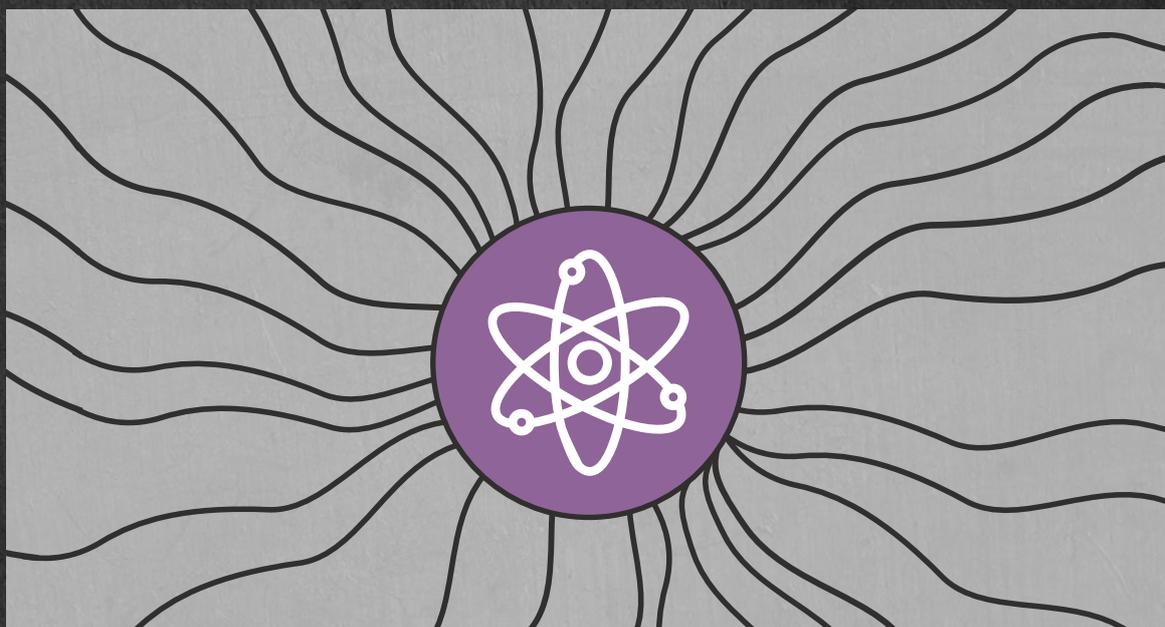


RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES:



SYMPOSIUM REPORT



ACKNOWLEDGEMENTS

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ABOUT UNIDIR

The United Nations Institute for Disarmament Research (UNIDIR) is a voluntarily funded, autonomous institute within the United Nations. One of the few policy institutes worldwide focusing on disarmament, UNIDIR generates knowledge and promotes dialogue and action on disarmament and security. Based in Geneva, UNIDIR assists the international community to develop the practical, innovative ideas needed to find solutions to critical security problems.

NOTE

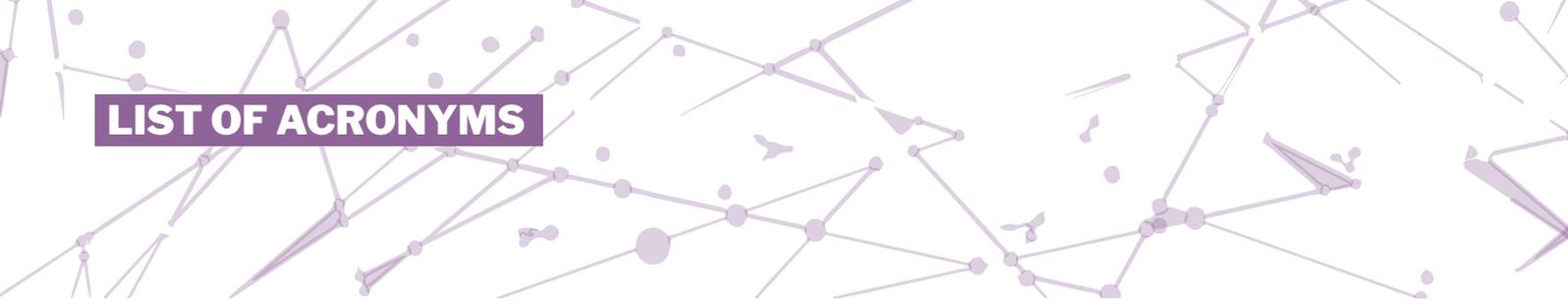
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LIST OF ACRONYMS

INF	Intermediate-Range Nuclear Forces Treaty
NC3	Nuclear command, control, and communications
NNWS	NPT non-nuclear-weapon States
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NWS	NPT nuclear-weapon States
TPNW	Treaty on the Prohibition of Nuclear Weapons

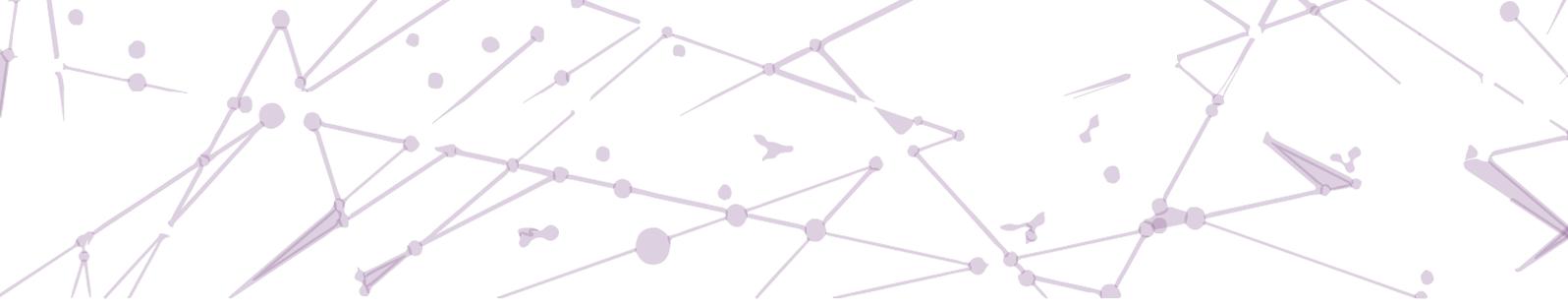
CONFIDENCE-RESTORING MEASURES ACROSS TODAY'S NUCLEAR DIVIDES

Virtual Symposium (Zoom Platform)
Tuesday 6 July 1500–1720 CET

Today, strategic tensions remain high among nuclear-armed States. At the same time, emerging military technologies and the extension of strategic competition into new domains are making the strategic dynamics among these States increasingly complex and are complicating efforts to prevent a breakdown of nuclear deterrence in a crisis. Continued limits on regular working-level communication and strategic dialogue among States add to uncertainties about the capabilities and intentions of others. Such limits on dialogue also make it harder to identify mutually beneficial actions to lessen nuclear risk, stabilize strategic relationships, and revitalize pursuit of nuclear disarmament. This dynamic also affects non-nuclear-armed States, which also are significant stakeholders in ensuring that nuclear weapons are never used again and that progress towards a nuclear-weapon-free world is made.

A critical if difficult challenge is to begin to restore confidence and trust across today's various nuclear divides. In addition to the divides between and among nuclear-armed States, other divides stand out: between the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) nuclear-weapon States and non-nuclear-weapon States, supporters and opponents of the NPT, and between actors in regions of tension such as the Euro-Atlantic, North Asia and the Middle East.

Against this background, UNIDIR is convening this virtual symposium to discuss ideas for confidence-restoring measures with a diverse group of experts and practitioners from the nuclear policy community. Following brief scene-setting remarks at the outset of each session by the organizers, the discussion will aim to identify the most promising confidence-restoring measures. Our emphasis will be on measures that might be feasible in the shorter term—but we also want to highlight possible medium-term opportunities. Our discussion will be informed by a series of brief draft papers prepared ahead of time by many participants with their specific ideas for confidence-restoring measures. (As reflected in the agenda as well as the accompanying spreadsheet, these ideas and their discussion fall into several categories).



14h55 Technical Refresher

15h00 Introduction and Objectives for Today's Meeting
(John Borrie and Lewis Dunn)

**15h10 Grouping #1:
Declaratory Policies and Operational Restraint**
Presentation and Discussion
Examples:

- Reagan–Gorbachev and beyond
- Commitments on irreversibility of disarmament, stockpile reductions, halting fissile material production, or addressing technology risks
- Restraint in cyber and space operations; missile defence etc.

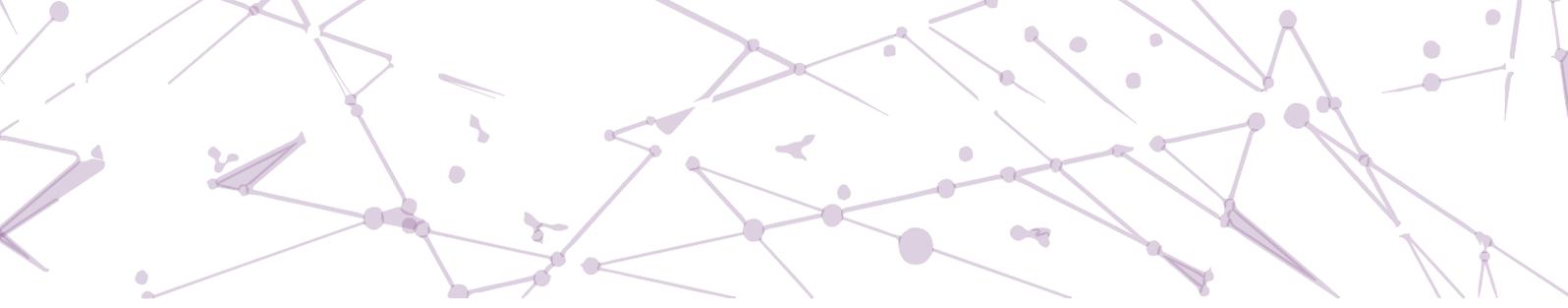
**15h40 Grouping #2:
Building Dialogue and Understanding What's at Stake**
Presentation and Discussion
Examples:

