mutual understanding on lasting and just peace in the Middle East. In this perspective, the concept of "existential threat" based on perception and fears requires to be clarified and framed, as it lacks any legal definition for unilateral use of force. Undoubtedly, the required framing exercise will help change course regarding the legitimacy of military actions that should be based on international law:

- The Arab States consider the non-declared Israeli nuclear capabilities coupled with its hegemonic ambitions in the region as a major threat to regional security.
- Israel invokes existential threat in relation with history and its regional neighbourhood.
- Iran declares its existence threatened by the West: Israel and the U.S.
- The United States raise concerns about a threat to global strategic balance.

In conclusion, the health and vitality of the NPT regime heavily depend on the political and on the stronger support of State parties particularly key actors who have the political, financial and technological means to change course for trust in multilateral diplomacy.

References

[1] Efforts of the President of the Conference and the Chairs of Main Committees throughout the Prep com process and the Rev. Con.
[2] The US delegation accused Russia of violating the Intermediate-Range Nuclear Forces Treaty (INF) and the Budapest Memorandum. The Russian delegation denounced the US and NATO countries by pursuing the "nuclear sharing policy" undermining the NPT.
[3] currently estimated at around 290 warheads.
[4] In violation of the UN Charter and the IAEA resolutions on protection prohibition of all armed attacks against nuclear installations devoted to peaceful purposes whether under construction or in operation (GC (xxxiv)/res/533) report by the director general.
[5] The 2022 NPT Review Conference adopted the decision on the establishment of the above-mentioned Working Group, but failed to agree on the draft Final document.
[6] Concrete steps agreed set out in the 2010 NPT Rev. Con action plan: rapidly moving towards an overall reduction in nuclear stockpiles and further diminishing the role and significance of nuclear weapons in security doctrines, reducing the risk of accidental use and further enhancing transparency and increasing mutual confidence.
[7] The resolution on the Middle East is adopted as an integral part of the package to indefinitely extend the NPT during the 1995 Review and Extension Conference calling on all states of the region to take "practical steps" towards the establishment of an effectively verifiable Middle East zone free of nuclear weapons and other arms of mass destruction.
[8] The Peace Conference was the first ever opportunity for direct negotiations and engagement between the Arab world and Israel. The Conference documents are reproduced in (1992) 21:2 Journal of Palestine Studies 117-149.
[9] UNGA Resolution 45/52, Establishment of a nuclear-weapon-free zone in the region of the Middle East, 4 December 1990, paras 8-10.
[10] Draft Final Document, Volume I, NPT/CONF.2015/R.3, 21 May 2015, para on the Middle East.
[11] i) the terms of reference of the 1995 Resolution must be followed; ii) the conference's aim is to elaborate a legally binding treaty which will establish such a zone; iii) the treaty to be concluded shall be founded on the arrangements at which 'the States of the region' shall be freely arrive; iv) all decisions to be taken at the conference shall require the consensus of participating states.
[12] Statement by the League of Arab States (LAS) to the Organization for Security and Cooperation in Europe (OSCE) in 2006.
[13] Disarmament Commission, Substantive Session, New York, 17 April 2018, Agenda item 4, Recommendations for achieving the objective of nuclear disarmament and nonproliferation of nuclear weapons, Working paper submitted by the States members of the League of Arab States, UN Doc. A/CN.10/2018/WG. I/CRP.2, para. 17.

Nuclear Threats in the Middle East: Nuclear Proliferation or a Renewed Pursuit of a Middle East NWFZ

by Khaled Shamaa and Reza Ziaran
Pugwash Council

The Strategic Context

The global security environment has deteriorated sharply in recent years. The paralysis of the UN Security Council, the increased resort to unilateral uses of force, and the erosion of arms control norms have created the most dangerous nuclear environment since the Cuban Missile Crisis.

In the Middle East, acute WMD related risks persist, including Israel's undeclared and un-safeguarded nuclear facilities and the absence of a regional security framework capable of managing crises. These vulnerabilities were sharply exposed by the June 2025 attacks on safeguarded Iranian nuclear facilities and the February–March 2026 war on Iran, during which additional IAEA monitored sites were struck. Together, these events generated unprecedented concerns about nuclear safety, the integrity of the global safeguards system, and the credibility of the NPT.

The attacks demonstrated how quickly regional tensions can escalate into direct military confrontation, with far-reaching implications for nuclear safety, proliferation risks, global security, and economic stability. They underscored the urgent need for a regional framework that reduces risks, prevents miscalculation, and removes WMD from the region's volatile strategic environment. Strikes on safeguarded facilities erode confidence in the IAEA's ability to ensure compliance, heighten the risk of radiological release, and expose the fragility of the region's security architecture.

Attacks on nuclear facilities, regardless of the actor or justification, pose a profound threat to human safety, international peace, and global security. Strengthening regional security arrangements and ensuring that nuclear infrastructure is protected from military operations is now an urgent imperative. Against this backdrop, the core message is clear: a Middle East free of nuclear weapons and all other WMD is not merely desirable, but an urgent global necessity.

Evolving concept of a NWFZ

The idea of establishing a zone free of nuclear weapons and other weapons of mass destruction in the Middle East emerged during the late 1970s and early 1980s, at a time when regional conflicts, shifting alliances, and the global Cold War competition heightened concerns about proliferation.

In 1974, Egypt and Iran jointly introduced the first UN General Assembly resolution calling for a Nuclear Weapon Free Zone in the Middle East, reflecting a shared recognition that regional security could not be achieved through arms races or unilateral military advantage. This early initiative was rooted in the belief that regional stability requires mutual restraint, transparency, and a commitment to collective security, rather than the pursuit of deterrence through WMD capabilities.

Over time, the concept evolved to encompass not only nuclear weapons but also chemical and biological weapons, reflecting the region's experience with chemical warfare and the broader international movement toward comprehensive disarmament. The political momentum behind the WMDFZ gained further significance with the adoption of the 1995 Resolution on the Middle East, which formed an integral part of the package enabling the indefinite extension of the NPT. The Resolution recognized that the Middle East's unique security environment required a dedicated framework to address longstanding asymmetries, unresolved conflicts, and the absence of region-wide verification arrangements. It also acknowledged that progress toward a WMDFZ would reinforce the NPT's credibility and contribute to global nonproliferation objectives. This move was further advanced by the 2010 NPT Review Conference Action Plan on the Middle East, reaffirming the international community's commitment to establishing a zone free of nuclear weapons and all other weapons of mass destruction (WMDFZ).

The Resolution established the legal and political foundation for subsequent efforts, including the UN convened Annual Conference launched in 2019. These initiatives reflect a growing understanding that, as former UN Secretary General Kofi Annan observed, "security is not a zero-sum game." They also underscore that durable peace in the Middle East requires cooperative, inclusive, and region owned approaches to eliminating WMD from the regional security architecture.

Yet progress toward implementing the Resolution has been consistently hindered by persistent hesitation, political fragmentation, and the argument that regional perspectives are too divergent to permit meaningful preparatory work.

At the same time, international attention sought to address nuclear proliferation concerns not through a region wide security architecture, but more through a targeted and selective case by case approach. That ¨"Band Aid"¨ approach has failed to address region wide WMD security concerns. Within this approach comes the handling of the "Iran nuclear file," under the assumption that resolving a single topical issue would ease broader proliferation concerns. This narrow approach, however, was neither pursued with the consistency nor the diplomatic investment required to produce a negotiated and sustainable outcome. It also ultimately diverted energy away from the comprehensive, region-wide processes envisioned in the Resolution.

Needless to say that a case-by-case counter proliferation approach cannot substitute a regional nonproliferation and disarmament regime. In fact, it is unconstructive and undermines any prospects for consolidating such a regime. More worrisome, especially in the global security perception, is the fact that such a "Band Aid" approach has failed to diminish the value of nuclear and other WMD as the ultimate deterrence and guarantor of security.

The Imperative of the 1995 Resolution

The 1995 Resolution on the Middle East remains valid, binding, and essential. Its implementation cannot be deferred or conditioned on political developments. The credibility of the NPT depends on honouring commitments made to all States Parties, including those in the Middle East.

The 2026 NPT Review Conference must therefore reaffirm the centrality of the 1995 Resolution, recall the responsibilities of its three cosponsors (Russian Federation, the United Kingdom, and the United States), and encourage constructive engagement by all regional states, because failure to advance implementation risks further erosion of the NPT's authority and deepening regional insecurity.

The United Nations Annual Conference

The UN General Assembly–mandated Annual Conference on the Establishment of a Middle East WMDFZ has made clear that inclusive dialogue is possible without preconditions, and that all regional states are able to engage constructively when provided with a neutral and legitimate forum. To sustain this momentum, universal regional participation, support from the nuclear weapon states, and technical engagement by the IAEA, OPCW, and other relevant organizations will be essential.

The NPT review process should reinforce this effort rather than remain a bystander. The Annual Conference has emerged as the most credible and effective avenue for sustained dialogue and confidence building in the region, and it deserves the full political backing of the Review Conference.

Building Blocks for Progress

The events of 2025–2026 have made clear that the Middle East cannot rely on ad-hoc crisis management or external mediation to prevent escalation. The region requires a structured, predictable, and inclusive process capable of reducing risks and building confidence over time. While political conditions remain challenging, practical steps are both possible and urgently needed. Experience from other regions shows that progress toward a WMD free zone does not begin with comprehensive agreements, but with incremental measures that gradually create trust, transparency, and a conducive environment for cooperation. In this context, a set of mutually reinforcing building blocks can help lay the groundwork for meaningful negotiations. These measures do not prejudge final outcomes, nor do they require states to compromise on core security concerns at the outset. Instead, they provide a pragmatic pathway to reduce immediate dangers, strengthen verification mechanisms, and open channels of communication that have long been absent in the region.

a. Regional confidence-building measures

- Greater transparency on nuclear-related activities
- Voluntary information exchanges and notifications
- Commitments to refrain from attacks on nuclear facilities

b. Strengthening verification and safeguards

- Universalization of the IAEA Comprehensive Safeguards Agreement
- Regional cooperation on nuclear safety and security
- Joint regional nuclear cooperation projects, including training and emergency preparedness initiatives

c. Inclusive security dialogue

- Regular regional consultations involving all states
- Engagement of scientific, technical, and civil society communities
- Exploration of cooperative monitoring and verification arrangements

These steps would build trust, reduce risks, and help create better conditions for negotiations on a WMDFZ.

The Role of Nuclear Weapon States

The engagement and leadership of the nuclear-weapon States are indispensable for advancing the establishment of a Middle East WMDFZ and restoring confidence in the NPT. Their responsibilities extend beyond rhetorical support: they must provide legally binding negative security assurances to regional states, support dialogue without political preconditions, refrain from actions that heighten regional tensions, and engage constructively with the UN Annual Conference. Only through such sustained and credible involvement can the nuclear-weapon States help create the political conditions necessary for meaningful progress toward a region free of nuclear weapons and all other WMD.

A Path Forward

The peoples of the Middle East deserve a future free from the shadow of nuclear, chemical, and biological weapons, a future grounded in security, dignity, and economic prosperity. The 2026 Review Conference should therefore seize the moment to demonstrate genuine leadership, reaffirm the long-sought aspiration of peoples of the region and take concrete steps toward establishing a Middle East free of all weapons of mass destruction.

To that end, the Conference should reaffirm the 1995 Resolution in clear and unambiguous terms; encourage universal participation in the UN Annual Conference; promote practical risk-reduction and confidence-building measures; recognize the catastrophic humanitarian consequences of nuclear use, as acknowledged in 2010. It should also call on all states never to use or threaten to use nuclear weapons; and reaffirm the internationally recognized prohibition on attacks against nuclear facilities, consistent with international humanitarian law and relevant UN and IAEA resolutions.

Taken together, these steps would strengthen the NPT, reduce regional risks, and support a credible and sustainable path toward a WMDFZ.

Conclusion

A Middle East free of weapons of mass destruction is a realistic, necessary, and achievable objective that would serve the security interests of all regional actors. The continued failure to implement the 1995 Resolution undermines the credibility of the NPT, erodes confidence in the review process, and risks further deterioration of the regional security environment. In its absence, states will continue to seek alternative means to address their security concerns, thus increasing the likelihood of proliferation, miscalculation, and conflict. We should remind ourselves that a single spark can burn down a forest.

The 2026 Review Conference offers an opportunity for renewed determination and a collective commitment to advancing a Middle East free of nuclear weapons and all other WMD. We should not miss this opportunity. The establishment of a WMDFZ, together with the inclusive preparatory work required to advance it, would provide essential assurances regarding regional stability and nonproliferation.