- Reagan–Gorbachev and beyond
- Commitments on irreversibility of disarmament,
- Bilateral, plurilateral strategic dialogues, including on strategic technologies impacting nuclear stability
- Regional dialogue on arms control and disarmament
- Dialogues on nuclear weapons and IHL, or TPNW–NPT relationship
- Educational efforts, and increasing inclusivity of conversation

16h10 Break

**16h15 Grouping #3:
Risk Reduction, Arms Control, and other Strategic Guardrails**
Presentation and Discussion
Examples:

- Risk reduction summit with deliverables; conflict prevention activities
- Build back US–Russian arms control process; reduce deployed warheads; central storage; cooperative reductions
- Instrument on negative security assurances; CTBT entry into force; scientific body on advancing verification

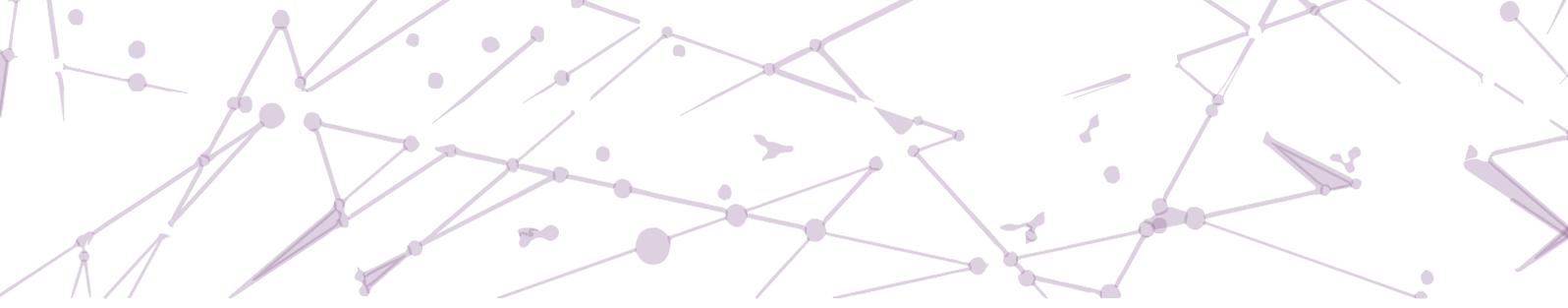


**16h45 Grouping #4:
Revisiting Approaches and Exploring Nuclear Off-ramps**

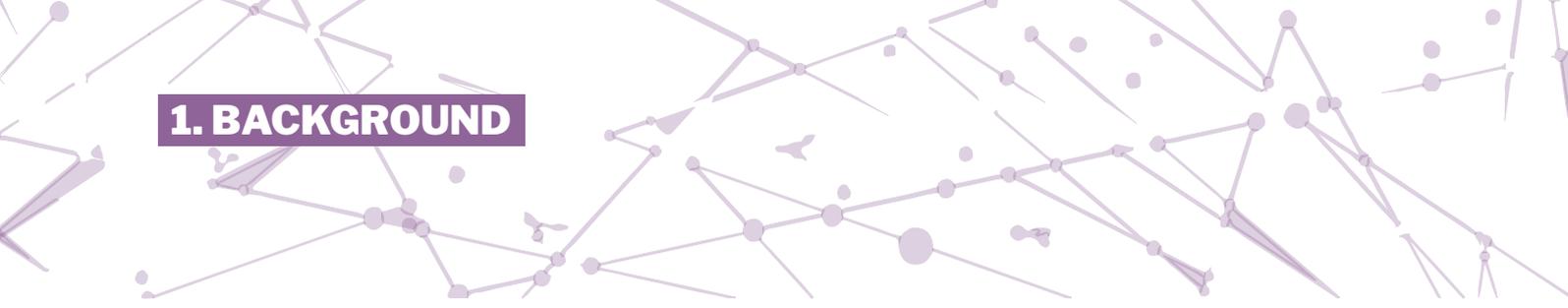
Presentation and Discussion

- Examples:*
- Strategy empathy; identification of shared interests
 - Mapping out off-ramps from reliance on nuclear weapons
 - Strengthening relevant international regimes and norms
 - NPT Review Conference reaffirmation of “unequivocal undertaking”; regular NWS reporting of Article VI

17h15 Closing Remarks
(John Borrie and Lewis Dunn)



1. BACKGROUND



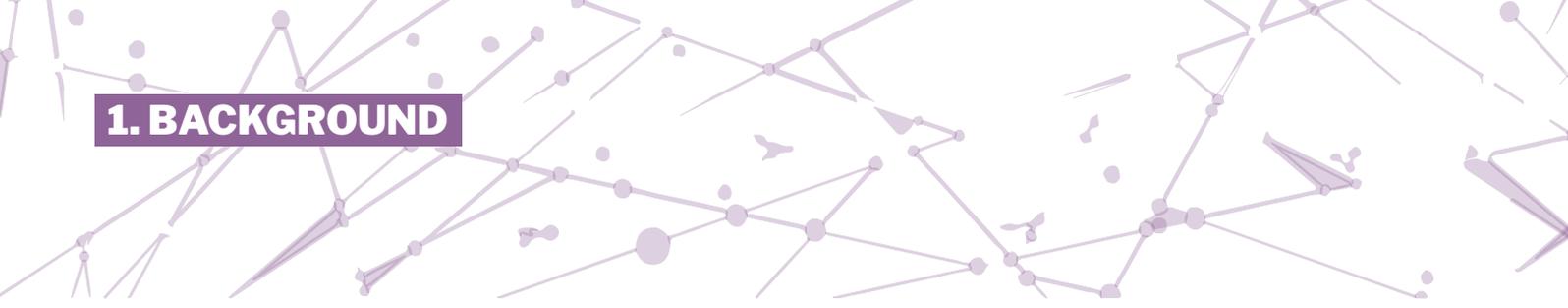
1. BACKGROUND

A critical if difficult challenge is to begin to restore confidence and trust across today's various nuclear divides. Today, strategic tensions remain high among nuclear-armed States. At the same time, emerging military technologies and the extension of strategic competition into new domains are making the strategic dynamics among these States increasingly complex and are complicating efforts to prevent a breakdown of nuclear deterrence in a crisis. Continued limits on regular working-level communication and strategic dialogue among nuclear protagonists add to uncertainties about the capabilities and intentions of others. Such limits on dialogue also make it harder to identify mutually beneficial actions to lessen nuclear risk, stabilize strategic relationships, and revitalize pursuit of nuclear disarmament.

A dynamic of lack of confidence and trust also characterizes the interaction between nuclear-weapon States (NWS) and non-nuclear-weapon States (NNWS) parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). NNWS are significant stakeholders in ensuring that nuclear weapons are never used again and that progress towards a nuclear-weapon-free world is made. But among them, there is great frustration at the lack of progress in advancing the NPT's nuclear disarmament goal as well as concern about the heightened risks of use of nuclear weapons.

Lack of mutual trust between supporters and opponents of the Treaty on the Prohibition of Nuclear Weapons (TPNW) is a more specific manifestation of these divisions among the NPT States parties. The reluctance of NWS to accept the bona fides of TPNW supporters—that they both support the NPT but also believe that the TPNW can be an important step in changing thinking about nuclear weapons—is particularly corrosive of the possibilities for collaborative action to address shared interests in non-proliferation, arms control, and nuclear disarmament.

Against this background, UNIDIR organized on 6 July 2021 a virtual symposium to discuss ideas on 'Confidence-Restoring Measures'. A small but diverse group of policymakers, experts, and civil society representatives participated on a not-for-attribution basis. The purpose of the symposium was to identify promising confidence-restoring measures across today's diverse nuclear divides, including those mentioned above. Particular emphasis was placed on those measures that might be feasible in the short term to help rebuild trust and confidence towards the possibility of collaborative actions to reduce nuclear risks, recraft arms control, and revitalize pursuit of nuclear disarmament.

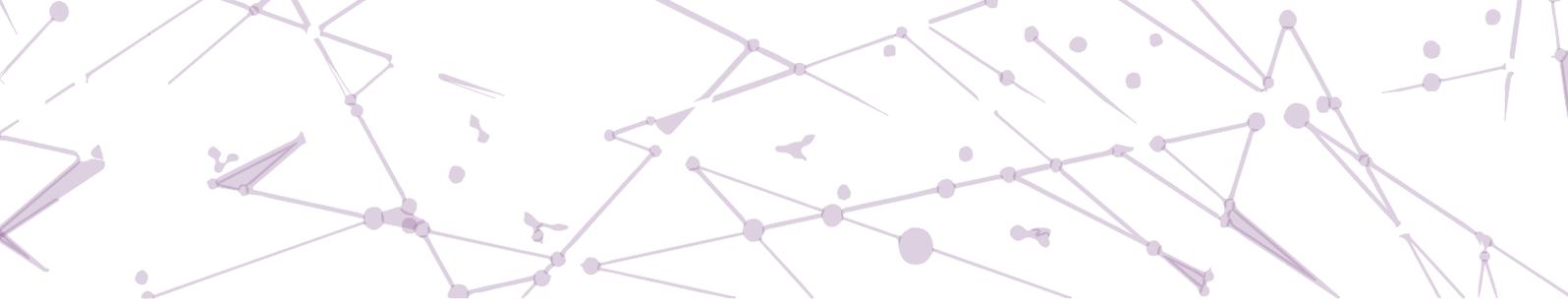


1. BACKGROUND

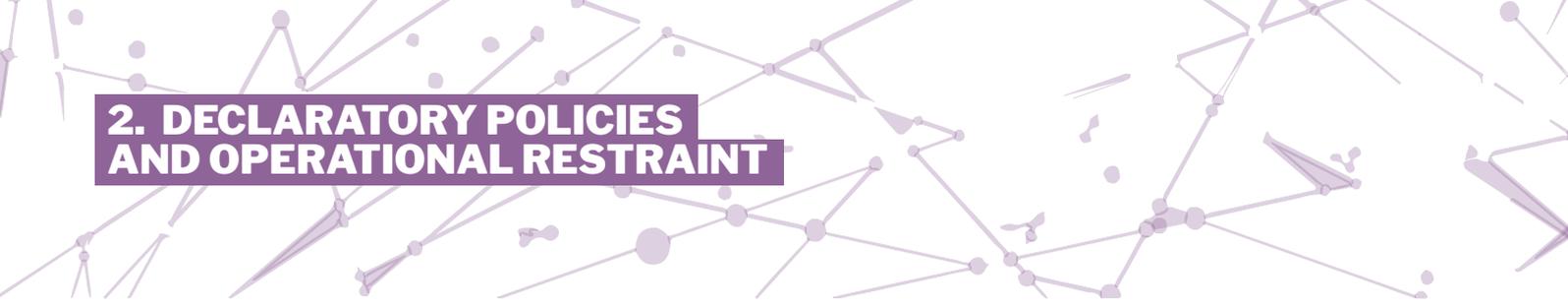
The symposium was informed by a series of brief papers prepared by participants and circulated among the group in advance of the event. The papers, which reflect the personal views of their authors, detail specific ideas on how to restore confidence and trust. Taken together, these papers offer a rich menu of options. As summarized by the annexed table, the ideas in the papers can be grouped into four broad categories:

- 1) Declaratory Policies and Operational Restraint;
- 2) Building Dialogue and Understanding What is At Stake;
- 3) Risk Reduction, Arms Control, and Other Strategic Guardrails; and
- 4) Revisiting Approaches and Exploring Nuclear Off-ramps.