Perspectives on the NPT from East Asia

by Mark Suh and Tatsu Suzuki
Pugwash Council

This is a challenging time for nuclear disarmament and nonproliferation. It is critically important to have a successful NPT Review Conference in 2026 in order to safeguard the last remaining treaty on nuclear nonproliferation and disarmament, to maintain global and regional stability and limit nuclear risks. In East Asia, tensions among nuclear-armed states and nuclear-umbrella states are rising due to the increase and modernization of both conventional and nuclear arms, as well as direct threat-making and the lack of dialogue. This paper briefly assesses what steps can be taken to enhance the likelihood of success at the NPT Review Conference, as well as reductions of tensions and possible arms control and disarmament dialogue in East Asia. How can Pugwash contribute to achieving this goal?

Summit meetings to reduce tensions and prepare for the NPT Review Conference

There are chances for possible dialogue among leaders of the countries in the region when US-China and US-Japan summit meetings are planned in March. These are rare opportunities to discuss measures to reduce tensions in the region as well as possible nuclear arms control issues preparing for the NPT Review Conference. Another US-ROK summit meeting would be essential to this regard as well. It is important to place tension reductions and nuclear issues high on respective summit agendas. Pugwash continuously advocates for this.

Re-thinking "success" of the NPT Review Conference

Typically, adopting the final document by consensus is the "successful outcome" of the Review Conference. Given the current conflicts and disagreements among party members, it is unlikely to "succeed" to adopt the final document by consensus. But it is still significant if party members can achieve to adopt documents by topics or by regions. It may not be an official success, but the adoption of "agreed documents" by concerned parties is key to strengthening the nonproliferation regime. It may also reduce tensions and lead to future arms control and disarmament dialogue. Changing the consensus rule to other decision rules (e.g. "consensus minus one") may be another option to be considered. It is critically important that the global community should see the outcome of this coming NPT Review Conference as "successful". Otherwise, there is a risk that the nonproliferation regime would lose further credibility which could lead to uncontrollable nuclear proliferation.

Recommendations for regional governments in light of the NPT Review Conference

Given recent discussions and concerns about nuclear proliferation, the Japanese and ROK governments should each re-commit to nuclear nonproliferation explicitly. They could do so by declaring unilaterally that they do not and will not seek to develop or otherwise acquire nuclear weapons themselves.

With the respect to the DPRK, the ROK government and other like-minded countries should be pragmatic and make the case that the DPRK did formally withdraw from the NPT by January 1, 2003. This formality could help to pave the way for negotiations with Pyongyang, alleviating the immediate demand that the DPRK shall return to the NPT as a non-nuclear weapon state.

Lastly, Japan and the ROK should actively engage countries in the Middle East, help to mitigate the current conflict and try to negotiate constructive language on the Middle East into NPT Review Conference documents. Both governments should use their diverse and positive relations to contribute to a successful NPT Review Conference and peaceful solution of the current Middle East conflict.

Possible short-term measures to reduce tensions and prepare for arms control measures in East Asia

There are possible short-term measures that all parties or concerned parties in the region can agree on to reduce tensions and to reduce risks of nuclear weapons use.

- One idea is to re-establish "hotlines" among nuclear armed states with a presence in the region (US-Russia, US-China, and US-DPRK).
- The hotline between North and South Korea should also be (re-)established to reduce tensions on the peninsula.
- The two Koreas should declare the end of the Korean War and commit to treat each other as normal states. China and the US could also confirm the end of the Korean War.
- Given diverse missile developments (and deployments) in East Asia, to build confidence and reduce risks of inadvertent escalation, states in the region can consider to unilaterally notify of missile launches or to agree to launch notification regimes. Such measures can focus on ballistic missiles (or include other missile systems such as cruise missiles).
- As a further confidence-building measure, to underline the defensive nature of missile launches, temporary deployments and military exercises, states can unilaterally provide information about their activities or even invite observers to such activities.
- Another idea to reduce nuclear risks is to start dialogue on the "No-First-Use" of nuclear weapons among P5 states (recommended by the Working Group at 2025 Hiroshima Conference).
- Continuing the moratorium of nuclear testing is also an important measure that could be agreed on before or at the NPT Review Conference. States can commit unilaterally to observing the moratorium or confirm their commitment multilaterally.
- No further production of fissile materials for nuclear weapons is another important item that could reduce tensions in the region as China, US (and possibly DPRK) may be producing fissile materials to increase their stockpiles of nuclear warheads. States can commit unilaterally to not producing more fissile material or promise this multilaterally.

- No deployment of intermediate nuclear armed missiles in the region can be another measure to be discussed. Nuclear-armed states in the region can unilaterally or multilaterally promise not to arm intermediate-range ballistic missiles with nuclear warheads if they deploy them to the region or promise not to deploy intermediate-range ballistic missile systems permanently.

Mid- to Long Term measures that should be considered

The NPT supports the idea of establishing Nuclear Weapon Free Zones (NWFZ), but no such initiatives have been made in East Asia. To reduce tensions and enhance confidence building, some states in the region (like ROK, Japan or Mongolia) can consider issuing an official statement of the will to start negotiations to establish a NWFZ in East Asia, including an establishment of a regional security framework pursuing "Common Security" instead of "national security" based on deterrence concept. As a fitting measure, countries in the region can consider establishing a regional security institution, such as the OSCE in Europe, that strengthens regional dialogue, confidence-building and cooperation in the spirit of common security. As a unilateral (and intermediate) step and following Mongolia's example, Japan and the ROK could also declare themselves as nuclear weapon-free zones, illustrating the fact that they do not have nuclear weapons stationed on their territories and do not seek their own nuclear weapons.

In addition to ending the Korean War, it is essential to launch and maintain dialogue with the DPRK, aiming to solve the nuclear issue and non-military solutions for regional territorial disputes.

In light of this, it is necessary to acknowledge the nuclear status of the DPRK, to normalize relations, to work pragmatically towards peaceful coexistence, nuclear freeze and arms control measures.

Pugwash Workshop on Security Dialogue in East Asia

It is now very difficult to have official dialogue among states in the region, but Pugwash can host a Track-2 dialogue to discuss possible security issues, to reduce tensions and minimize the risk of nuclear weapons use in East Asia. Such workshops already took place in 2001 and 2002, in Seoul and Beijing respectively, with comprehensive attendance of states in the region, including the DPRK. Pugwash can revitalize this workshop series in the near future to discuss above-mentioned issues and measures. Mongolia, Vietnam and China could be fitting candidates to host such workshops. At the NPT Review Conference, civil society representatives from East Asia regions can discuss this proposal.

European Perspective on the 11th NPT Review Conference

by Götz Neuneck
Pugwash Council

The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and related NPT regime is the cornerstone of the global non-proliferation regime, enhancing predictability, stability and transparency also preventing nuclear arms races. Over the decades, the treaty has constrained the spread of nuclear weapons. The NPT Treaty's three pillars – non-proliferation, disarmament and peaceful use of nuclear energy – are under strain. Member states might fully lose interest to participate or strengthen the Treaty commitments and obligations, although former final documents in 1995 (Principles & Objectives), 2000 (13 Practical Steps) and 2010 (Action Plan) devised further avenues for progress. Up to 1985, NPT Review Conferences were seen as successful when they managed to adopt a final document by consensus. Since 2015 no final document was approved, and it is likely that this will happen a third time in a row undermining the authority of the treaty fundamentally.

The key challenges are (1) the end of New START and the blockade of strategic reduction talks with no prospect of further nuclear reductions and accountability between the United States and Russia, (2) an evolving nuclear rhetoric to use tactical nuclear weapons, changing nuclear doctrines and (3) mutual accusation of other treaty violations such as nuclear testing and (4) conventional attacks on non-nuclear-weapon states and safeguarded facilities reinforcing the danger of new nuclear non-proliferation.

The current challenges in nuclear weapon policy have the potential to renew nuclear competition between the P5/NWS and stimulate broader proliferation pressures in other regions:

New START Treaty – a historical turning point?

On February 5, 2026, the New START Treaty, which entered into force between the United States and the Russian Federation in 2011, finally expired. After 50 years of successful efforts to limit and reduce the gigantic nuclear arsenals of the United States and the Russian Federation, this could become a historic turning point, because there are no longer any restrictive and legally binding nuclear arms control agreements between the two major nuclear powers.[1] Both nuclear weapon states and NPT members, which possess over 90 percent of the world's approximately 12,300 nuclear warheads, are thus no longer subject to any legal restrictions on producing new nuclear warheads and expanding their operational nuclear arsenals after 35 years.[2]

After the summit meeting with President Putin on August 15, 2025, President Trump did hold out the prospect of "denuclearization of the arsenals." Since then, however, nothing has happened. On the contrary, tensions have escalated on both sides, including two hot wars are fought in which nuclear powers are involved: in the Ukraine and in the Middle East.

On September 22, 2025, President Putin offered that "Russia is ready to continue complying with the central quantitative restrictions of the New START Treaty for one year after February 5, 2026" if the United States does the same. To date, the White House has not publicly responded to this offer. Both nuclear weapon states risk damaging the Non-Proliferation Treaty Regime irreversibly by violating Article VI obligations, which state that “each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament.” Without further actions, both the US and Russia risk accelerating an irreversible nuclear arms race that ultimately cannot be won by either side, as well as the intensified continuation of nuclear proliferation.

A New Nuclear Arms Race: New Testing? New Warheads? New technologies?

All P5 nuclear weapons states are expanding their nuclear arsenals: The US has presented costly plans to modernize and upgrade its stockpile, and President Trump has stated that the US may resume nuclear testing “on an equal basis” with Russia. His Administration accused China of a low yield nuclear test in 2020. In addition, plans have been announced for an unworkable global missile defence system called “Golden Dome” that will encourage adversaries to expand their offensive nuclear systems and can trigger an unbridled arms competition in space.

Russia, in turn, has been developing for many years new types of nuclear weapons that are not covered by New START regulations but could be restricted by future arms control agreements. These include a nuclear-propelled cruise missile (Burestvestnik), a heavy ICBM which can transport up to ten warheads (Sarmat), a manoeuvrable hypersonic gliding warhead (Avangard), and a one-megaton underwater torpedo (Poseidon).

Additionally, the People's Republic of China, having committed itself to renouncing first use, remains silent about the scope and purpose of the expansion and diversity of its nuclear arsenal, which provides other states with arguments for expanding their own armed forces. Ways to limit a nuclear competition of three actors by trilateral arms control have not been found yet.

Finally, the war in Ukraine shifted the debate in Europe from nuclear disarmament to a debate for more nuclear deterrence. The nuclear language and signalling by Russia, which attacked the sovereign Ukraine in February 2022 and continues to fight a brutal air war against the population, has revealed a higher risk of the use of tactical nuclear weapons and emphasized the strategy of nuclear weapon states to shield conventional attacks against non-nuclear armed countries which are left vulnerable. Additionally, the demise of the 1987 landmark INF treaty – which had eliminated all ground-launched ballistic and cruise missiles with ranges of 500 to 5.500 km – has left a vacuum on restrictions on dual-capable delivery systems of INF range. Russia already deployed new INF systems such as the Oreshnik and uses conventional equipped missiles of long-range against the Ukraine. The US and Germany plan to deploy ground-based conventional hypersonic missiles and cruise missiles with high precision in 2026 and Europe launched a programme to develop their own long-range conventional strike capability.

In Europe, given considerable doubts about the US government's loyalty to the NATO alliance, a debate is underway about an independent "European nuclear force." The two European P5 Nuclear weapons states announced to increase the warheads of their smaller strategic arsenal. The announcement of President Macron on March 2, 2026, that France will increase the size of their estimated 290 warhead stockpile, but also not disclosing the overall size of its nuclear arsenal, while also introducing a new concept called “advanced deterrence” expanding the scope of deterrence beyond France itself toward a broader European role including other European states. Already in March 2021, then UK Prime Minister Boris Johnson ordered that the ceiling of the UK’s nuclear stockpile will be raised from 180 to 260 warheads, as part of the government’s Integrated Review of Security, Defence, Development and Foreign Policy.

Individual voices in Poland and Germany are increasingly calling for these countries to allow deployment of forward-based nuclear weapons on their territory or to build their own nuclear deterrent, which would end the NPT obligations of these non-nuclear weapon states. Even new NATO members Sweden and Finland are discussing the necessity of their own nuclear deterrent strategy. The key argument is that nuclear forces will strengthen national security, but this argument can and will be picked up by other states and can lead to a new wave of nuclear proliferation in Europe or the Middle East. Following the demise of the INF Treaty and the daily use of long-range systems in the war in Ukraine, regulations are also needed to prevent a costly and dangerous offensive-defensive arms race with Russia in Europe.

The Nuclear-space connection: an arms race also in space?

There is an increased danger that the arms race also includes the space domain. In the Cold War, the US and the Soviet Union repeatedly pursued weapons programs and testing space vehicles with anti-satellite functions but have not officially permanently deployed space weapons so far due to possible destabilizing effects such as more space debris or threatening important early warning satellites in space which are central for nuclear deterrence. Now, major space-faring nations are obviously experimenting with technology targeting satellite services from enemy countries.[3] The United States, Russia, China and India have conducted debris-causing anti-satellite tests by direct-ascent missile defense interceptors, but also others such as Australia, France, Japan, Iran, North and South Korea and the United Kingdom are developing counterspace technologies to disrupt or destroy satellites in orbit.