This report includes the symposium agenda, a short summary of the discussion, and the compendium of papers prepared for the event. The summary sets out some of the themes of the discussion, and broadly follows the topic groupings of the measures as set forth above. The event conveners and participants believe that the ideas for confidence-restoring measures would be of broader, public interest in stimulating thinking as a part of UNIDIR's ongoing nuclear dialogue series. The summary is the responsibility of the UNIDIR team and not the participants. Every effort has been made to accurately reflect the discussion at the symposium. But this short summary only partly taps into the rich set of ideas set out in the papers prepared by participants. The reader is urged to delve deeper into those papers.



2. DECLARATORY POLICIES AND OPERATIONAL RESTRAINT



2. DECLARATORY POLICIES AND OPERATIONAL RESTRAINT

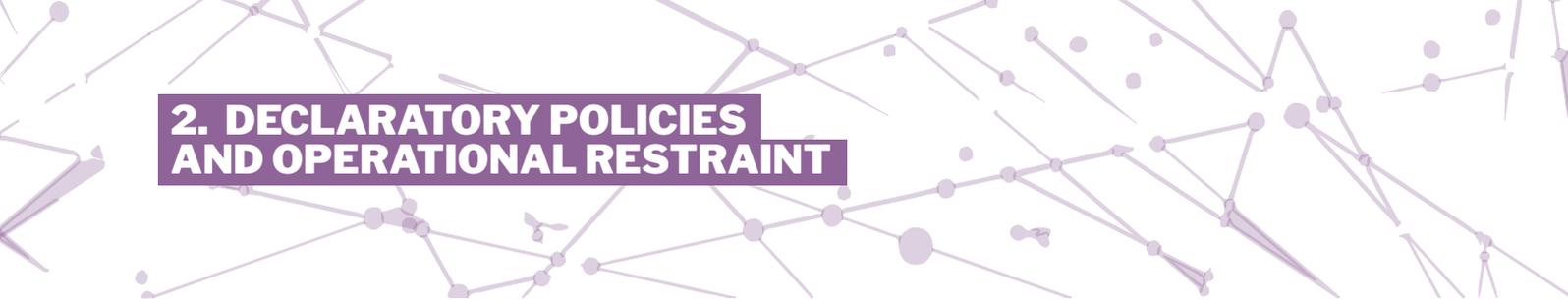
BUILD ON RECENT BILATERAL REAFFIRMATIONS OF THE REAGAN–GORBACHEV PRINCIPLE

The participants welcomed the recent statement by US President Joe Biden and Russian President Vladimir Putin reaffirming the Reagan–Gorbachev principle that “a nuclear war cannot be won and must never be fought”. It was noted that following the Biden–Putin reaffirmation, Putin and Chinese President Xi Jinping also made such a statement. There was broad agreement that it is important to build on these affirmations of the Reagan–Gorbachev principle, both specifically to address Chinese concerns that in the view of the United States it applies only to the US–Russian bilateral relationship, and more broadly to take advantage of the momentum inherent in the Russian–US reaffirmation to pursue other actions to reduce further nuclear risks.

In that regard, there was considerable agreement among participants that it is important now to multilateralize support for the Reagan–Gorbachev principle. Possible ways to do so include: a statement by the NPT nuclear-weapon States as part of the P5 process or at a separate meeting; a First Committee–United Nations General Assembly Resolution; and an endorsement of the principle at the Tenth NPT Review Conference. In addition, many participants suggested following up wider affirmation of the Reagan–Gorbachev principle with discussions of its doctrinal implications within the P5 process. Complementary statements also could be made that would emphasize the commitment of nuclear-armed States to making every effort to ensure that nuclear weapons are never used again. Several participants proposed pursuit of more far-reaching actions, including seeking agreement among nuclear-armed States to adopt doctrines of no-first-use of nuclear weapons. Others, however, warned against too much ambition in seeking to build-on the Biden–Putin and Putin–Xi statements. Instead, they called for realism given limits on the readiness of nuclear-armed States to make far-reaching changes in their nuclear doctrines.

ENCOURAGE COMMITMENT TO PEACEFULLY MANAGING DIFFERENCES AMONG NUCLEAR PROTAGONISTS

During the preceding discussion, several participants explicitly emphasized that it also is important for today’s nuclear protagonists to revitalize earlier commitments to resolve their disputes by peaceful means. The Helsinki Final Act of 1975 was explicitly cited. Or, as another participant stressed, the ‘great powers’ need to do a better job at managing their differences so as to avoid circumstances that would heighten the risk of nuclear use. The fact that the most likely pathway to use of nuclear weapons today is through escalation of a conventional military conflict underlines the importance of such action.



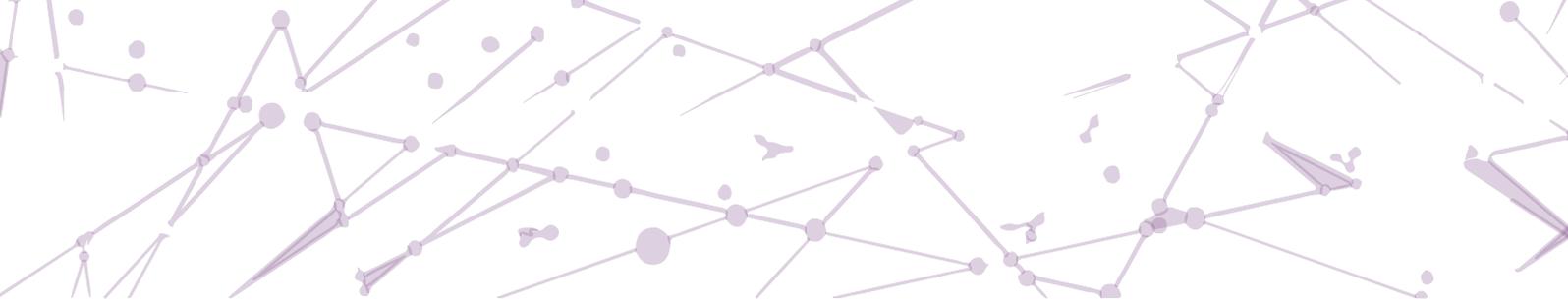
2. DECLARATORY POLICIES AND OPERATIONAL RESTRAINT

REAFFIRM PURSUIT OF NUCLEAR DISARMAMENT

Given the lack of trust and confidence among NPT parties, it was suggested that the NWS need to reaffirm their commitment to nuclear disarmament. Closely related, the great reluctance of the NWS to reduce reliance on nuclear weapons or even to talk about reduced reliance was emphasized by several participants. They went on to note that it is very difficult to understand this NWS reluctance, not least given that a commitment to do so is inherent in the NPT article VI disarmament obligation. The result has been an erosion of confidence among the NNWS.

SEEK TO TAKE CYBER ATTACKS ON NC3—AND ON SPACE ASSETS WITH NUCLEAR ROLES—OFF THE TABLE

Regarding specific measures of operational restraint, there was broad support among participants on the importance of agreement on the principle of not carrying out cyberattacks on nuclear command, control, and communications (NC3). Closely related, the importance of not carrying out attacks on space assets (including those with roles in NC3) was stressed. Different ways to actualize such a principle can be envisaged, from parallel unilateral restraint to informal or formal agreements. More broadly, it was noted that prospects for regulating new technologies—and possibly conflict in new domains—may be easier than regulating well-established capabilities because participants have less to give up.



3. BUILDING DIALOGUE AND UNDERSTANDING WHAT IS AT STAKE



3. BUILDING DIALOGUE AND UNDERSTANDING WHAT IS AT STAKE

RENEW DIALOGUE AMONG NUCLEAR PROTAGONISTS

Given the widespread breakdown of dialogue across the many nuclear divides, participants stressed the importance of renewed dialogue across the board. For the most part, participants also shared the view that dialogue needs to be substantive and action-oriented—not dialogue for its own sake. That said, it also was suggested that in light of the poor state of US–Chinese relations, any dialogue would be an important confidence-restoring measure even if it did not lead rapidly to more substantive results or agreements. In any future dialogues, as several participants noted, it also will be important to ensure participation by the right persons, in particular military and defence officials with direct responsibilities for action. In assessing the potential payoffs of renewed dialogue and structuring such dialogue, as one participant emphasized, the human dimension is critical. Getting individuals to speak with each other can be the first step to later substantive progress on specific issues.

DIALOGUE BETWEEN THE US CONGRESS AND THE DUMA

Several participants raised the idea of creating a format for dialogue between members of the US Congress and members of the Russian Duma. That dialogue could focus on strategic stability issues and could help over time to ease the domestic political constraints on future agreements.

NEED FOR DIALOGUE AMONG NWS AND NNWS— BUT IN WHAT FORUM? ON WHAT ISSUES?