The current US government is also planning to erect a new space-based anti-missile defense system. In a formalized executive order on January 27, 2025, US President Trump initiated “a Golden Dome for America” to defend the US against ballistic, hypersonic and advanced cruise missiles, which he said will be “forever ending” the missile threat to the United States.[4] On May 20, 2025, he announced that $25 billion had been allocated for a multi-layered anti-missile architecture comprising land-, sea-, and space-based interceptors and sensors.[5] Orbiting space-based interceptors are also capable of attacking and destroying early warning and communication satellites in geostationary orbit (GEO) as well as critical GPS navigation satellites. Such an approach would pose an intolerable threat to all satellites of all space-faring nations.[6] Counterreactions such as the accelerated development of their own counterspace or stealth capabilities by Russia and China are very likely.

Such developments would herald a new multipolar arms race with strategic nuclear weapons. Both strategic stability between the nuclear-weapon states and stability in a crisis would decline, and the dangers of unintended use of nuclear weapons would increase. The expiration of New START is not only a bad sign for US-Russian relations but also has significant global consequences. The nuclear non-proliferation regime, with the Non-Proliferation Treaty at its core, would be severely damaged, with the risk of an increasing number of states acquiring nuclear weapons. The continued failure of Beijing, Moscow, and Washington to engage in good faith in arms control and disarmament negotiations constitutes a significant violation of their obligations under Article VI of the Non-Proliferation Treaty (NPT) and undermines its long-term viability. This is another reason why more and more states are turning to the Treaty on the Prohibition of Nuclear Weapons, which has now been ratified by 74 states and signed by other 21 others. At the upcoming NPT Review Conference in New York, there is a risk that the treaty, which has 191 parties, will suffer irreversible and structural damage that will make the goal of a nuclear-weapon-free world even more distant and nuclear disarmament impossible.

The second pillar of the NPT, non-proliferation, is also under heavy strain as can be seen in the Middle East and in Europe. The military attacks against Iran and especially on nuclear safeguarded facilities in June 2025 and since February 2026 by two nuclear armed states, the United States and the non-NPT member Israel, took place during ongoing negotiations to bring back IAEA inspectors to Iran, which would have limited Iran`s enrichment capabilities and blocked a path to develop nuclear weapons.

Iran also attacked the underground nuclear facility in Dimona in Israel and Russia attacked the Ukranian Zaporizhzhya Nuclear Power Plant, underlining an increasing risk that nuclear installation could release radioactive material. There are more voices which argue that Iran might leave the NPT causing a new wave of non-proliferation concerns. Key states here are Saudi Arabia or South Korea.

In sum, the key factors of today's global rivalries are: (1) the expansion of nuclear arsenals, doctrines and threats into other domains; (2) the increase of nuclear risks in ongoing wars (3) the collapse of diplomacy and arms control treaties due to inaction and disregard and (4) new regional non-proliferation challenges and (5) the introduction of warfare changing technologies which trigger a technological arms race. All these factors are mutually reinforcing and risk the erosion of multilateral disarmament as well as global and regional security, stability and confidence building.

The coming NPT Review Conference in New York

The 11th NPT Review Conference in April/May 2026 will be very critical for the future of the treaty and global security. Two NPT review conferences in 2015 and 2022 have failed to reach a common agreement to review, reaffirm and strengthen the NPT consensus of 1995, 2000 and 2010. Another failed conference is no option! It is the responsibility of the 191 state parties and especially the P5 nuclear weapons states to conduct good faith discussions to reach forward-looking consensus and concrete confidence building solutions to prevent the use of nuclear weapons. Everything has to be done in New York by the NPT members to protect the integrity of the NPT. Especially Europe, which builds its fundament and peaceful heritage on a multilateral policy, can help to strengthen the NPT and to reduce nuclear risks.

Some proposals have been made to guarantee the survival of the NPT. The following steps can help to make the security policy environment more favourable for far-reaching peace and arms control negotiations:

1. The presidents of the US and Russia declare their commitment to the central rules and limits of the New START Treaty and to begin negotiations on strategic stability and restraint. The continuation of nuclear arms control between the US and Russia with the aim of reducing the stockpiles of these states is central to further disarmament and crisis stability. Renewed recognition of the principles and rules of the Comprehensive Nuclear Test Ban Treaty (CTBT) and the Outer Space Treaty (OST) would have a significant confidence-building effect on the international environment and constrains vertical proliferation visibly. The Stockholm initiative launched in 2019 was a good starting point, but to “reduce the role of nuclear weapons in doctrines” needs concrete actions. Additionally, bi- or trilateral reduction or limitations talks could start immediately with a perspective of further negotiations.
2. The other nuclear-weapon states, China, France, and the United Kingdom, issue a declaration to limit their own nuclear arsenals to current levels if the two superpowers also make a verifiable declaration to this effect. Enhanced transparency measures and a functioning verification procedure for this would need to be established. All P5 states should agree to freeze the number of strategic launchers and negotiate a verification agreement. They can also reaffirm their commitment for the global moratorium on nuclear test explosions and strengthen the technological verification means.
3. Joint limitation measures and restraint would create a more positive environment for talks on further strategic reductions, new restrictions on medium-range missiles and tactical nuclear weapons, limitations on strategic missile defense systems, and other measures to reduce nuclear risks. This includes, above all, joint steps to mitigate the risks of integrating artificial intelligence into the nuclear command and control structure.
4. Even though the nuclear-weapon states declare that "a nuclear war cannot be fought or won," they are not yet prepared to negotiate or implement steps to limit and disarm their nuclear arsenals. Renouncing first use would be a logical consequence. In view of the danger of an arms race spreading to other domains such as space and cyberspace, joint agreements between the five permanent members of the UN Security Council (P-5) are of great importance, also in light of new technological developments.
5. The NPT parties can pledge to refrain the use of nuclear weapons and start negotiations on legally binding negative security assurances for non-nuclear weapon states in compliance with the NPT.
6. Discussions for an “effective verifiable” weapons free zone of mass destruction in the Middle East should be resumed again. This region needs a structured and inclusive process to establish confidence building structures and measures. The 1995 Resolution on the Middle East is not only valid for further discussions but should and thus be filled with life. The inclusion of a regime limiting the use of missiles must be included. The adoption of the additional protocol to IAEA agreements can help to restart confidence against clandestine nuclear weapon programmes. A ceasefire agreement with Iran must include ways to guarantee the rights of this non-nuclear weapon state for the peaceful use of nuclear energy.

References

[1] The treaty, which was adopted in 2010 and extended for five years in 2021, allows each side to have 1,550 deployed nuclear warheads and 700 deployed long-range missiles and bombers. Comprehensive bilateral inspections and verification arrangements have confirmed compliance with these limits until early 2023. See: Fact Sheet Arms Control Association: https://www.armscontrol.org/factsheets/us-russian-nuclear-arms-control-agreements-glance
[2] Federation of American Scientists, https://fas.org/initiative/status-world-nuclear-forces/
[3] Götz Neuneck (2022). A New Arms Race in Space? Options for Arms Control in Outer Space. Security and Defence: Ethical and Legal Challenges in the Face of Current Conflicts. J. C. Peña. Heidelberg/New York, Springer: p. 23-36.
[4] Presidential Actions: https://www.whitehouse.gov/presidential-actions/2025/01/the-iron-dome-for-america/
[5] Secretary of Defense Pete Hegseth Statement on Golden Dome for America, https://www.war.gov/News/Releases/Release/Article/4193417/secretary-of-defense-pete-hegseth-statement-on-golden-dome-for-america/
[6] Fetter, S. and D. Wright (2025). 'Can Iron Dome be transmuted into a Golden Dome?' The Washington Quarterly 48(2): 95-114.

The Nordic Nuclear Debate in a Shifting Security Landscape

by Thomas Jonter and Katariina Simonen
Pugwash Council

Recent shifts in global security dynamics—particularly Russia's war in Ukraine and increasing uncertainty about the United States' long-term commitment to NATO—have led to a debate in the Nordic countries about getting access to nuclear weapons. Notably, President Macron has invited several European governments, among them Sweden and Denmark, to discuss expanding France's role in Europe's nuclear security, including the possibility of stationing French nuclear weapons on allied territory. This initiative comes at a time when the role of nuclear weapons in European defence is being fundamentally re-examined. In addition to the French proposal, there are discussions in the Nordic region about creating a joint Nordic nuclear defence, and in Sweden, renewed interest in a national nuclear weapons program—despite Parliament's rejection of such a program in 1968. In Finland, the Government has recently proposed the abolishment of a legal prohibition to bring nuclear weapons to Finland. The proposition was prepared in secret, which reflects the strongly siloed discussion environment both in Finland and Sweden, i.e. the peace movement and academia on the one side and the governments and the military on the other. If the proposal is accepted, there are few brakes to the introduction of nuclear weapons on Finnish soil and little, if any, supervision and transparency.

In the debate, which is also the view of the governments of Finland and Sweden, nuclear weapons are seen as the ultimate, and essentially the only, guarantor of security. The question is whether this is true. Or do more atomic bombs and more nuclear powers make the world more insecure? If so, is it the international commitment to disarmament and non-proliferation of nuclear weapons that makes the world safer and more secure? Is it deterrence with nuclear weapons - or détente that creates security?

This is of course an impossible question to answer with certainty and clarity given the complexity of the question. However, to believe that a French nuclear umbrella would increase security for Europe is an illusion. It is also an illusion to believe that Sweden or the Nordic countries together would increase their security if they acquired nuclear weapons of mass destruction. The various proposals are based on a faulty analysis on what creates security and risks to normalize a policy that in practice increases the risk of the use of weapons of mass destruction, accidentally or intentionally, and increases the proliferation of nuclear weapons in the Nordic region or in the near neighbourhood. The civilian preparedness initiatives do not include nuclear weapons use in our respective countries or in the neighbouring areas (they cover distant fallout like the Chornobyl incident in 1986). In this situation, it's important to note that any state hosting nuclear weapons must acknowledge it will become a primary target in the event of a nuclear conflict.

In this analysis, we are addressing two main reasons why it is a dangerous idea to replace American nuclear weapons with French, Nordic or Swedish ones:

1. A French nuclear umbrella for Europe creates a feeling of false safety.
2. European nuclear weapon solutions would most likely lead to the spread of nuclear weapons.

A French nuclear umbrella for Europe creates a feeling of false safety

Our fundamental position is that all nuclear weapons, including American ones, must be abolished. This will not happen overnight and should be done in a step-by-step process, as reflected in proposals such as the Stockholm Initiative and to some degree in the TPNW. A French replacement of US nuclear weapons would seriously disturb such step-by-step processes and take us back to square one. Certain public statements indicate that this potential arrangement is intended to supplement, rather than replace, US nuclear weapons stationed in Europe. If that is the real rationale or just a justification can be discussed. However, there are reasons to believe that the main idea with the French initiative is to send a signal to Russia and the rest of the world that Europe still will have a nuclear deterrence capability even if the US is pulling out NATO.

Even if you are a hard-core believer in in deterrence (which we are not), it is unrealistic to assume that French nuclear weapons would have the capacity to replace the American ones. In the long run France's arsenal is estimated at just 290 warheads and is limited primarily to air- and sea-based platforms with regional scope. As of 2024, the United States possesses approximately 5,244 nuclear warheads, Russia holds around 5,580, including a full range of delivery systems and global reach.

It is true that French strike power could be increased and the number of nuclear weapons increased if other European states joined in and pay for the pipes. A French update of its nuclear arsenal strike force would, however, take time and be difficult to organize effectively in cooperation with other European states. In this context, it is also highly doubtful that most European states would agree to a solution where their security and survival ultimately rest on French security guarantees. For example, it is difficult to see that the EU's most powerful state, Germany, would accept that economically and politically weaker France be assigned this role. Furthermore, the domestic political situation in France is shaky. The far-right in France has stated it would not share nuclear weapons with other European countries, further complicating any potential arrangement.

If, against all odds, France were to receive the green light to take responsibility for a European nuclear defence, the question must be answered: when will France be allowed to press the button? Will it, in the end, always be a French decision? That is hard to imagine.

Is it possible to imagine a solution where Europe, or the countries that are part of a new defence alliance, are responsible for a common nuclear arsenal? The question then becomes: Who, in that case, should ultimately be allowed to press the button in a critical situation? Nuclear deterrence is based on the principle that the threat of devastating retaliation discourages attacks. For deterrence to be credible, adversaries must believe that nuclear weapons could be used quickly and decisively. In multinational alliances, this presents complex challenges: who has the authority to launch nuclear weapons in a crisis? Reaching unanimous agreement among ten or more European states is unlikely in urgent situations. This uncertainty undermines the effectiveness of collective deterrence and can lead to dangerous miscalculations.

European nuclear weapon solutions would most likely lead to the spread of nuclear weapons

If President Macron's proposal is given the green light, there is an imminent risk that the Non-Proliferation Treaty will collapse. The NPT regime is already under great pressure in light of the fact that the nuclear-weapon states are not living up to their promises, namely, to disarm in accordance with Article VI of the treaty. This pressure has increased further with the expiry of the bilateral arms control agreement between the US and Russia, NEW START, in February this year. This means that the world's two largest nuclear powers are free to resume production of new nuclear weapons without regulation. If the NPT collapses, it will likely lead to a number of states taking steps to acquire nuclear weapons.

Even a Nordic or Swedish nuclear weapons program would, for obvious reasons, fundamentally jeopardize the future of the Non-Proliferation Treaty (NPT). Such an acquisition would constitute a clear violation of the NPT, which has served as a cornerstone of the rules-based world order since 1968. For example, when India conducted nuclear tests in 1974 and later in 1998 outside the NPT framework, it triggered regional arms races and heightened tensions with neighbouring countries, illustrating how treaty violations can destabilize security in an entire region. Furthermore, experts like the Stockholm International Peace Research Institute have warned that undermining the NPT could lead to increased proliferation and erode trust among European states, making collective security much more difficult to achieve. Are Sweden and the Nordic countries truly prepared to risk terminating the NPT and causing its collapse? As a result, this decision would hardly be beneficial to European security.

What happens in Europe and the Nordic region does not occur in isolation; international relations are shaped by interconnected relationships and mutual perceptions. Our security policy choices can serve both as inspiration for some countries—potentially encouraging others to pursue nuclear capabilities—and as threats for others, possibly provoking countermeasures from major international actors such as Russia, China, or the United States. This interconnectedness underscores the far-reaching consequences of any shift in Nordic nuclear policy.

It is also important to remember what nuclear weapons mean. The bombings of Hiroshima and Nagasaki caused not only immediate mass deaths among civilians, but also extensive destruction through pressure waves and heat radiation, radiation damage, climate impact through soot clouds and radioactive fallout, and a collapse of the healthcare system. This is what happens regardless of whether nuclear weapons are used intentionally or unintentionally. In addition, it should also be added that today's nuclear weapons have a capacity that can destroy the world several times over.

Alternative Strategies: Disarmament, Cooperation, and Confidence-Building

Against this backdrop, what should the Nordic countries do? We believe that the Nordic countries should pursue broader, more effective policies for addressing security threats. Research consistently points to nuclear weapons and climate change as the two greatest existential risks to humanity. Nordic or Swedish acquisition of nuclear weapons would not address these challenges. Instead, the wisest course is to strengthen the rules-based world order through international law, treaties, and confidence-building cooperation.

Risk reduction, arms control, and nuclear disarmament should be central pillars of Nordic security policy. The Stockholm Initiative demonstrates how smaller states can promote security, reduce proliferation risks, and advance steps toward disarmament. Sweden, Norway and Finland have been involved in this process since the start in 2019 and should continue their engagement in accordance with the goals of the initiative. In an era of uncertainty, dialogue and cooperation are more essential than ever.

Recommendations

The Stockholm Initiative will again receive renewed attention at the upcoming NPT Review Conference in April-May 2026. We strongly recommend that the Nordic states join forces, as Nordic cooperation can amplify diplomatic influence and foster innovative approaches to disarmament, setting an example for other regions. Their collaboration is particularly impactful in this context, where unified action can help advance international security goals. The aim should be to identify concrete proposals in line with the agenda of the Stockholm Initiative. This is especially important for Finland and Sweden as new NATO members, to show that the final goal of the initiative should still be general nuclear disarmament. The Initiative represents a concerted effort by 19 states to advance nuclear disarmament in accordance with Article VI of the Non-Proliferation Treaty (NPT). Article VI obligates states to negotiate a treaty for general and complete disarmament under strict and effective international control. The Initiative is anchored in 22 practical steps that outline specific disarmament obligations and related commitments. These steps serve as a pragmatic roadmap for progress. Despite ongoing geopolitical tensions and differing national interests, the Initiative seeks to bridge gaps through consensus-building and practical steps, making progress possible even in challenging circumstances.

Key proposals include:

- Reducing existing nuclear arsenals
- Limiting the role of nuclear weapons in national defence doctrines
- Enhancing transparency among states regarding nuclear capabilities
- Negotiating a treaty to prohibit the production of fissile material for nuclear weapons

These commitments aim to build trust, encourage concrete actions, and foster international cooperation on disarmament. Despite broad support for the Initiative's pragmatic approach, progress has been limited since its launch in 2019. The NPT Review Conference that was organized in 2022 was overshadowed by escalating tensions between Russia and Ukraine, making it difficult to secure the consensus needed to move forward. The conflict led to deep divisions among member states, particularly regarding language condemning Russia's actions, which prevented agreement on a final document. As a result, key resolutions on nuclear disarmament and non-proliferation were not adopted, including commitments to strengthen verification mechanisms and measures to reduce nuclear risks. These unresolved issues highlighted how geopolitical tensions can directly undermine the effectiveness of international treaties and hinder progress on critical security initiatives. As a result, the Initiative's implementation stalled.

To overcome these challenges and reinvigorate the process, we recommend that the Nordic states jointly advocate for the creation of an expert group linked to the Stockholm Initiative. This group is necessary for several reasons:

- Strategic Guidance: The expert group would develop a grounded, actionable strategy for the Initiative's roadmap, tailored to the evolving international landscape.
- Diverse Expertise: By including specialists in international law, disarmament research, military affairs, civil society, and diplomacy, the group can address complex issues and anticipate challenges.
- Global Inclusion: Ensuring representation from all continents would foster broader support and legitimacy for the Initiative.

The expert group would be tasked with producing a comprehensive plan to guide actions over the next five years, culminating in the subsequent NPT Review Conference. For example, the group could recommend new verification mechanisms, propose confidence-building measures, and facilitate dialogue among stakeholders.

The authors would like to thank Dr Juha Vuori, University of Turku, for his comments on our draft of this article, which have strengthened the argumentation.

WASHINGTON AND ARTICLE VI IN 2026

By Steven E. Miller
Pugwash Council

From its beginnings, the Nonproliferation Treaty (NPT) review process has been troubled by the obvious contradiction between the unmissable deep attachment of the nuclear-armed states to their nuclear arsenals and the obligation under Article VI of the NPT to work for the elimination of nuclear weapons. In the first two decades of the NPT regime, there was what might be called a Cold War exemption, recognizing the reality that the great protagonists of the age, the United States and the Soviet Union, were engaged in an intense nuclear competition that was firmly embedded at the heart of their global rivalry. Even in that era, however, many among the non-nuclear weapon states (NNWS) voiced criticism of the nuclear armed states and objected to what was seen as the disregard of Article VI obligations. We now live in a world in which 99 states – more than half the membership of the United Nations – have signed the Treaty on the Prohibition of Nuclear Weapons (TPNW) as a clear expression of their preference for a nuclear weapons free world and as a sign of their frustration that Article VI has been inadequate as a mechanism to bring nuclear disarmament genuinely into view. Collisions between the nuclear armed states and the NNWS over Article VI have been regular features at NPT Review Conferences and may be intense in 2026 as states that have renounced nuclear weapons confront those states that are determined to retain their nuclear weapons capabilities for the foreseeable future.

The United States has always vigorously defended its record against the charge that it was failing to fulfil its obligations under Article VI. At one NPT Review Conference after another, it rejected this criticism and offered arguments justifying its performance under Article VI. In part, this defence has rested on rhetorical support for the core objective of Article VI. American presidents have recurrently expressed a commitment to the long-term goal of nuclear disarmament. President Obama famously made this declaration in his Prague speech in April 2009: "I state clearly and with conviction America's commitment to seek the peace and security of a world without nuclear weapons." The United State has not resisted or rejected Article VI but rather has unambiguously aligned its long-term policy with the ultimate aim of Article VI. However, the United States did not rely solely on declarations of fealty to Article VI – pleasing rhetoric was not sufficient to allay criticism. Rather, Washington has insisted that its record includes many elements that it regards as implementation of Article VI. In making this argument, the United States mobilizes whatever constructive steps are evident – such as the Cooperative Threat Reduction (CTR) or constraints on fissile material production – that support its claim. But across several decades, the US case has rested on three broad planks.

Institutionalized Arms Control Process. Starting with the initiation of the Strategic Arms Limitations talks in 1969, and continuing for some four decades, the United States engaged in sustained arms control interactions with Moscow (the Soviet Union and then Russia). This was a process that experienced occasional delays, interruptions, and setbacks, but was governed by the expectation that it was an ongoing exercise that would occasionally result in a new agreement constraining nuclear forces. This allowed the Cold War superpowers to claim that they were acting in a manner consistent with the call in Article VI for "good faith" negotiations aiming at ending the arms race and seeking nuclear disarmament.

An Architecture of Nuclear Restraint. Across that four-decade period, the result of the arms control process was an increasingly constraining web of agreements that governed the nuclear relationship between by far the two largest nuclear armed states. These agreements, starting with SALT I in 1972 and continuing through the New START agreement of 2010, cumulatively stifled the arms races by freezing numbers, constrained modernization, eliminated some destabilizing weapons, achieved deep reductions, introduced extensive transparency, and institutionalized strategic dialogue. The successful creation of arms control frameworks made it possible for Washington to plausibly claim that it valued nuclear restraint, sought to avoid arms racing and minimize nuclear dangers, and to argue that it was fulfilling Article VI obligations.

Nuclear Reductions. The Cold War witnessed truly prodigious accumulations of nuclear weapons. The US nuclear stockpile peaked in the mid-1960s with more than 30,000 weapons. The Soviet arsenal reached nearly 40,000 nuclear weapons in the mid-1980s. The combined nuclear inventories of the two superpowers reached a crescendo in 1985, at 63,632 weapons. However, the story line in the decades subsequent to the collapse of the Soviet Union in 1991 involved the steep reduction in the number of nuclear weapons held by Washington and Moscow. For the United States, its nuclear holdings declined from a high of 31,255 to 3,748 by 2023 – an 88% reduction. Indeed, the broad pattern in the three decades from 1985 to 2015 was a steady and occasionally rapid decline in the nuclear inventories of both nuclear superpowers. This trend, above all, could be spotlighted as consistent with the call in Article VI for efforts to achieve nuclear disarmament.

This combination of extensive arms control exertions and major nuclear reductions led US officials and many US experts to the conclusion that the United States has more than satisfied the vague mandate in Article VI to pursue negotiations and work toward disarmament. Illustrative is the conclusion of the US submission on Article VI to the NPT Preparatory Committee in 2003, offered by a Bush Administration generally regarded as sceptical of the NPT Review process: "The totality of these efforts represents a solid record of achievement in implementation of Article VI." Similarly revealing is the judgement of Christopher Ford, prominent expert and sometime US official, offered in 2007: "To what extent can it be shown that the United States has failed with respect to Article VI….? The answer is that the United States has made enormous progress, so much so that had someone predicted two decades ago that things would stand where they do today, that person might perhaps have been thought mad." Critics may focus on the thousands of nuclear weapons that still exist and the absence of evidence that the United States,

or any of the nuclear armed states, have any real inclination to give up their nuclear arsenals, but at NPT Review Conferences an unapologetic Washington has been able to point to a substantial record of arms control accomplishments and nuclear reductions in answer to complaints about its compliance with Article VI.

In 2026, the dynamic will be different because Washington's usual defences of its Article VI record are not available. The arms control process has been dormant for more than fifteen years. There have been no formal negotiations since the conclusion of New START in 2010. Washington's occasional statements declaring a desire for better agreements and for the establishment of a trilateral US-Russia-China negotiating framework have not led to actual negotiations and have produced nothing that suggests actual progress – indeed, there is nothing in sight to indicate that anything meaningful will happen in the realm of strategic nuclear arms control.

Meanwhile, with the expiration of the New START agreement in February 2026, a two-decade trend of eroding arms control constraints culminated in the complete elimination of the negotiated framework that governed the US-Russia nuclear relationship. For the first time in more than half a century (since the signing of SALT I in May 1972) the strategic nuclear forces in the possession of Washington and Moscow are unregulated by any negotiated constraints. The extensive architecture of nuclear restraint that once existed, including not only limits on offensive forces but the ABM Treaty, the INF agreement, and the Cooperative Threat Reduction Program, has been dismantled or allowed to expire without replacement. The Trump Administration saw existing arms control as unfortunate shackles on American power and forthrightly explained that the demise of New START "marks the end of an era: the end of US unilateral restraint."