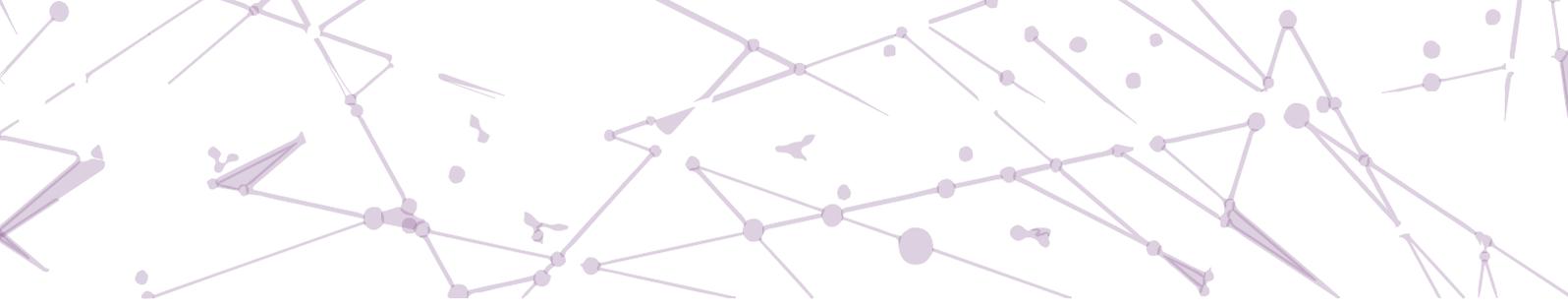
Renewed dialogue also is essential among the NWS and NNWS, including between parties and non-parties to the TPNW. At least some participants were sceptical, however, of the readiness of the NWS to engage in such dialogue. The nature of the NPT review process was seen as still another impediment. Specifically, in different ways, quite a few participants argued that the current review process cannot provide an adequate forum for such dialogue. Several alternative options for multilateral dialogue were suggested. These included remaking the NPT process, making use of other possible venues, for example direct engagement between States of the ‘Stepping Stones’ initiative and the NWS, the ‘Creating the Environment for Nuclear Disarmament’ dialogue, and simply creating a new forum. As for substance, a number of participants argued that such a dialogue among the NWS and NNWS needs to reflect in part the humanitarian perspective and to include discussion of the risks of nuclear deterrence (as compared to the value of retaining nuclear weapons). Why past promises to make progress towards nuclear disarmament have not been met also should be on the agenda.



3. BUILDING DIALOGUE AND UNDERSTANDING WHAT IS AT STAKE

REENGAGING COOPERATIVELY WITH TPNW PARTIES

The States animating the TPNW's negotiation were motivated at least in part by their concerns for the NPT. Many TPNW parties are strong supporters of the NPT even as they adopted the TPNW to try to reenergize pursuit of nuclear disarmament. Now, as several participants argued, it is time for both TPNW supporters and opponents to turn to the practical challenges of reinforcing and sustaining the NPT regime through practical cooperation, including through necessary compromises at the upcoming Review Conference. In addition, despite the difficulties of doing so, it was suggested that there is a need to find a way for both the NWS and NNWS to focus attention on the humanitarian concerns that were a major factor underlying negotiation of the TPNW.



4. RISK REDUCTION, ARMS CONTROL, AND OTHER STRATEGIC GUARDRAILS



4. RISK REDUCTION, ARMS CONTROL, AND OTHER STRATEGIC GUARDRAILS

PURSUE RISK REDUCTION—BUT HOW BROADLY TO DEFINE IT? HOW TO DO IT? HOW TO DEAL WITH NNWS CONCERNS?

Participants agreed on the importance of pursuing risk reduction both as a confidence-restoring measure and in its own right given today's risk of the use of nuclear weapons. It was noted that the declaratory policy and operational restraint measures discussed also fit under this category of risk reduction.

However, there was some disagreement as to how broadly to define risk reduction. Risk reduction can be defined and pursued narrowly, as one participant argued, with specific reference to the concept of 'strategic risk reduction'. This approach would explicitly focus on reducing the risks of nuclear deterrence and making it more stable. Specific measures could include ensuring the survivability of second-strike forces, clarifying postures and reducing misunderstanding, and strengthening transparency. By contrast, a broader approach to risk reduction could be adopted with the goal, as another participant proposed, of taking all actions possible to put nuclear weapons as far away from use as possible. In effect, it would seek explicitly, so this argument continued, to address the very danger of nuclear deterrence itself. This latter approach would entail actions often rejected by States relying on nuclear deterrence, for example de-alerting of nuclear forces and adoption of no-first-use doctrines.

At the same time, it was acknowledged by proponents of the broader approach that anything that reduces nuclear risk is important. It was suggested as well that up, until some point, this distinction between a narrower and a broader view of risk reduction is not clear cut. Instead, there are actions in the narrow approach that also contribute to the broader approach's goal of making the use of nuclear weapons less likely. Building outward from the narrower towards the broader approach also could be seen as less threatening by nuclear-armed States. In any case, it was stressed that if the NWS expect to gain support for risk reduction in the NPT context from the NNWS (especially the States of the Non-Aligned Movement), they need to make clear that they do not regard nuclear risk reduction as an alternative to pursuit of their nuclear disarmament obligations.

A DEDICATED P5 WORKING GROUP ON RISK REDUCTION?

Regarding the question of how best to pursue risk reduction, participants expressed different views on recent proposals that the NWS should create a separate working group on risk reduction within the P5 process. Already, each of the existing working groups partly focuses on risk reduction. That said, a separate group would underscore recognition by the NWS that they need to cooperate to reduce nuclear risks, and of the importance of doing so.



4. RISK REDUCTION, ARMS CONTROL, AND OTHER STRATEGIC GUARDRAILS

A NUCLEAR RISK REDUCTION SUMMIT?

The proposal to organize a Heads-of-State-level nuclear risk reduction summit was discussed and found to be quite interesting by many participants. Doing so was seen as a way to focus leaders' attention on the risks of nuclear weapons, especially of a possible breakdown of nuclear deterrence. A summit also could be a forum in which nuclear-armed States would announce specific risk reduction actions. Participation could be limited to as many of the nine nuclear-armed States that were ready to attend, or participation could be open to all States (making it easier for all nine nuclear-armed States to participate). The agenda could be narrowly focused on actions being taken (or to be taken) to reduce nuclear risk, or it could be somewhat broader to address selected arms control and disarmament topics.

ADVANCING US–RUSSIAN STRATEGIC STABILITY TALKS

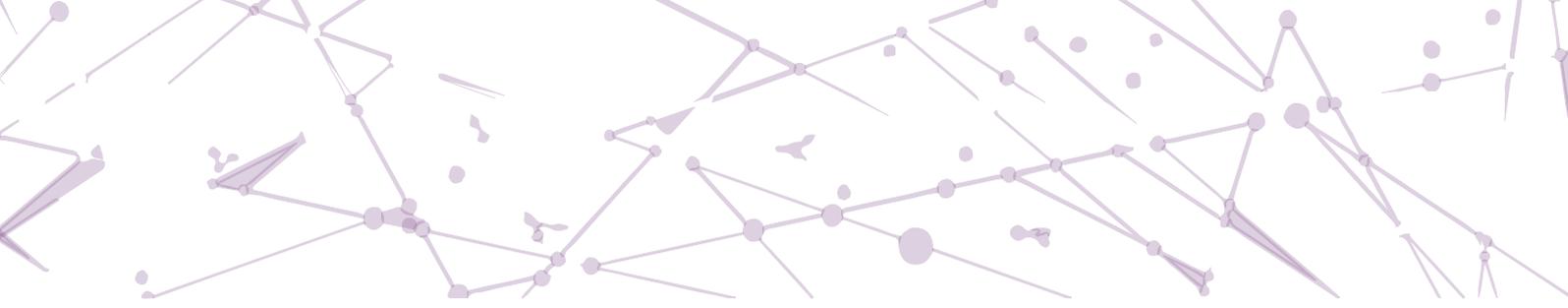
Getting existing arms control mechanisms back on track is essential. A starting point is the renewal of strategic stability talks between the United States and the Russian Federation. One purpose, it was suggested, would be to follow-up the recent Biden–Putin reaffirmation of the Reagan–Gorbachev principle with efforts to understand mutual threat perceptions. Readiness on the part of the United States to discuss limits on missile defences would be an important signal that could create the confidence needed for new agreements. But such a statement, it was argued, is very difficult to envisage given US politics. Conversely, calls for the Russian Federation to stop meddling in US domestic politics as the Russian Federation's most important confidence-restoring step vis-à-vis the United States were seen as unrealistic given that the Russian Federation has repeatedly denied such activities. As already suggested, one promising area was seen to be discussion of operational restraints on cyberattacks against NC3.



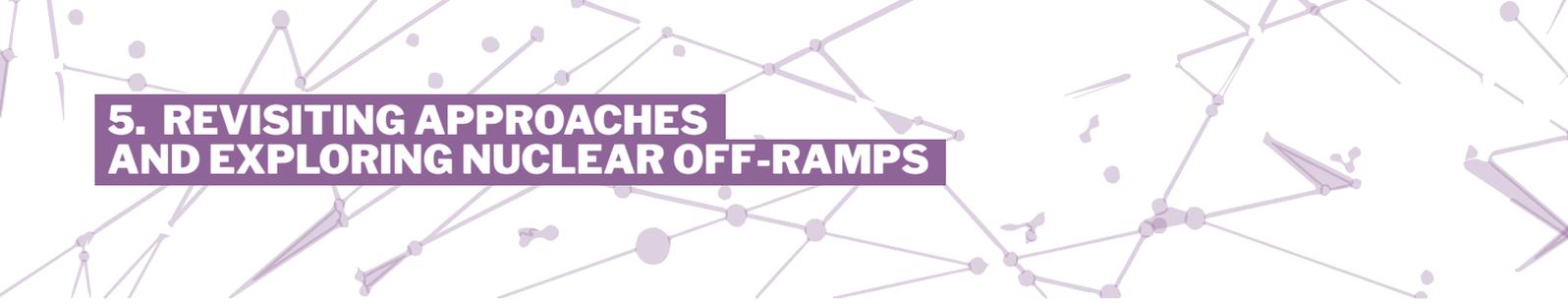
4. RISK REDUCTION, ARMS CONTROL, AND OTHER STRATEGIC GUARDRAILS

US–CHINA DIALOGUE—NEED FOR A DIFFERENT APPROACH THAN ‘ARMS CONTROL’

A renewed dialogue between the United States and China, a number of participants suggested, could be framed in terms of discussions of strategic stability. Doing so would take into account Chinese scepticism of the concept of arms control. Regardless of what it is called, a new dialogue, it was argued, would need to be robust, problem-solving, and action oriented to reduce risk and to head-off accelerating strategic competition damaging to both States. Readiness on the part of the United States to acknowledge mutual nuclear vulnerability with China was seen by several participants as a possible enabling step. But it also was suggested that any such efforts to build US–Chinese mutual confidence needed to be seen as a two-way street. So viewed, both States need to consider, perhaps through quiet high-level talks initially, what initial step each would take to reassure the other and help to provide a good context for a strategic stability dialogue. So viewed, the question becomes if the United States is prepared to acknowledge mutual vulnerability, what will China do in parallel? (To recall, as also suggested above, just getting the two States to discuss strategic stability issues with each other would be an important step.)



5. REVISITING APPROACHES AND EXPLORING NUCLEAR OFF-RAMPS



5. REVISITING APPROACHES AND EXPLORING NUCLEAR OFF-RAMPS

TAKE A LOOK AT PROPOSED NEW APPROACHES AND LONG-STANDING PROPOSALS

During the discussion, several participants called for a greater readiness on the part of the NWS to explore new approaches to arms control and to disarmament. With regard to the former, the reluctance of the NWS to engage collaboratively with the ‘Stepping Stones’ initiative was highlighted—and the lack of understanding for their reluctance to do so emphasized. Somewhat differently, it was suggested that there were insights to be learned from considering how to apply the GRIT—graduated and reciprocated initiatives in tension reduction—approach, whether to reduce nuclear risks, reenergize US–Russian arms control and a new process of US–Chinese mutual reassurance, or revitalize pursuit of nuclear disarmament. Possible pursuit by all nuclear-armed States of a ‘code of nuclear responsibilities’ also was suggested. In turn, several participants proposed that a readiness to revisit long-proposed measures for legally binding negative security assurances, no-first-use of nuclear weapons, and non-deployment of non-strategic nuclear weapons would go far to strengthen confidence among the NNWS.

FOCUSING ON THE NUCLEAR DISARMAMENT END STATE— HOW USEFUL? HOW MUCH?

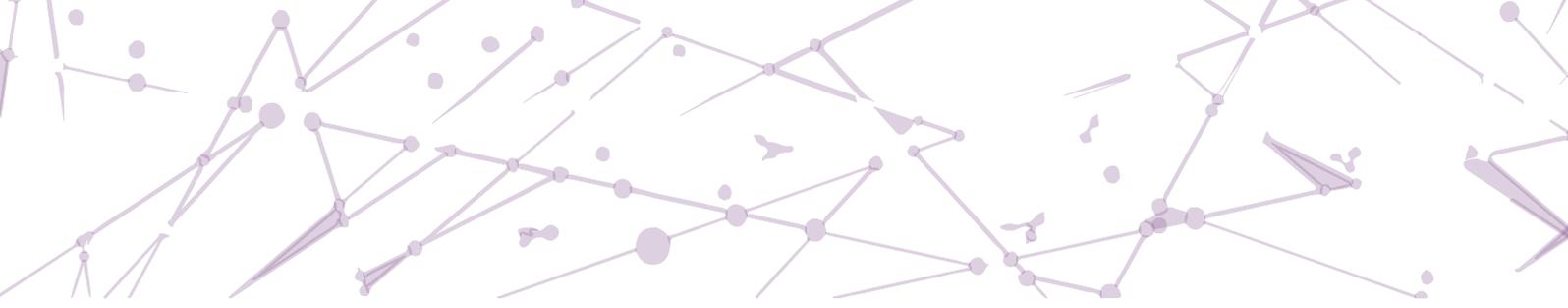
Participants differed on whether or not more attention should be focused on efforts to define the end state of nuclear disarmament, including permitted and proscribed activities, as well as how to ensure all States’ safety and security in a world without nuclear weapons. Some saw defining the end state as a way to add momentum to the disarmament process by providing a beacon for action. It also could help to enable actions to reduce the perceived risks of a world without nuclear weapons, again making that outcome more attractive. But other participants feared that too much focus on the end state would paralyse pursuit of nuclear disarmament by leading to calls for fundamentally changing relations among States and meeting requirements for perfect security. For those participants, the key is to take a more iterative approach to make progress towards a world without nuclear weapons. Indeed, it was proposed that nuclear disarmament should not be viewed as an end state to be achieved once and for all time. Instead, it is better viewed as a continuing process in which practices and institutions will need to be invented and sustained along the way. Still, a closing point of view agreed that while there were difficulties with trying to define a nuclear disarmament end state, the process of thinking it through could be liberating. It could help to identify key relationships in the complex ‘nuclear system’, thereby opening up possibilities for action and milestones to pursue.



5. REVISITING APPROACHES AND EXPLORING NUCLEAR OFF-RAMPS

THE ELEPHANT IN THE ROOM—CLIMATE CHANGE

At least for a number of participants, the discussion's focus on the threat of nuclear weapons was seen as addressing the biggest challenge of two decades ago. Instead, the greatest threat today, it was emphasized, is climate change. That said, it was also argued that stabilizing relations among nuclear-armed States would be an enabler of their collaboration in addressing the climate change threat both to them and to all other States. The point was also made that for all the difficulty of escaping the nuclear weapons dilemma, it is perhaps less daunting than the range of actions required to respond to climate change issues. Transitioning away from reliance on nuclear weapons for security is ultimately about changing minds over time, something that new, incoming evidence and continuing questioning of assumptions underpinning the nuclear discourse could influence.



6. ANNEX: TABLE OF COMPILED MEASURES

6. ANNEX: TABLE OF COMPILED MEASURES

Author	Context	Categorization	Specific Proposals
I. Williams	All actors	Approach	Map out challenges to an 'end state' of nuclear disarmament
I. Williams	NPT	Approach	Transform review process to be more productive, transparent, inclusive; with working group
Ingram	NPT	Approach	More inclusive approach (e.g. Stepping Stones), look into principles for reducing nuclear salience
Borrie	TPNW-NPT	Approach	Achievable outcomes at NPT Review Conference (e.g. risk reduction dialogue, strategic arms control)
Borrie	TPNW-NPT	Approach	Acknowledge US-China mutual nuclear vulnerability
Camara	TPNW-NPT	Approach	Nuclear-armed States to acknowledge TPNW as legitimate initiative
Podvig	TPNW-NPT	Approach	Focus on shared interests, including on non-use (Reagan-Gorbachev)
Haute couverture	Nuclear-armed	Approach, Arms Control	Enhance mutual knowledge, respect, appreciation; expand expertise to include culture
Erasto	Russia-US	Approach, Arms Control	Strategic empathy and compromise (e.g. on strategic missile defence, non-strategic nuclear weapons), move towards minimum deterrence
Watkins	Russia-US	Approach, Operations	Assurances not to seek demise, not to target NC3, reduce risk between deployed forces, secure mil-mil communications, Track 1.5 on deterrence policies
Potter	NPT	Approach, Risk Reduction	Urgency on nuclear risk reduction (and disarmament facilitator), civility and respect in discourse

6. ANNEX: TABLE OF COMPILED MEASURES

Author	Context	Categorization	Specific Proposals
Potter	Russia-US	Approach, Risk Reduction	Revitalize risk reduction measures, export controls cooperation, non-proliferation meetings, citizen diplomacy, nuclear threat assessments, nuclear audits
Erasto	Nuclear-armed	Arms Control	Cooperative reductions/arms control
Perkovich	Russia-US	Arms Control	Non-deployment of non-strategic nuclear weapons, inspection regime
Podvig	Russia-US	Arms Control	Reduce deployed strategic warheads, commitment to post-New START treaty and negotiations, explore non-deployment of INF-range (with working group)
Borrie	TPNW-NPT	Arms Control	Build back the US-Russian arms control process (central storage, critical infrastructure, Reagan-Gorbachev statement)
Camara	Nuclear-armed	Declaratory Policy	Reagan-Gorbachev, no-first-use, irreversible reductions, diminish tech risk
Perkovich	Nuclear-armed	Declaratory Policy	Reagan-Gorbachev or edited formulation
Podvig	NWS-NNWS	Declaratory Policy	Commitment not to produce more warheads, on fissile materials and FMCT, Reagan-Gorbachev, nuclear risk reduction (ballistic missile launch notifications)
Li	P5	Declaratory Policy	Reagan-Gorbachev, reiterate commitment on not aiming weapons
H. Williams	TPNW-NPT	Declaratory Policy	Recommitment to the NPT and international security