Further, the long-standing pattern of nuclear reductions, stretching over some thirty years, has come to an end. For the past decade, the US nuclear stockpile has remained more or less constant. It is true that many thousands of nuclear weapons have been eliminated in the past, but the focus in 2026 is sure to be the thousands of nuclear weapons that remain. Moreover, in response to the Chinese buildup of its nuclear forces, there is now active discussion in the strategic community in the United States of the need to increase the number of deployed US strategic forces in order to offset Beijing's expansion. It is reasonable to expect that the US nuclear arsenal is more likely to grow than to decline in the coming years. Furthermore, the United States is committed to a comprehensive, long-term, nearly two-trillion-dollar effort to replace and improve its entire nuclear posture, including all strategic delivery systems as well as the nuclear weapons production complex. This sweeping and expensive effort is intended to produce the strategic nuclear posture on which the United States will rely for much of the remainder of this century. In the absence of arms control and reductions, it is hard to see how this modernization can be construed as fulfilling Article VI obligations. With the growth of Chinese nuclear capability, the momentum of Russian nuclear modernization, and the US initiative to renovate its entire strategic nuclear posture, a new nuclear arms competition among the three great powers seems more likely than meaningful progress towards greater nuclear restraint.

In the predictable friction over Article VI at the 2026 NPT Review Conference, therefore, Washington's stance will be notably weaker than in the past. In need of replacing its aging strategic forces, determined to respond effectively to Russian and Chinese investments in upgraded nuclear capabilities, and liberated from arms control constraints, the United States is preoccupied with strengthening its nuclear forces and maintaining a strategic posture that preserves its ability to implement its nuclear doctrine. Washington's rhetoric about the desire for new and improved treaties coincides with the reality that arms control is not seriously on the agenda and relations with Russia and China do not seem conducive to successful negotiations. In 2026, there is not much positive that Washington can bring to the Article VI discussion.

The good news is that past fights over compliance with Article VI have not done large or lasting damage to the NPT regime. We can hope for the same this time.

References

1. Discussion of early Article VI controversies and American reactions to them can be found in Steven E. Miller, "Proliferation, Disarmament, and the Future of the Nonproliferation Treaty," in Morten Bremer Maerli and Sverre Lodgaard, eds., *Nuclear Proliferation and International Security*, (London: Routledge, 2007), pp. 50-70.
2. Office of the Press Secretary, The White House, "Remarks by President Obama in Prague as Delivered," April 5, 2009.
3. Precise numbers can be found in US Department of Energy, "The US Nuclear Weapons Stockpile," available at https://www.energy.gov/nnsa/us-nuclear-weapons-stockpile.
4. US Department of State, Bureau of Nonproliferation, "Article VI of the Non-Proliferation Treaty" Washington DC, May 1, 2003.
5. Christopher Ford, "Debating Disarmament: Interpreting Article VI of the Treaty on the Nonproliferation of Nuclear Weapons," *The Nonproliferation Review*, Vol. 14, No. 3 (November 2007), p. 413.
6. US Mission to International Organizations in Geneva, "United States Statement by Under Secretary of State for Arms Control and International Security, the Honorable Thomas Dinanno,' February 5, 2026.

Nonproliferation Cluster of Agreements as a Core of Six Arms Control Paradigms

By Alexander Nikitin [1]
Pugwash Council

Nonproliferation is more than a Treaty and more than a principle. It is a core group of treaties, agreements, regimes central to a spectrum of 69 arms control agreements concluded between 1960 and today. This piece of analysis, written by one Western and one Russian scholar belonging to the Pugwash community, organizes the history of arms control into clusters or paradigms, which are deconstructed into basic principles and reconstructed as rising and falling curves, reflecting world order changes.[2] This enabled the authors to determine what has become outmoded, what has been rendered irrelevant, what is useful but in need of updating, and what remains relevant and called for.

The paradigms

Paradigm in arms control is a relatively systemic set of dominating basic principles and practical conclusions from such principles, co-adopted and co-shared for a limited historic period by a group of states or interstate alliances in the areas of limitation, prohibition, and elimination of certain types of weapons and of geopolitical, military, and technical capabilities related to armed fight.

We identified six paradigms (logical groups, clusters) in the history of arms control: Nonproliferation, Arms Limitation, Cuts and Elimination (Disarmament), Confidence-building, Risk Reduction, and Strategic Stabilization. Verification was treated as a cross-cutting dimension.

The **Nonproliferation** Paradigm is the most important in the context of the NPT Review Conference. It is not limited to the Nonproliferation Treaty per se. It also includes the large cluster of almost three dozen treaties, agreements and regimes (see Table 1).

Table 1. Nonproliferation Paradigm					
1980	Convention on the Physical Protection of Nuclear Material	1995	Treaty on the Southeast Asia Nuclear-Weapon-Free Zone (Bangkok Treaty)	2015	Plan of Action on Iran (JCPOA)
1979	Moon Agreement	1995	NPT decision on strengthening the NPT review process	2010	NPT Review Conference "Action Plan"
1977	"The London Club," Nuclear Suppliers Group (NSG)	1995	NPT Principles and Objectives of Nuclear Non-Proliferation and Disarmament	2009	Central Asia Nuclear-Weapon-Free Zone
1971	NPT Model Safeguards Agreement	1995	Indefinite extension of the NPT	2005	International Convention for the Suppression of Acts of Nuclear Terrorism
1971	Seabed Arms Control Treaty	1994	Belarus, Kazakhstan, Ukraine accede to the NPT as non-nuclear-weapon states	2000	NPT Review Conference Document "13 Practical Steps"
1968	Non-Proliferation Treaty (NPT)	1994	Budapest Memorandum	1997	IAEA Model Additional Safeguards
1967	Tlatelolco Nuclear-Weapon-Free Zone (NWFZ) agreement	1992	Lisbon Protocol recognizing Russia, Belarus, Kazakhstan, Ukraine as successors to the USSR obligations under the START-I Treaty	1996	Wassenaar Arrangement on Export Controls
1967	Outer Space Treaty	1987	Missile Technology Control Regime (MTCR)	1996	African Nuclear-Weapons-Free Zone Treaty (Treaty of Pelindaba)
1963	Partial Nuclear Test Ban Treaty (PTBT)	1985	The Australia Group on Export Controls of Biological and Chemical Items	1996	Comprehensive Nuclear-Test-Ban Treaty (CTBT)

Treaties and agreements within the Nonproliferation paradigm are united by being based on the three principles:
(1) Preventing the spread of WMD to new countries;
(2) Preventing the proliferation of weapons of mass destruction (WMD) to territories and domains that are the common heritage of mankind, and to zones under special international jurisdiction;
(3) Preventing WMD from falling into the hands of non-State actors.

The first of these principles is enshrined in the most important Treaty on the Non-Proliferation of Nuclear Weapons (1968) and institutionalized in the creation of the International Atomic Energy Agency (IAEA) and its inspection and verification system.

The second principle became the basis of agreements on the prevention of militarization of Antarctica (1959), the Moon and other celestial bodies (1967 and 1979), and the seabed (1971). Regarding the ban on the deployment of nuclear weapons into outer space, it should be noted that Russia has long been fighting to expand this ban on all military activities in outer space and has jointly submitted with the PRC a draft relevant treaty on the prevention of the deployment of weapons in outer space (PPWT, 2008). Since 1967, when Latin American countries proclaimed a nuclear-weapon-free zone on their continent (the Treaty of Tlatelolco), six nuclear-weapon-free zones have been formed, surrounded by additional agreements and declarations by (not all) nuclear-weapon States about the recognition of these zones.

As for preventing WMD and other dangerous military technologies from falling into the hands of non-state actors, this principle is embodied in a number of agreements on the creation of an export control system, a missile technology control regime (1987), and the prevention of nuclear terrorism (1980, 2005), but it still needs significant upgrade. The further evolution of the Nonproliferation paradigm rests with the legitimacy of the NPT and application of the principles of nonproliferation not only to more states, but also to non-state actors (private military and security companies, international terrorist networks, etc.), and to more domains (first of all, to outer-space).

The P5 are united in support of the treaty. But far from being the dynamic instrument it was meant to be, it has become a status quo instrument. The NPT treaty and the international regime connected with it have proven resilient, but being halted on the disarmament dimension, stuck in the Middle East, and largely irrelevant in Asia where three NWSs remain outside the Treaty, the NPT regime requires serious collective efforts to survive and to upgrade.

The **Limitation** paradigm (numerical limits, but yet no cuts), is best known for the initiation of strategic arms limitation talks (SALT I) in the 1970s. By now it is outmoded. In a multipolar world of asymmetrical force postures and multidomain war strategies, parity in select categories of weapons is a straitjacket, launchers are inadequate units of account, and verification by national technical means is not enough to allay suspicions of noncompliance. Moreover, some types of weapons call for radical solutions (elimination) rather than mere ceilings at existing levels. Sometimes, a total prohibition is easier to verify than reductions.

The conditions for revitalization of militarily significant **Confidence-building measures** Paradigm are not so easy to reproduce. The rationale for the Stockholm Conference CSBMs from the mid-1980s and the Vienna documents that followed mounted on the assumption that transparency leads to predictability which is conducive to confidence. In Europe of the 1980s that seemed logical and achievable: the European borders had been recognized, the parties had promised to tolerate or even to respect each other's political systems, and the end of the Cold War was in sight. Clearly, CSBMs of this kind are fair weather measures, conditioned on none of the parties harbouring any intention to change the status quo by military means – all of it in stark contrast to contemporary security realities.

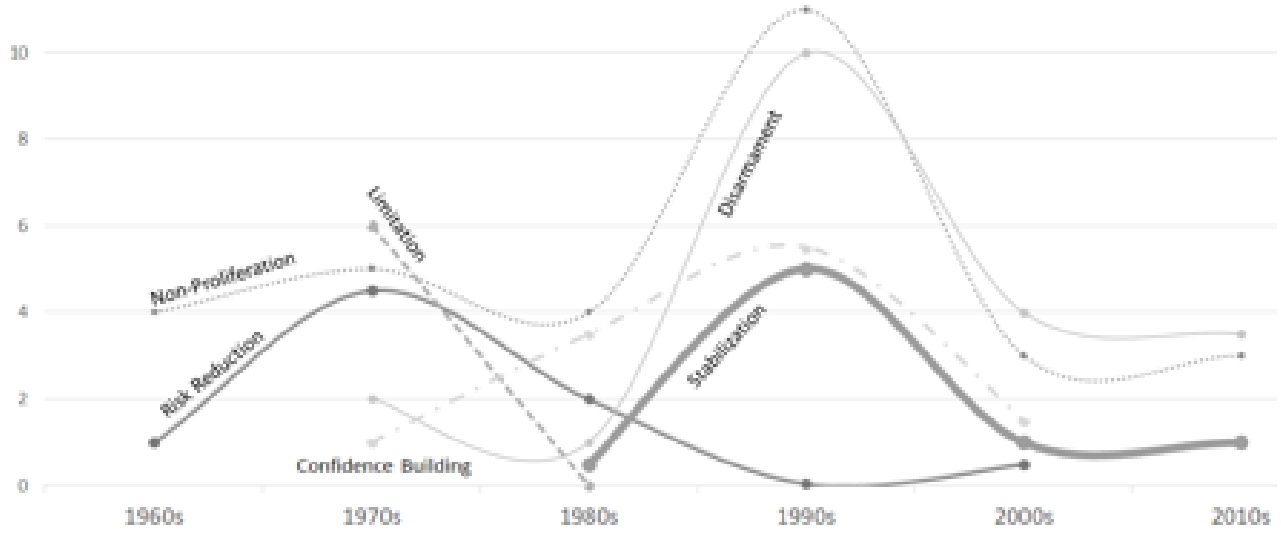
Technically, many of the other CBM agreements remain valid, but they have fallen victim to rapid political and military changes and lost much of their relevance. When the US withdrew from the Open Skies Treaty (2020) and Russia suspended exchange of data under New START (2023), the communications handled by the US-Russian Nuclear Risk Reduction Center reportedly dropped to less than 10 percent of what it had been in 2019. Over time, each side's picture of the other's nuclear arsenals has grown opaque.

The **Risk-reduction** paradigm tries to come to grips with immediate dangers by instant communication (direct hot lines) to avoid accidents and by negotiating "rules of the road" to prevent escalation. In a transitioning world replete with serious conflicts, this paradigm has fundamentally important tasks cut out for it. Assuming that world powers may use force, but want to avoid another world war, a nuclear war in particular, risk-reduction measures are a sine qua non.

The **Disarmament** (cuts & eliminations) paradigm remains relevant. In the US–Russia dyad, many new long-range nuclear and conventional weapons can be fitted into existing New START structures under the principles of common ceilings and freedom to mix. Reduction of reserves and destruction of units to be withdrawn can also be accomplished by proven arms-control methods. So far, verification problems have prevented warheads from being units of account, but this needs not be an insurmountable obstacle to future agreements. The precision lost by counting launchers, delivery vehicles, and other quantifiable gadgets may be manageable.

The **Disarmament and Strategic Stability** paradigms are intertwined. In the beginning, stability was the number one objective of arms control. Next was damage limitation should war occur, followed by reduction of the costs of military preparations. Disarmament was desirable but subordinated to stability. Conceivably, arms build-up could also be conducive to stability, for instance, to diminish the vulnerability of one's deterrent. However, the history of arms control shows that stability has been achieved by prohibitions and reductions – by the ABM Treaty of 1972 and by the START process from the early 1990s onwards - and undermined by arms build-up, proving that disarmament can only be reached through arms-control objectives.

Graph 1 shows the evolution of each paradigm, by decade.



There was an early peak in the first half of the 1970s, when the Helsinki Conference on Security and Cooperation (CSCE) laid the foundations of multilateral CBMs and the first US-Soviet agreement on strategic arms was signed. The high point came 20 years later, during the "period of opportunity" after the Cold War. During the 1970s, 14 new arms control agreements were signed, in the 1990s the quantity of new treaties and agreements reached 24, while then dropped down to 4 in 2010s and none in 2020s.

This century, many agreements have been terminated and for several years there have been no new arms control accords. The agreements that survived, however decimated, mainly belong to three of the six historic paradigms: Risk reduction, Non-proliferation and Confidence-building. Future efforts may centre on the principles of these paradigms supplemented by behavioural rules and limitations, in addition to physical elimination and capping of weapon systems.[3]

Towards a new arms control and disarmament paradigm

The rights and obligations of the NPT are not confined to the nonproliferation paradigm but branch out to the disarmament paradigm as well. Article VI of the NPT obliges all member states, non-nuclear as well as nuclear, to work for disarmament. In the nonproliferation paradigm, one of the priorities remain stalled: nonproliferation to more environments, especially to outer space. Preserving outer space as the common heritage of mankind and preventing its militarization is perceived by the world community (though not by all states) as an urgent global problem requiring global cooperation.

Another track has been under-utilized: more can be done to prevent proliferation of weapons of mass destruction and related technologies to non-governmental actors. Governments tend to be united against non-governmental interference, in trade union fashion. What is required is therefore attentiveness, diligence, and timely initiatives as much as overcoming political biasness.

To avoid plunging into the abyss of nuclear escalation, the current reformatting of the world order must address the proliferation of multi-domain military strategies and the multiplication of asymmetric types of weapons capable of solving comparable tasks. It calls for a new paradigm and new, flexible disarmament methods.

Any new disarmament paradigm should be based, inter alia, on principles addressing the relationship between different types of weapons and technologies. This includes the relationship between nuclear weapons and high precision, hypersonic conventional arms that can fill many roles hitherto assigned to nuclear arms; the interconnection relationship between offensive and defensive systems; and weapons which do not have a "mirror" analogue in the arsenals of other countries. A new strategic equation may compensate for such asymmetries by slashing a category of weapons on one side in exchange for not deploying a group of much different weapons on the other side. System to system trade-offs may replace the rigid principle of parity in comparable force categories.

Instead of combining negotiations on interrelated weapons into one large "gordian knot", dismembering and disconnecting different negotiation tracks have been suggested. Some will remain bilateral while others may become trilateral or multilateral. Different tracks will develop at different speeds, and some may drag on for decades.

New technologies and strategies affect how weapon inventories are grouped for negotiating purposes. Strategic weapons are no longer confined to weapons of intercontinental range. Medium and shorter-range weapons may also have strategic roles. If so, they had better be placed in the same basket together with long-range strategic weapons, with a freedom to mix.

More important, entirely new items are waiting for a place on the agenda, cyber means not least. Negotiations on interrelated weapon systems as well as single categories of arms could be imagined in different dyads and triads.

Common Security

In its broadest sense, arms control is about all forms of interaction and cooperation between potential enemies aimed at reducing the likelihood of a war that neither side wants. It is grounded in the realization that lasting security is something states have to build together for mutual gain. To bring it back to life and make proper use of its potential the world must therefore revert to cooperative security in some form or other. For that to happen, the first requirement is that leaders are willing to talk with each other in a business-like way. Also, civil society and expert communication across political divides should be encouraged.

In 1982, during another wave of Cold War, the International Commission on Disarmament and Security Issues launched the notion of Common Security.[4] It stated that in the nuclear age, lasting security is something we must build together with our adversaries. It is not something we can build on our own by unilateral rearmament. In this spirit, the Commission issued a series of recommendations and arms control proposals. Today, we may need another commission of a similar kind to apply the concept of common security to the contemporary world – a global coalition of the willing that may contribute to a much-needed resumption of contacts and cooperation across current divides.

References

[1] This paper is edited by Alexander Nikitin on the basis of the joint study by Sverre Lodgaard (Pugwash Norway) and Alexander Nikitin (Russian Pugwash Committee)
[2] Detailed results of the study including lists of all 69 agreements clustered into six paradigms are published at: Lodgaard S., Nikitin A. In Search of a New Arms Control Paradigm. Arms Control Today, 2026, Vol 56, N.1.
[3] Kühn Ü., Williams H. Behavioral Arms Control and East Asia. APLN, RECNA, Nautilus Institute. April 2024. https://www.apln.network/projects/nuclear-weapon-use-risk-reduction/behavioral-arms-control-and-east-asia (accessed 07.03.2026)
[4] Common Security. A Programme for Disarmament: The Report of the Independent Commission on Disarmament and Security Issues under the Chairmanship of Olof Palme. 1982. London and Sydney: Pan Books.

Three Incentive-Compatible Mechanisms for the Next NPT Review Cycle

by Joel N. E. Christoph
International Student/Young Pugwash

The next review cycle inherits an Article VI to which commitments have grown more declaratory and verification more partial. Numerical ceilings set by New START expired on 5 February 2026 with no successor in force, modernization programs are accelerating across all recognized nuclear-weapon states, and the integration of artificial intelligence into command, control, and communications is proceeding with little international visibility. This short paper argues that the next cycle needs above all a small set of incentive-compatible mechanisms that survive political volatility and give states measurable ways to demonstrate restraint. It draws three lessons from mechanism design in frontier technology governance and proposes their translation into NPT practice through transparency commitments among nuclear-weapon states ready to adopt them, an earmarked window within existing participation-support mechanisms, and voluntary declaratory frameworks for AI integration in nuclear systems.

1. The declaratory drift of Article VI

Fifty-six years after entry into force, the NPT rests on a bargain that has narrowed in practice. Non-nuclear-weapon states continue to forgo a nuclear-weapon option and accept intrusive safeguards. Nuclear-weapon states retain their arsenals and meet, with decreasing regularity, to discuss reductions they do not undertake.

The 2022 Review Conference closed without a consensus outcome. New START, the last bilateral instrument placing ceilings on Russian and United States strategic warheads, was suspended by Russia in February 2023 and expired on 5 February 2026 with no successor in force. Modernization programs in each of the five recognized nuclear-weapon states are projected to extend their arsenals well into the second half of the century.

Three technological and strategic pressures compound this drift: (1) the diversification of nuclear possessors, and the corresponding strain on bilateral arms control; (2) the integration of AI into decision-support, early warning, and target-identification systems; and (3) the steady erosion of transparency instruments that once underwrote strategic stability. These pressures sit alongside the non-traditional forces that a recent ISYP report on the Third Nuclear Age identifies as capable of reshaping nuclear policymaking, including climate change, social justice, and public perception (Ayala Arboleda et al., 2026). None of these can be resolved in a single review cycle. Each, however, admits partial mechanisms that are better than silence, and each rewards incremental institutional investment more than grand declarations.

2. Three lessons from frontier technology governance

Mechanism design in AI governance has converged on a small set of tools that transfer to nuclear arms control without requiring treaty amendment.

First, reciprocal transparency with service-level commitments. Emerging frameworks for frontier AI deployment pair scheduled disclosure obligations with response-time commitments for clarification requests. The commitment is procedural, and that is its political appeal. Participants retain content control while agreeing in advance to a bounded response obligation. Analogous structures already exist in NPT practice in the form of the Additional Protocol complementary access regime. The lesson for the next cycle is that narrow, time-bound reciprocal obligations can be layered on top of existing instruments without reopening them.

Second, earmarked capacity-building within existing institutions. Frontier technology governance proposals increasingly pair market access or development assistance with contributions to oversight capacity in states that would otherwise lack it. The logic is that credible verification and informed engagement are shared public goods, and that those who benefit most from technology diffusion can reasonably contribute to the institutional infrastructure that makes diffusion safe. In the NPT context, the existing architecture of the United Nations Sponsorship Programme for disarmament treaty processes, the IAEA Technical Cooperation Programme and Nuclear Security Fund, and successive European Union Council Decisions in support of the NPT and IAEA safeguards already channels capacity-building resources, so the operative question is where new earmarks are needed within this architecture.

Third, voluntary declaratory frameworks with civil-society tracking. Emerging AI governance practice relies on public voluntary statements by states. The REAIM Seoul Blueprint for Action of September 2024, endorsed by sixty-one states, affirms that human control and involvement should be preserved for actions critical to informing and executing sovereign decisions concerning nuclear weapons employment (REAIM, 2024). Two months later, the Biden and Xi meeting in Lima produced the first bilateral affirmation of the need to maintain human control over the decision to use nuclear weapons (White House, 2024). The commitments bind little in formal-law terms and yet raise the reputational cost of visible backsliding over time. The lesson for the next cycle is that voluntary declaratory frameworks can be layered on top of existing instruments and refined across review cycles.

3. Three concrete proposals for the next review cycle

The proposals below translate the preceding lessons into operational steps that the cycle can advance without treaty amendment and through coalitions of willing states.

Proposal 1. Article VI Transparency with Service-Level Commitments, Among Willing Nuclear-Weapon States.

A subset of nuclear-weapon states party with existing transparency practice reciprocally commit to publish, at an agreed frequency, aggregated ranges on deployed strategic warheads, fissile-material holdings outside of weapons, and modernization expenditure categories, using a common template. Each commitment is paired with a response-time commitment for clarification requests from other states party.

This sits alongside treaty verification and operates independently of universal participation. It rebuilds a floor of mutual legibility below which the willing group does not fall, with procedural discipline borrowed from transparency regimes that continue to function and keeps the door open for later participation by states not yet ready to join.

Proposal 2. An Arms Control Engagement Window within Existing Participation-Support Mechanisms.

An earmarked funding window within the United Nations Sponsorship Programme for disarmament treaty processes, paired with targeted European Union Council Decision instruments in support of the NPT, supports non-nuclear-weapon states that request assistance in engaging substantively in NPT review-cycle workstreams and adjacent arms-control dialogues. The window finances delegation-level training, participation costs, and in-country expert time for safeguards-related work tied to review-cycle agendas. Initial capitalization at the low-to-mid tens of millions of dollars, drawn from voluntary contributions by nuclear-weapon states and interested donors, is sufficient to demonstrate concept (Christoph, 2023). The window uses existing administrative infrastructure, targets the specific gap between general safeguards capacity and treaty-level diplomatic engagement, and reduces the correlation between geographic voice in the regime and domestic resource endowment.

Proposal 3. A Voluntary Declaratory Framework on AI and Nuclear Weapons (VDF-AN).

Nuclear-weapon states party, and states party that host or participate in nuclear-sharing arrangements, issue public biennial statements on two commitments. First, the principle that humans retain meaningful control over nuclear weapons decisions, building on existing bilateral and multilateral formulations. Second, a scope-level declaration of AI integration across the main functional classes of their nuclear command, control, communications, and decision-support systems, reported against a small common schema that preserves confidentiality on capability-specific details. The statements are deposited with the United Nations Office for Disarmament Affairs and referenced in review-cycle documentation. Pugwash and allied civil-society networks track and analyze the statements across cycles. Pilot participation by states that already affirm human-control principles is sufficient to establish the framework and to set an expectation that silence becomes informative over time.

Proposal 4. Why these, and why now

Each proposal satisfies three criteria that the next review cycle needs to take seriously. First, none requires treaty amendment or universal participation. Second, each can be initiated by a coalition of willing states and expanded as confidence accumulates. Third, each produces a measurable output that legislators, journalists, and civil society can track between review conferences, which addresses the deeper political problem of a regime whose ambition has come to exceed its observable motion.

A broader observation underlies these proposals. Regimes that survive political stress are those that demand the least on the margin from parties in the worst mood. The mechanisms above ask for template-based disclosures, earmarks within instruments that already exist, and public statements. Each is achievable within the political environment in which the next review cycle will operate.

References

Ayala Arboleda, N., Christoph, J., Erginyavuz, E., Noishiki, H., Pirnavskaia, K., Suh, E., Ward, S., and Weiss, T. (2026). The Third Nuclear Age: Exploring Non-Traditional Security Challenges in Nuclear Policymaking. International Student/Young Pugwash.

Christoph, J. (2023). Economic Incentives for Nuclear Disarmament: Bridging Normative and Pragmatic Approaches for a Safer World. In Expanding Perspectives on Nuclear Disarmament, 109–120. Uppsala: Alva Myrdal Centre.