6. ANNEX: TABLE OF COMPILED MEASURES

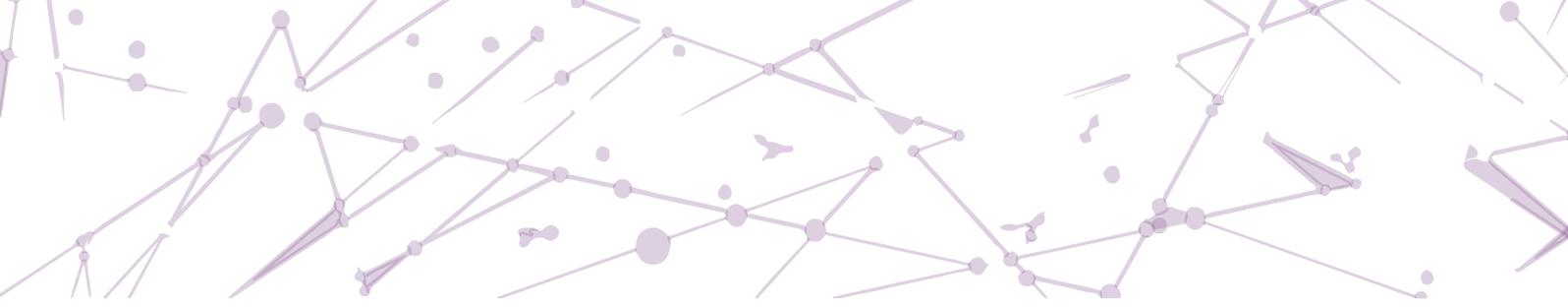
Author	Context	Categorization	Specific Proposals
H. Williams	TPNW–NPT	Declaratory Policy	Reagan–Gorbachev statement, commitments to past Review Conference commitments
Perkovich	US–China	Declaratory Policy	Recognition of NC3 interference as ‘grave threat’
Camara	P5	Declaratory Policy, Dialogue	Reaffirm commitment to nuclear disarmament, P5 process consultations, reporting on NPT article VI
Dunn	US–China	Declaratory Policy, Operations	US: acknowledgment of mutual vulnerability; China: limited deployment as part of modernization
Akiyama	East Asia	Dialogue	Regional mechanism for dialogue on arms control and disarmament
Ingram	NPT	Dialogue	Dialogue towards unconditional negative security assurances and sole purpose
Perkovich	NPT	Dialogue	Dialogue on nuclear weapons and IHL
Jadoon	Nuclear-armed	Dialogue	Exploration of confidence building measures (asymmetries, technology), conventional arms control, and restraints on use of force
Meyer	Nuclear-armed plus	Dialogue	Revival of strategic dialogues
Sood	Nuclear-armed plus	Dialogue	Russia–US, China–US, China–India–Pakistan, Russia–US–China–India–Pakistan, nuclear-dependents and TPNW
Li	P5	Dialogue	Consolidate existing dialogues, focus on reducing role of nuclear weapons including no-first-use; discuss new tech impact; strengthen with NNWS

6. ANNEX: TABLE OF COMPILED MEASURES

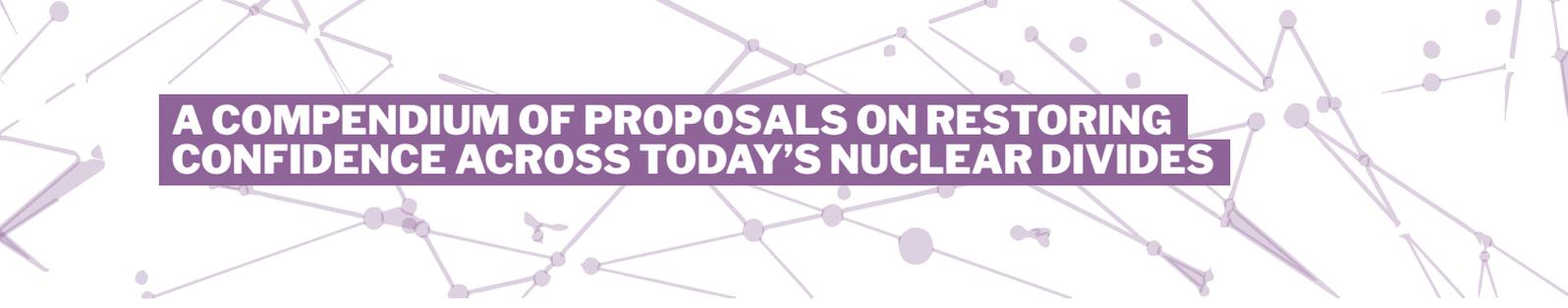
Author	Context	Categorization	Specific Proposals
Potter	Russia-US	Dialogue	Bilateral Presidential Commission, non-proliferation cooperation, civility
Roberts	Russia-US	Dialogue	Mechanism for strategic dialogue; create commission for dialogue between Congress and Duma
H. Williams	TPNW-NPT	Dialogue	Exploration of TPNW-NPT relationship
Akiyama	US-China	Dialogue	Bilateral dialogue including US Strategic Command and PLA Rocket Force officers
Roberts	US-China	Dialogue	Mechanism for strategic dialogue; resurrect the Track 1.5 process
Kmentt	TPNW-NPT	Dialogue, Approach	Constructive, inclusive, democratic dialogue, addressing questions from humanitarian perspective, and considering deterrence consequences, risks, etc.
Potter	NPT	Education	Disarmament and non-proliferation education, next generation simulations at NPT
Potter	Russia-US	Education	Dual degrees in arms control and non-proliferation, Track 2.5 diplomacy investment
Ogilvie-White	All actors	Education, Operations	-
Ritchie	All actors	Education, Risk Reduction	Collective nuclear conflict prevention, including role of regional actors, corporations, civil societies
Camara	NWS-NNWS	Instruments	CTBT entry into force, scientific body on nuclear disarmament verification, legally binding instrument on negative security assurances for NWFZ

6. ANNEX: TABLE OF COMPILED MEASURES

Author	Context	Categorization	Specific Proposals
Ritchie	All actors	Operations	Revisit practices in US–Soviet Agreement on Prevention of Nuclear War, Helsinki Final Act, Charter of Paris
Perkovich	Nuclear-armed	Operations	No cyber operations against nuclear power plants
Meyer	Nuclear-armed plus	Operations	Space security: ban anti-satellite weapons, agreement on norms or code of conduct for space operations, transparency and confidence-building measures from 2013 GGE report
Meyer	Nuclear-armed plus	Operations	Cyber: ban operations on nuclear weapon complexes
Perkovich	Russia–NATO	Operations	Code of conduct (to reduce conventional conflict), agreed procedures for investigation
Dunn	Russia–US	Operations	US: formal limits on missile defence; Russia: cease and desist in election interference and other cyber incursions
Potter	NPT	Risk Reduction	GGE on nuclear risk reduction, risk reduction summit, nuclear risk reduction as standing agenda item
Sethi	Nuclear-armed	Risk Reduction	Summit on nuclear risk reduction with deliverables: joint statement, list of measures, gift baskets, put on Conference on Disarmament agenda



A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES



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UNIDIR invited written, informal briefs in advance of the Symposium held on 6 July 2021. The purposes behind inviting these comments were to create a focus on specific proposals in advance of the meeting, kick-start its discussion, and ensure that diverse viewpoints were covered.

As such, the papers that follow are published with permission of the commentators. The rich menu of options provided the basis for the development of the event agenda, and the identification of broad categories of ideas around which discussion was arranged. The papers are in their original formats.

The commentators offered their viewpoints in their own personal capacities and their views as stated here should not be interpreted as necessarily reflecting their official positions or affiliations.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

A FIRST STEP FOR CONFIDENCE-RESTORING (BUILDING) MEASURES IN EAST ASIA—NOBUMASA AKIYAMA ¹

SUMMARY

- Declaratory policies, traditionally regarded as confidence-building measures, are not effective unless they induce counterparts to reciprocate such declaratory policies and take steps to reduce the threat.
- Unfortunately, East Asia has not yet established the foundation of trust and confidence among States, which is necessary for ensuring a positive spiral to occur between the United States, China, and other stakeholders in regional security.
- There is a lack of common understanding among the interested States in the region about the role of strategic stability and deterrence, the significance of arms control and disarmament, and the role and necessity of concrete measures such as transparency and declaratory policies.
- In this context, a regional mechanism for the dialogue on arms control and disarmament should be created, through which a common understanding of the above key concepts and arms control and disarmament measures can be formed among stakeholders. A framework for the dialogue should consist of two layers: a bilateral dialogue between the United States and China and a multilateral dialogue involving stakeholders in the region.
- After building a foundation of such common understanding, the United States and China should cooperate and implement measures for risk and threat reduction in a reciprocal and mutually beneficial manner, taking into deep consideration the avoidance of the stability–instability paradox, and the fear of ‘abandonment’ which may be faced by US allies in the region. It should also be noted that the process of dialogue itself will serve as a confidence-building measure.
- In order to make effective dialogue possible, and not merely a ceremonial exchange of views, it would be useful for military officers involved in the operation of nuclear forces in both the United States and China to directly discuss matters of mutual concerns.
- At the same time, the region should start consultation on crisis management and escalation avoidance mechanisms. In the midst of rising tensions in the East China Sea and South China Sea, consultations should urgently begin among the States concerned on the effective operation of an emergency communication mechanism in order to avoid unintended escalation and armed conflict. A maritime and air communication mechanism exists between Japan and China for the prevention of maritime and air collisions, but it is not practically operational.

¹ Dr. Nobumasa Akiyama is a Professor at the Graduate School of Law, School of International and Public Policy, Hitotsubashi University in Japan. The views expressed here are his own.

1. The Characteristics of the Strategic Environment in East Asia

First, nuclear weapons are deeply embedded not only militarily but also politically in the strategic dynamism of East Asia, which is composed of four nuclear powers (China, the Democratic People's Republic of Korea, the Russian Federation, and the United States) and US allies (Japan, the Republic of Korea, and Taiwan) under extended nuclear deterrence. The strategic confrontation between the United States and China is intensifying, involving regional players such as Japan, Australia, Taiwan, the Republic of Korea and Southeast Asian States. There seems to be no appetite for arms control on the Chinese side. Meanwhile, the United States does not seem to be willing to admit its vulnerability to China.

Second, there is an absence of confidence and no confidence-building mechanisms between China and the United States, between China and the US–Japanese alliance, or multilaterally at the regional level. (In a sense, there is no confidence to be 'restored' in East Asia, but to be 'built' from the beginning.) At the same time, there is no multilateral alliance mechanism among US allies, unlike in Europe.

Third, there are two indigenous nuclear powers in the region, China and the Democratic People's Republic of Korea, but the threats they pose to States in the region are qualitatively different. In the case of China, there is the threat that China's superiority in nuclear and conventional forces will undermine the security and political freedom of the States in the region. On the other hand, in the case of the Democratic People's Republic of Korea, for its own survival, it has adopted a mode of behaviour that gives as little predictability as possible to the States concerned with its limited nuclear capability. In order to cope with this kind of threat, it is necessary to construct an optimal combination of deterrence against such unpredictable adventurism on the part of the Democratic People's Republic of Korea and incentives to halt its nuclear development and induce it to take action for denuclearization.

2. A Modality of Dialogue

In such a strategic environment where mutual trust is lacking, it is unclear whether unilateral actions, even if based on good intentions, would induce favourable responses from others, and it is highly unlikely that a positive action-to-action cycle of threat reduction could be taken place (rather, betrayal is likely).

Declaratory policies generally lead to a reduction in nuclear risk, but it is assumed that there should exist a certain degree of confidence in the expectation that nuclear forces would be operated in accordance with the declaratory policies. Otherwise, the existence of an effective verification system for operations will be necessary. Regrettably, there is no basis for nuclear risk reduction through such declaratory policies in the US–Chinese relationship, or among the six parties including the Democratic People's Republic of Korea, and there is no agreement on the concept of effective verification of declaratory policies.

Therefore, the first action required in East Asia is to create a mechanism for confidence-building dialogue. I would propose a two-tiered structure of dialogue: bilateral dialogue between the United States and China, and multilateral dialogue that includes the major States in the region. (It may be better to set up a separate framework for the denuclearization of the Democratic People's Republic of Korea, rather than discussing it within the multilateral dialogue.)

With regard to mechanisms for US–Chinese strategic dialogue, there have always been track 1.5 and track 2 ‘strategic dialogues’. However, they have rarely been linked/reflected to government-level dialogues, especially between the military parties that operate nuclear forces. In fact, in order to ensure that a dialogue mechanism would not be limited to a ceremonial exchange of views or policy-level ideational discussion, the participants should include US Strategic Command officers and their Chinese counterparts in the PLA Rocket Force, so that they could deepen their substantive understanding of the concerns and issues facing both sides.

A multilateral dialogue framework would function as a bridge between the NWS and NNWS in the region, as it would ensure transparency in the arms control dialogue between the two States with feedback from the dialogue. It would also serve as a feed-in to US–Chinese arms control discussions of issues and concerns of States in the region other than the United States and China, and an exchange of views on linkages with adjacent regions (such as South Asia and the Russian Federation).

3. Potential Issues for US–Chinese Arms Control Dialogue: Managing Great Asymmetry

In order to discuss concrete measures for nuclear risk reduction and nuclear arms control between the United States and China, it is necessary to address the question of how strategic stability between the United States and China is defined, paying attention to both aspects of crisis stability and arms race stability. In particular, what form does a stable relationship take when nuclear forces of the two States are asymmetrical?

The asymmetries between the two States can be listed as follows. First, the asymmetry in the composition and quantity of nuclear forces—at the strategic level, the United States is overwhelmingly superior, while at the regional level, China is dominant with medium-range missile capabilities.

Second, the asymmetry in extended nuclear deterrence—the United States provides extended nuclear deterrence to its allies such as Japan and the Republic of Korea, which is an indispensable element of the US global strategy, but China's nuclear weapons are for its own security purposes only.

Third, the asymmetry in nuclear doctrine—China declares minimum deterrence or limited deterrence and no-first-use. The United States does not rule out the possibility of first use, and adopt the assured destruction strategy. There is also a difference in perceptions between the two States regarding the role of nuclear weapons, in particular what to deter and what to dissuade.

In addition to this, it is necessary to pay attention to the difference in the concept of transparency, which may define the modality of arms control. In other words, the United States and other States emphasize the exchange of information on the composition and quantity of forces, while China believes that doctrine and declaratory policies will ensure transparency.

Other important tasks in defining strategic stability would require the exchange of views on the evaluation of non-nuclear elements in military capabilities and the changing role of nuclear weapons with the military application/adoption of emerging technologies such as artificial intelligence, sensor technology, hypersonic glide vehicles, cyber threats, missile defence, and so on.

From the perspective of promoting disarmament, it is also desirable to discuss the consistency of nuclear operational policies with the law of war and the international humanitarian law. (This is unlikely to be of much interest among nuclear armed States, but from the perspective of transparency for non-nuclear weapons States, it may emerge as an agenda item.)

4. Perspectives from Non-Nuclear-Weapon States:

How to Overcome the Dilemma of Arms Control/Stability–Instability Paradox

In terms of military balance, Taiwan and Japan recognize that they are losing air and sea superiority in conventional forces against China. In terms of conventional forces, the United States is still maintaining its superiority, but the margin is diminishing. In addition, China has an overwhelming advantage in medium-range missile capabilities. US allies believe that maintaining the credibility of US extended deterrence or alliance deterrence (both in the realm of nuclear and conventional forces) will ensure not only military security but also freedom from Chinese political pressure.



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The biggest concern for US allies is the fear of 'abandonment' by the United States. If the United States and China both understand that they are in a state of mutual deterrence at the strategic level (the United States currently does not officially acknowledge its vulnerability to China), and if this is institutionalized through strategic-level (nuclear) arms control between the United States and China, and if strategic stability is established, this will allow the United States to endorse China's increasing freedom of action and influence in the East Asian region. In other words, it will be important to ensure that China does not take assertive actions in the region. It will be important for regional stakeholders to maintain the credibility of US deterrence of expansion, or for China's restraint to gain credibility.

On the other hand, from China's perspective, it may not be able to make concessions on the Taiwan issue, which is its core interest, or sacrifice its freedom of action in East Asia (or the Western Pacific) in order to achieve strategic stability with the United States.

It is necessary to discuss within the framework of the strategic dialogue what efforts should be made so that the strategic stability between the United States and China does not bring about a psychological state of concern about such a stability–instability paradox among the interested States in the region.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

COMMENT ON CONFIDENCE-RESTORING MEASURES—JOHN BORRIE ¹

Strategic tensions between some of the nuclear-armed States in recent years has led to widening international concern about major power crisis, potential conflict, and nuclear weapon use. Several NWS have announced policies that give nuclear weapons renewed salience and have sought to dampen expectations about nuclear disarmament prospects. There seem to be multiple downward spirals of trust at play. Some involve the nuclear-armed States. Trust has also declined between the NWS and many of the NNWS since the NPT's indefinite extension in 1995.² One response already seen is the emergence of the 2017 TPNW, something that the NWS and many of their allies clamorously opposed and claim is damaging. Yet the TPNW's emergence is a symptom and not a cause of the current malaise. How can sufficient trust and confidence be restored to resume progress towards achievement of a nuclear-weapon-free world? Here are three ideas.

1. Focus on achievable outcomes in the NPT and ditch the TPNW rhetoric

It would, of course, be nice if supporters and opponents of the TPNW could set aside their respective rhetoric in the interests of intensified cooperation to reverse the deterioration of the NPT regime. An NPT Review Conference success *might* reassure TPNW opponents that the new treaty's supporters are not seeking to undermine the NPT—although it is difficult to really say as those concerns seem politically and not empirically driven. Meanwhile, the TPNW's parties are all NPT parties, and are not of material non-compliance concern for the NPT regime. None have agitated for exit from the NPT. Nor are the TPNW or its States parties the nub of the issue in terms of the risk of use of nuclear weapons and the current lack of trust between nuclear-armed States, especially the United States, and China and the Russian Federation, about which more below.

What would assuage the concerns of the NNWS, of which the TPNW's supporters and States parties are subsets, and build their trust in the NWS? Action plans and sets of nuclear disarmament steps have been agreed at previous NPT review meetings, but their record of implementation is patchy, at best. Any NPT final outcome containing yet another plan for article VI implementation is unlikely to be as persuasive as concrete results would be in implementing agreements to date. Prospects there do not look too good.

¹ John Borrie is a Principal Adviser to the New Zealand Government on disarmament. At the time of this meeting John was a Senior Resident Fellow at UNIDIR, and is an Associate Fellow at Chatham House. The views expressed are his own.

² See Ken Booth and Nicholas J. Wheeler, *The Security Dilemma: Fear Cooperation and Trust in World Politics*, 2008.

It is time for all NPT State parties to accept that this is a situation no-one wants to be in and correspondingly lay off the 'blame game'. In my view, the NPT Review Conference would be well advised to focus on achieving two or three discrete, achievable outcomes as goals, rather than new, far-reaching plans. Beside recommitting to what they have agreed before where it still makes sense and is fundamental to a constructive atmosphere, there should be emphasis on greater dialogue (e.g. nuclear risk reduction, including cross-domain implications) and good faith in pursuing strategic arms control post-New START extension. This is 'thin gruel' for the pro-disarmament crowd. However, the flip side should be an acceptance that the TPNW is a reality, with the good faith intent behind it acknowledged.

2. Build back the US–Russian arms control process

Even an outcome in the next NPT review meeting on nuclear disarmament widely considered to be positive may not improve confidence even one iota among those nuclear-armed States in the most tension with one another. The relationships between the nuclear-armed States have their own dynamics that predominantly tend to influence the NPT, not the other way around despite initiatives like the NWS' 'P5' dialogue. In the Euro–Atlantic region the big players are still those powers with the largest nuclear arsenals, the United States and the Russian Federation. This is not to say that there is no role for others in establishing a tone: note, for instance the unimpressed general reaction to the United Kingdom's recent decision to increase the cap on its operational nuclear arsenal—or in contributing to nuclear risk reduction. NATO allies, including NNWS, might feed concrete suggestions into strategic arms control discussions between the United States and the Russian Federation for whatever could supplement and perhaps eventually replace the recently extended New START.³ But it is Washington and Moscow that are key.

Rebuilding confidence in the Euro–Atlantic will not be easy, for instance given developments as varied as the greater cross-domain dynamics of NATO–Russian strategic competition of late, non-compliance concerns of various kinds that sank the Intermediate-Range Nuclear Forces Treaty (INF) and the Open Skies Treaty, and a spate of cyberattacks. But there is a long history of interaction on Russian and US strategic arms control and crisis avoidance that provides some basis on which to build if Presidents Biden and Putin decide to do so following their summit in Geneva in June 2021. Progress might be made through discrete arrangements dealing with specific strategic problems or mutual vulnerabilities that could drive further destabilizing dynamics. These could include central storage of non-strategic nuclear weapons, restricting new forms of cruise missile, non-deployment of INF-range cruise missiles (along the lines that Pavel Podvig has suggested), delineating

³ For instance, see Steven Pifer, 'The art of negotiating non-strategic nuclear weapons', [The National Interest](#), 4 June 2021 and 'Germany's role in US-Russian arms control', [Brookings](#), 3 June 2021.

critical infrastructure on Earth and in space on which cyber, electronic, or kinetic attacks would be considered especially escalatory, or even adjusting policies on missile defences. A good place to start (and something that could be carried into the NPT space and would probably attract general support) would be a reaffirmation of the Gorbachev–Reagan statement that a nuclear war cannot be won and must not be fought.