Christoph, J. (2026). Risk-Weighted Compute Permit Markets under Imperfect Monitoring. SSRN Working Paper.

REAIM (2024). REAIM 2024 Blueprint for Action. Second Summit on Responsible Artificial Intelligence in the Military Domain, Seoul, 9–10 September 2024.

White House (2024). Readout of President Joseph R. Biden, Jr. and President Xi Jinping of the People's Republic of China. Lima, Peru, 16 November 2024.

Scientific Influence and Emerging Nuclear Risk: Transparency and Agency in the NPT

by Haneen Khalid
International Student/Young Pugwash

The central challenge facing the Nuclear Non-Proliferation Treaty (NPT) is no longer limited to the spread of nuclear weapons as discrete capabilities. Increasingly, nuclear risk emerges from the interaction between nuclear and non-nuclear systems, such as those shaped by rapid advances in artificial intelligence. These technologies do not replace nuclear weapons but are reshaping how nuclear-relevant capabilities are developed and governed.

At the same time, innovation is driven less by state-controlled programs and more by fast-moving, transnational ecosystems involving private firms, research institutions and global supply chains. As a result, many consequential decisions affecting nuclear risk are made upstream, before traditional arms control mechanisms take effect. Particularly, Global South actors help drive demand for these technologies but are often underrepresented in shaping the standards and governance frameworks that contain them. The result is a growing mismatch – risk governance that intervenes only at the level of state deployment is too late.

A Changing Risk Landscape

The NPT was designed to address the possession and spread of nuclear weapons. Today, risk is increasingly shaped by interaction effects between nuclear and non-nuclear technologies.

These include AI-enabled decision-support systems that may alter timelines or escalation dynamics, digital infrastructures that introduce vulnerabilities with nuclear command and control, and nuclear-adjacent technologies that can affect strategic stability when integrated into military systems.

Such developments complicate traditional distinctions between nuclear and non-nuclear domains. Further, for Global South states, these dynamics are experienced asymmetrically. While these states may not be primary developers of disruptive technologies, as stakeholders, they are embedded within the supply chains propagating risks. In a system of distributed innovation, nuclear risk is both designed "upstream" and realized through procurement and integration decisions "downstream". Far from rendering the NPT obsolete, this provides an opportunity to re-engage its authority for more integrated risk governance.

The Upstream–Downstream Gap

A defining feature of this emerging landscape is that critical decisions affecting nuclear risk can now be made during the development and financing of adjacent technologies. Systems are often conceived in private-sector environments, developed through transnational research collaborations, financed through global capital networks and procured by states after key design choices are already made.

This creates a structural gap. The NPT retains authority over state obligations, and the International Atomic Energy Agency applies safeguards to nuclear facilities, but neither is systematically positioned to shape how emerging technologies are integrated into national systems. Governments in the Global South acquire defense-adjacent systems without full visibility into upstream design assumptions.[1] For example, imports of advanced military systems from the Global North have not always been aligned with the specific strategic and institutional contexts of procuring states, an issue that may intensify as complex technologies are transferred. This creates information asymmetries and limited capacity to assess dual-use or escalation implications. Addressing this challenge requires extending non-proliferation governance both upstream (design and finance) and downstream (procurement and integration), without displacing the central role of states.

Transparency and Risk Reduction

Improving transparency at the design, financing, and procurement stages can strengthen all three pillars of the NPT. This includes creating trusted channels for discussing sensitive issues, alongside developing scientific guidelines that enable policy and technical actors to incorporate risk-mitigation practices without compromising confidentiality. First, greater transparency improves risk identification by making design choices and safeguards processes visible early in technology lifecycles. Second, it reduces uncertainty and misperception by clarifying human-control provisions, critical in environments shaped by speed and complexity. Third, it creates incentives for safer innovation. If safeguards-ready design and transparency improve access to capital and international legitimacy, both developers and procurers have reasons to adopt these features early.

For Global South states, these dynamics are tied to questions of access. Linking transparency and safeguards-ready practices to improved access to financing, technology partnerships, and innovation ecosystems can align non-proliferation and risk reduction objectives with development priorities. In this way, the same innovation ecosystems that could destabilize nuclear governance can be directed toward strengthening safety and cooperation.

The Pugwash Conferences, Scientific Influence and the Way Forward

The mission of the Pugwash Conferences has long been to bring scientific insight to threats to human security arising from technological developments.[2] Historically, Pugwash has helped translate scientific insight to arms control frameworks, bridging the gap between technical knowledge and diplomatic action. Now there is an opportunity to include such contributions at the level of technology design, system integration and innovation pathways.

Pugwash is uniquely positioned to serve as a technical intermediary in this environment. Its ability to convene scientists, policymakers and future leaders across geopolitical divides can help translate fast-moving technological developments into governance standards. Three possible functions include: first, benchmark formation or defining what constitutes verification-ready innovation in advanced nuclear and tech-enabled systems. Second, risk translation or identifying and categorizing risks emerging at the nuclear–non-nuclear interface, including escalation pathways. And third, transparency and procurement guidance or developing structured transparency practices, helping states assess dual-use risks when acquiring advanced technologies. In doing so, Pugwash can help extend scientific insight not only in nuclear policy debates, but in the technological trajectories that shape nuclear risk.

Recommendations for the Next NPT Cycle

The changing technological landscape offers an opportunity to re-engage the NPT regime for more integrated, multistakeholder governance. The next review cycle should take targeted steps in the following ways:

1. States Parties should establish a structured consultative framework linking existing IAEA efforts[3] to private-sector innovators, financial institutions, and transnational scientific networks. This should focus on developing benchmark practices for innovation safeguards in nuclear and AI-enabled systems.
2. States Parties should encourage financing and partnership models that reward early integration of transparency and human-control provisions. Aligning incentives at the design stage can help shape safer innovation pathways.
3. The review process should promote safeguards-aware procurement norms, ensuring that states have access to structured information when acquiring dual-use technologies.
4. The review process should formalize a role for scientific networks, such as Pugwash, as technical intermediaries. Pugwash-led expert groups can support the development of benchmarks, risk-signaling frameworks, and transparency practices, while ensuring meaningful participation from Global South scientific communities.

Conclusion

The future of the NPT will depend not only on preventing the spread of nuclear weapons, but on maintaining influence over the conditions under which nuclear-relevant capabilities are developed and integrated. As emerging technologies reshape these conditions, the regime must extend its reach into risk ecosystems. Scientific communities are essential to this effort. By placing networks such as Pugwash Conferences on Science and World Affairs at the center of a renewed consultative process, the NPT can extend its influence into the design and integration of emerging technologies, strengthening non-proliferation incentives and helping restore the political and technical foundations necessary for future progress on disarmament.

References

[1] https://www.sipri.org/commentary/essay/2025/military-ai-responsible-procurement
[2] https://pugwash.org/about-pugwash/
[3] https://www.belfercenter.org/publication/future-directions-iaea-safeguards

Why the promise of Pillar 3 is on shaky ground this NPT Review Conference

by Sanaa Alvira
International Student/Young Pugwash

On 27 April, States parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) will meet in New York for a month-long Review Conference to evaluate the implementation of the treaty and past conference decisions, and decide on forward-looking steps. The conference will convene against the backdrop of two consecutive previous Review Conferences failing to agree on a consensus final document – a first in the treaty's history – and 16 years after the last negotiated outcome.[1] States parties will therefore gather amidst an increasingly deteriorating international security environment and at a moment when the credibility and effectiveness of the NPT are under unprecedented strain.

Yet, even amid this broader disarray, one area has traditionally offered a measure of cautious optimism. Discussions under Pillar 3, concerning the peaceful uses of nuclear technology, were widely considered the "quiet success" of the last Review Conference, despite the absence of an agreed outcome document.[2] Often overlooked by arms control and non-proliferation experts as the distant sibling of the first two pillars on disarmament and non-proliferation, Pillar 3 has historically provided an important space for identifying areas of agreement. Given the difficult context the current Review Conference will convene in, Pillar 3 offers a glimmer of hope in finding areas of agreement and constructive engagement.

But Pillar 3 is on increasingly shaky ground: while in some areas – such as gender provisions[3] and attacks on civilian nuclear infrastructure – fault lines had already appeared at the last Conference, novel disagreements in areas such as Sustainable Development Goals (SDGs) and climate change have further complicated discussions. From hope, there is now growing anxiety about whether Pillar 3 meetings will be able to continue negotiating in a forward-looking manner.

That said, discussions under Pillar 3 have never been entirely free of disagreements. Tensions exist between Nuclear Weapons States (NWS) and their allies and Non-Nuclear Weapons States (NNWS) over conditionalities associated with the transfer of and access to nuclear technologies, equipment, material and scientific knowledge as enshrined in Article IV of the NPT, as well as strict export controls. These expectations have consistently shaped many NNWS' positions in NPT review cycles, and debates under this pillar are closed linked to questions of equity and sustainable development.

Following the US-Israeli attacks on Iran's nuclear facilities in June 2025 and the subsequent war in the Middle East, attacks on civilian nuclear facilities are expected to dominate discussions under Pillar 3 at this Review Conference.

This is, however, not a new topic in the NPT context. The 1985 Review Conference extensively debated the issue following Israel's attack on Iraq's Osirak nuclear research reactor at Tuwaitha (prior to 1985, the issue received little attention).[4] The 1985 final document, which was agreed to by consensus, included explicit language in four detailed paragraphs expressing "profound concern about the Israeli military attack on Iraq's safeguarded nuclear reactor on 7 June 1981." In 1995, the Decision 2 document addresses this issue in generic terms, stating that "attacks or threats of attack on nuclear facilities devoted to peaceful purposes jeopardize nuclear safety."[5] In the list of actions agreed upon by consensus in 2010, Action 64 calls all States to abide by the 2009 IAEA General Conference decision prohibiting armed attacks or threats against nuclear installations, whether operational or under construction.[6]

In 2022, the issue was debated extensively with specific reference to the Russia-Ukraine war and attacks on the Zaporizhzhia nuclear power plant. Disagreements persisted, and Russia's objections to references to the facility ultimately broke down consensus.[7] What was notable was that a relatively cohesive position among the West had emerged in support of stronger language on attacks against civilian nuclear facilities, including calling for explicit references to Russia as the aggressor. However, following the US-Israeli attacks on Iran's nuclear facilities – a NWS and P5 country together with a non-NPT State party attacking safeguarded facilities of a NNWS – concerns and uncertainty of how this will play out at this Review Conference arise. It is likely that the countries that had previously supported naming Russia as the aggressor with respect to attacks on nuclear facilities will no longer push for similar language at this conference.

There is also the issue of attribution. Russia and Ukraine have both accused each other of attacks on Zaporizhzhia, and for undermining nuclear safety and security in the region. From an NPT Review Conference perspective, it may have been possible to negotiate agreed language that does not implicate any country directly (although in the last conference, both Russia and Ukraine wanted the other to be named as the aggressor). The question now is how States parties will approach attribution in a context where the United States has acknowledged responsibility for attacks on Iranian nuclear facilities. Would they seek to call out both Russia and the United States? This appears unlikely: while the naming of specific countries in an accusatory tone has always been highly contentious in outcome documents, a reluctance to pursue such language from the West in particular would nonetheless represent a notable departure from previously held national positions.

Several working papers on or containing references to attacks on civilian nuclear infrastructure submitted to the Review Conference are a clear indicator of the growing concern on this issue. Iran expectedly submitted a dedicated proposal containing several recommendations for the Review Conference to consider, including the establishment of a "dedicated NPT working group" to "document and investigate attacks on nuclear sites."[8] Most notably, their proposal has expanded the scope of the issue from attacks on civilian nuclear facilities to also include assassination of scientists, engineers, sabotage and cyberwarfare, presenting an additional wrinkle to discussions under this Pillar. Russia went a step further and accused not just the United States and Israel, but also the United Kingdom, Germany and France whose leaderships "publicly justified the use of force."[9]

These developments have wider implications for discussions under Pillar 3. Concerns over attacks on civilian nuclear infrastructure have direct consequences for the nuclear energy sector, particularly around concerns of civilian infrastructure becoming military targets. Meanwhile, working papers submitted by the United States, the United Kingdom and France continue to emphasise the expansion of peaceful applications of nuclear technology, making no reference to attacks on nuclear facilities.[10] This disconnect raises broader questions about the credibility of nuclear supplier states when their actions undermine the inalienable right they seek to uphold. While it is unlikely that the Review Conference will take it up directly, renewed debates about the right to enrich under the NPT taking place outside of the conference – driven by developments around Iran's nuclear programme – could certainly influence discussions and perceptions at the conference itself.[11]

Beyond these topics, issues relating to gender provisions, SDGs and climate change are likely to be an issue at this Review Conference. Discussions on gender provisions have become increasingly contentious over time, but the United States' insistence that references to SDGs and climate change are a non-starter is a new and unfortunate development. This is not just limited to the NPT context – across multilateral fora such as the UN General Assembly and the IAEA General Conference, for example, countries and international institutions have been grappling with the United States' significant departure from previous support to multilateral sustainability frameworks.

Other issues under "strengthening the review process" such as transparency and accountability will be taken up under Pillar 3. With ongoing discussions and debates regarding the potential removal of Subsidiary Bodies, there may be additional strain on the Main Committees (including Main Committee III, under which peaceful uses is discussed) to adequately cover a packed agenda.

Despite the increasing strain on Pillar 3 discussions, certain areas of broad agreement among States parties remain. Chief among these is support for the IAEA's role in facilitating access to nuclear technology, especially through its Technical Cooperation Programme (although NNWS stress that such cooperation and assistance must not be conditioned on requirements that go beyond the Agency's mandate). One area where there is potential to gain traction and achieve broad agreement on discussions under the peaceful uses pillar is to advance the discussion of the benefits of non-power applications of nuclear technologies, a subject that receives broad backing and support from States parties, and to support the IAEA in promoting these benefits.

A working paper submitted by Philippines and other countries on non-power applications attempts to "advance the growing consciousness on non-power applications in order to promote awareness, upscaling and commercialisation."[12] Similarly, the United States and the United Kingdom announced a new joint initiative to advance international awareness and acceptance of the benefits of non-power applications called the Accelerating Scientific Collaboration and Excellence in Nuclear Technology (ASCENT). Perhaps there may be an opportunity for countries to cooperate on the more technical aspects as an entry-point for some constructive engagement.

However, these areas of convergence are unlikely to offset the broader divisions shaping Pillar 3 discussions. Outcomes from Pillar 3 (and possibly the entire conference) are unlikely to move beyond watered-down statements on each of these difficult issues, at best. States parties at this Review Conference could consider adopting a separate document or decision that prohibits States parties from attacking civil nuclear facilities (similar to the 2010 Action Plan or the 13 Practical Steps). [13] Such a document could include the following recommendations:

- Reaffirm the importance of the IAEA's "Seven Indispensable Pillars of Nuclear Safety and Security"[14]
- Recall that Action 64 from the 2010 Review Conference calls on all States to abide by the decision adopted by consensus at the 2009 IAEA General Conference on the prohibition of armed attack or threat of attack against nuclear installations during operation or under construction[15]
- Reaffirm the 2009 IAEA General Conference decision GC(53)/DEC/13 which recognised the importance attached to safety, security and physical protection of nuclear material and nuclear facilities devoted to peaceful purposes, as well as IAEA General Conference resolutions GC(XXIX)/RES/444 and GC(XXXIV)/RES/533 regarding armed attacks or threats against nuclear facilities devoted to peaceful purposes, whether under construction or in operation
- Reiterate that the use or threat of use of nuclear and radiological material should not be used as a pretext for escalation of conflict under any circumstance
- Recognise the dangers posed to nuclear facilities in armed conflict resulting in a situation where they may no longer be able to meet fully its nuclear safety, security and safeguards commitments and obligations related to peaceful activities, and commit to supporting IAEA inspections to these facilities adhering to guidelines including shift length, worker treatment and reporting procedures
- Commit to supporting the IAEA in identifying detailed logistics with regard to delivery of donated equipment (packing of goods, preparation of documents, export licenses at origin, etc.) to civil nuclear facilities during an armed conflict
- Commit to renewing efforts to reinforce the international framework relating to the protection of civil nuclear facilities including in armed conflicts, based on the ideals of the international humanitarian law

Pillar 3 has long been a source of optimism for the NPT. But as newer challenges such as strikes on and occupation of civilian nuclear facilities, and deepening disagreements over gender, SDGs, and climate change emerge, that optimism is running thin. As a result, consensus under Pillar 3 is becoming more difficult to achieve, and less meaningful when it is. While a watered-down document that leaves everyone equally unhappy is understandable from a consensus point of view, the current situation raises questions about the future of the NPT review process, and of multilateral consensus-based institutions more broadly, that will need to be grappled with.

References

[1] The 2010 Review Conference managed to achieve consensus on a final document, but not the review portion which reflected the views of the conference President. The last full consensus was achieved in 2000, 26 years ago.
[2] https://europeanleadershipnetwork.org/commentary/pillar-iii-the-quiet-success-story-of-the-npt-revcon/
[3] https://europeanleadershipnetwork.org/commentary/gender-as-a-flashpoint-risks-and-resolutions-for-the-npt-review-process/
[4] https://www.nonproliferation.org/wp-content/uploads/npr/103stoi.pdf
[5] https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/GENERAL-DOCS/outcome1995-2.pdf
[6] https://docs.un.org/en/NPT/CONF.2010/50 (VOL.I)
[7] https://www.armscontrol.org/act/2022-09/news/russia-blocks-npt-conference-consensus-over-ukraine
[8] https://docs.un.org/en/NPT/CONF.2026/WP.22
[9] https://docs-library.unoda.org/Treaty_on_the_Non-Proliferation_of_Nuclear_Weapons_-EleventhReview_Conference_(2026)/NPT_CONF.2026_WP.44_-_44._Russia_ADVANCE_-_Erosion_nuclear_non-proliferation_.pdf
[10] https://docs-library.unoda.org/Treaty_on_the_Non-Proliferation_of_Nuclear_Weapons_-EleventhReview_Conference_(2026)/NPT_CONF.2026_WP.51_-_51._ADVANCE_UK,_USA,_France_-_Financing_Nuclear.pdf
[11] See https://www.armscontrol.org/act/2026-03/features/right-peaceful-use-nuclear-energy-disputed-matter and https://thebulletin.org/2025/08/actually-the-npt-doesnt-guarantee-a-right-to-make-nuclear-fuel/
[12] https://docs-library.unoda.org/Treaty_on_the_Non-Proliferation_of_Nuclear_Weapons_-EleventhReview_Conference_(2026)/NPT_CONF.2026_WP.10_-_10._ADVANCE_Philippines_-_Upscaling_the_Non-Power.pdf
[13] https://vcdnp.org/wp-content/uploads/2025/04/Mitigating-the-Threat-of-Attacks-on-Nuclear-Facilities_VCDNP_web.pdf
[14] https://www.iaea.org/topics/response/nuclear-safety-security-and-safeguards-in-ukraine#:~:text=In%20March%202022%2C%20the%20IAEA,maintained%20for%20the%20safe%20and
[15] https://docs.un.org/en/NPT/CONF.2010/50 (VOL.I)

Contributors

Hussain Al-Shahristani (Iraq) is a scientist, scholar and statesman who serves as President of Pugwash. During his scientific career he was imprisoned for eleven years after refusing to collaborate on a nuclear weapons program. He subsequently served for more than a decade in ministerial roles in the government of Iraq.

Sanaa Alvira (India) is a Japan Chair Fellow at the Vienna Center for Disarmament and Non-Proliferation (VCDNP) in Austria and a Research Associate at the Centre for Aerospace Power and Strategic Studies in India. She is a member of the International Student/Young Pugwash Leadership Team.

Joel Naoki Christoph is a Technology and Human Rights Fellow, Carr-Ryan Center for Human Rights Policy, Harvard Kennedy School, researching emerging technology risks, AI governance, and international security cooperation. He is a member of the International Student/Young Pugwash Leadership Team.

Taous Feroukhi (Algeria) is a member of the Pugwash Council and a former career diplomat and has served as Permanent Representative of Algeria to the United Nations and other International Organizations in Vienna. Ambassador Feroukhi joined the diplomatic service in 1976, with roles including Chairpersonship of the Board of Governors of the IAEA and the Presidency of the Preparatory Commission for the CTBT.

Karen Hallberg (Argentina) is Secretary General of the Pugwash Conferences on Science and World Affairs and a professor of Physics at the Balseiro Institute and Principal Researcher at the Bariloche Atomic Center, National Atomic Energy Agency and National Research Council, Argentina.

Cesar Jaramillo (Canada) is a member of the Pugwash Council and is executive director of the SANE Policy Institute, Canda, where his focus areas include nuclear disarmament, outer space security and conventional weapons control. He is also chair of the Canadian Pugwash Group.

Thomas Jonter (Sweden) is a member of the Pugwash Council and is Professor of International Relations at the Department of Economic History and International Relation, Stockholm University. He is also Guest Professor of Peace and Conflict Studies at Uppsala University and is chair of the Swedish Pugwash Group.

Haneen Khalid (Pakistan) is a member of the ISYP Leadership Team and a recipient of the 2025 Gorbachev–Shultz Legacy Award for contributions to public diplomacy. Her work focuses on international security, arms control, and global risk governance. She holds advanced degrees from the University of Chicago and Princeton University, and has been recognized through fellowships with the Obama Foundation, Aspen Institute, and the Bulletin of Atomic Scientists.

Contributors

Steven E. Miller (USA) is a member of the Pugwash Council and is Director of the International Security Program and co-Principal Investigator of the Project on Managing the Atom at Harvard University's Belfer Center. He is also Editor-in-Chief of the quarterly journal, International Security, co-editor of the International Security Program's book series, Belfer Center Studies in International Security, and the Chair of the US Pugwash Group.

Götz Neuneck (Germany) is Chair of the Pugwash Council and Chair of the Federation of German Scientists (VDW). He is former Deputy Director of the Institute for Peace Research and Security Policy IFSH at the University of Hamburg and Head of the Interdisciplinary Research Group Arms Control and Disarmament (IFAR^2), and a Professor Emeritus at the Faculty of Mathematics, Informatics and Natural Sciences at the University of Hamburg.

Alexander Nikitin (Russia) is a member of the Pugwash Council and is Professor of Political Science and Chief Research Fellow at the Moscow State Institute of International Relations (MGIMO) Institute of International Studies and at the Center for International Security of the Institute of World Economy and International Relations. He serves as Deputy Chair of the Russian Pugwash Committee.

Tariq Rauf (Canada/Pakistan) is a member of the Pugwash Council and is an internationally respected authority on nuclear disarmament and nonproliferation issues. He served as an Expert with Canada's NPT Delegation from 1987-2000, in which capacity he was involved in formulating the strengthened review process for the NPT at the 1995 NPT Review and Extension Conference and at the 2000 NPT Review Conference; from 2002 to 2010, he was Alternate Head of the IAEA NPT Delegation and secured a decision at the 2005 NPT Review Conference to convene the first session of the Preparatory Committee in Vienna starting in 2007; he served as an Expert with the Chair of the 2014 session of the PrepCom and the Chair of Main Committee I (nuclear disarmament) at the 2015 NPT Review Conference; subsequently he has been as Advisor with other NPT delegations.

Khaled Shamaa (Egypt) is a member of the Pugwash Council and is a former career diplomat who served as Permanent Representative to International Organizations in Vienna, Ambassador to Austria, Mexico and Belize, as negotiator on disarmament, nonproliferation and trans-national threats and as chair of the UN Commission on Drugs. In his 30-year career, he held a variety of portfolios related to multilateral affairs, international security, disarmament, and sustainable development.

Katariina Simonen (Finland) is a member of the Pugwash Council and is a Senior Ministerial Advisor (Home Affairs) at the Finnish Government. In Academia, she is both an Adjunct Professor at the National Defence University and a Visiting Research Fellow at the University of Helsinki, Department of World Cultures. She holds a LL.D. -degree (Legum Doctor) in public international law.

Contributors

Mark Suh (Korea/Germany) is a member of the Pugwash Council and is a South Korean political scientist who serves as Chairman of the Corea Trust Fund. He is a former Senior Researcher and Korean Coordinator of the Free University of Berlin and Member of the Presidential Advisory Council on Peaceful and Democratic Unification of Korea.

Tatsujiro Suzuki (Japan) is the Treasurer of Pugwash and a member of the Pugwash Council. He serves as President of Peace Depot and is a Visiting Professor at the Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA). He is also the former Vice Chairman of the Japan Atomic Energy Commission (JAEC).

Reza Ziaran (Iran) is a member of the Pugwash Council and is former Secretary of the Preparatory Commission of the Comprehensive Test Ban Treaty Organization in Vienna from 2008-2023. He is also a former Ambassador of Iran to the Netherlands and International Organizations in The Hague.

NPT CONFERENCE 2026

PUGWASH-CARNEGIE BRIEFS ON SCIENCE AND WORLD AFFAIRS

The **Pugwash Conferences on Science and World Affairs** constitutes an international community of scientists, scholars, experts, and current and former policymakers from across regions and continents. United by a shared commitment to humanity's survival and well-being, the Pugwash community seeks to reduce and eliminate the risks of war and existential threats by advancing rational, evidence-based dialogue and cooperation.

The Pugwash Conferences on Science and World Affairs is an independent, not-for-profit international organization whose work is delivered exclusively for the global public good.

Design & Layout :
Sathchidha Pachiappan