3. Acknowledge US–Chinese mutual nuclear vulnerability and build on it

The dynamic between China and the United States is a greater conundrum for confidence-restoring efforts. For one thing, there is no previous bilateral arms control motor to restart. Beijing's relative lack of nuclear transparency (and its alleged reluctance to engage with the United States of late), the way in which its neighbours perceive its military actions, plus the 'push-me-pull-you' dynamic of many allies' interests in the region for Washington to manage all exert drag force. New US high-tech industrial policy sharpens the dividing lines—as do US efforts to build a Western counter-alignment to Beijing.

In these circumstances a pattern of interactions needs to accrete that builds a sense of predictability between leaders, officials, and military commanders, and helps them properly understand the strategic stakes and how to avoid nasty surprises between Chinese and US forces in the Western Pacific, but also between China and US allies and third parties. In the longer run such contacts might identify where specific agreements are mutually desirable, for instance on maritime, aerial and outer space deconfliction, on refraining from certain forms of destabilizing behaviour, and perhaps certain forms of capability-oriented arms control in the fullness of time. But this kind of strategic arms control, if it is to succeed, will need to take into account new forms of qualitative and quantitative asymmetry. Basic understandings, such as a recognition of mutual nuclear vulnerability (which the United States has never officially acknowledged to date) could help create a basic floor for this.

⁴ I point the reader to Lewis A. Dunn's paper, *Reversing The Slide: Intensified Great Power Competition And The Breakdown Of The Arms Control Endeavour* (UNIDIR, 2019), and his paper with Andrey Baklitskiy and Tong Zhao in the UNIDIR nuclear dialogue series on *Some Thoughts On The Logic Of Arms Control* for its American, Chinese and Russian scholarly perspectives (UNIDIR, 2020).

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CONFIDENCE-RESTORING MEASURES—MARCELO CÂMARA ¹

In the absence of a concrete prospect for nuclear disarmament in the near future, the suggested actions below could help in restoring confidence among the parties to the wider global regime.

All nuclear-armed States

- To reaffirm the 1985 Reagan–Gorbachev declaration that a “nuclear war cannot be won and therefore must never be fought”;
- To pledge a no-first-use policy in their nuclear doctrines;
- To create a framework for gradual and irreversible reductions in their nuclear arsenals, including pledges to halt the development of new types of nuclear warheads; and
- To consider regulatory measures to diminish the risks to nuclear stability posed by the weaponization of emerging technologies.

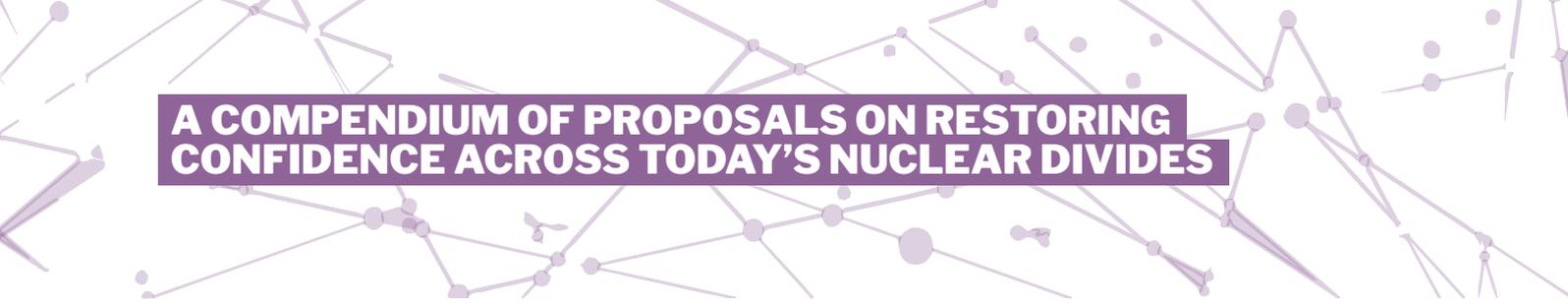
Nuclear-armed States and non-nuclear-armed States

- To reinforce the nuclear taboo against nuclear weapons testing by pursuing the entry into force of the Comprehensive Test Ban Treaty;
- To set up a scientific multilateral body within the United Nations disarmament machinery tasked to make advances in nuclear disarmament verification; and
- To envisage a legally binding instrument in relation to negative security assurances for non-nuclear-weapon States parties to nuclear-weapons-free zones.

TPNW supporters and TPNW opponents

- Despite their critical stance towards the TPNW, the nuclear-armed States should acknowledge it as a legitimate initiative aimed at pushing forward the NPT objectives and as part of the legal framework of the nuclear non-proliferation and disarmament regime.

¹ Marcelo Câmara is a senior official working on disarmament issues in the Ministry of Foreign Affairs of Brazil. The views expressed are his own.



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P5

- To reaffirm the 'unequivocal undertaking' on nuclear disarmament within the 2021 NPT Review Conference;
- To conduct regular consultations within the 'P5 Process' mechanism with selected groups of NNWS or like-minded coalitions, such as the New Agenda Coalition and the Non-Proliferation and Disarmament Initiative;
- To report regularly to the General Assembly and the Security Council on their efforts to implement NPT article VI. As the indisputable pacesetters in nuclear disarmament, the United States and the Russian Federation bear special responsibility in this regard.

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CONFIDENCE-RESTORING MEASURES—LEWIS A. DUNN¹

Background

In the absence of a concrete prospect for nuclear disarmament in the near future, the suggested actions below could help in restoring confidence among the parties to the wider global regime.

A focus on confidence-restoring measures raises at least three questions. These are: confidence between whom? Confidence in what? Confidence-restoring how?

My focus here will be on the United States and the Russian Federation and the United States and China. With regard to confidence in what, my answer is confidence in the possibility of good faith cooperation to regulate their strategic relationships and strengthen the nuclear taboo. Even with today's lack of trust, for all three protagonists, their shared interests in avoiding the dangers and opportunity costs of unregulated strategic competition and a growing risk of nuclear confrontation would provide the necessary foundation.

As for the how, at one level, restoring confidence—in what could be called the 'possibility of collaborative strategic engagement'—calls for initial limited successes that can contribute to the possibility of still later successes. Or, success can lead to success in a positive feedback loop. Extension of New START is an example in the US–Russian strategic relationship; a future US–Chinese announcement of the initiation of official strategic dialogue with the goal of agreeing to measures to stabilize strategic engagement and to reduce strategic risks would be another. Such actions send a signal that collaborative strategic engagement is possible.

At a different level, however, there may be more overarching actions that may have an important impact in restoring confidence in the possibility of collaborative engagement to avoid unregulated strategic competition and to sustain the nuclear taboo. These actions may be asymmetric, linked to a particular focus of each side's concerns about the possibility of working with the other side. They all are unilateral, though they likely would require prior coordination among the protagonists so that they could be taken in parallel with each other. Specifically:

¹ Dr. Lewis A. Dunn is an independent consultant on nuclear issues. He also serves on the Secretary-General's Advisory Board on Disarmament Matters. The views expressed are his own.

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US–Russian strategic relationship

- **United States:** Official public statement of US readiness to accept formal limits on US missile defences (not necessarily by treaty given the difficulties of gaining US Senate ratification but perhaps by an Executive Agreement that would require 60 votes in the Senate to overturn)—accompanied by restoration of the word ‘limited’ in the authorization for missile defences in the next National Defense Authorization Act.
 - > **Why:** Directly signals readiness to address long-standing Russian concern, revising policies of three successive US administrations.
- **Russian Federation:** Cease and desist from meddling in US elections via extensive social media activities as well as engaging in other more focused cyber incursions—even while still maintaining that the Russian Federation had never done so and has not been doing so.
 - > **Why:** Removes what may be the most important underlying reason for US scepticism about the Russian Federation’s intentions and ability to cooperate with the Russian Federation even where national interests overlap.

US–Chinese strategic relationship

- **United States:** Official statement that the United States is prepared to formally acknowledge US–Chinese mutual vulnerability in the context of the broader process suggested above of collaborative dialogue and parallel actions to stabilize the US–Chinese mutual deterrence relationship.
 - > **Why:** Addresses long-standing Chinese concern about US strategic intentions, while signaling readiness to accept limits on strategic capabilities of concern to China.
- **China:** Official statement that China plans to deploy ‘no more than’ a given number of nuclear weapons as part of its ongoing nuclear modernization and seeks agreement with the United States on actions to regulate the US–Chinese strategic relationship in a manner beneficial to both States.
 - > **Why:** Without using that word, signals Chinese readiness in the right context to set aside its aversion to ‘transparency of capabilities’, which would be a necessary element of agreed approaches to enhance stability of the US–Chinese strategic relationship in both States’ interests



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Overall prospects

Prospects for the above or any other actions to restore confidence in the possibility of collaborative strategic engagement depend on whether the leadership in all three protagonists—China, the Russian Federation, and the United States—recognize that their longer-term self-interest will not be served by strategic competition with its risks and opportunity costs. For Moscow and Beijing, the new Biden administration provides an opportunity for engagement in support of mutual interests which could well be lost if not seized soon.

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BUILDING 'STRATEGIC CONFIDENCE' AMONG NUCLEAR-WEAPON STATES— TYTTI ERÄSTÖ¹

Distrust among the NWS is a key rationale behind the perceived need for nuclear deterrence, and also one of the main obstacles to nuclear disarmament. While most NWS and their allies support disarmament in principle, they see the need to maintain their deterrence capabilities at least as long as their adversaries do the same.

Cooperative reductions among adversaries can provide a way out of this apparent 'Catch-22' situation. As demonstrated by the history of US–Russian arms control, cooperative reductions can build mutual trust, but such trust can also be lost as a result of broken promises in the form of treaty violations and withdrawals. Resuming the arms control process requires both political will and at least a minimal degree of trust, which seem to have been absent from US–Russian relations since the negotiation of New START in 2010.

Nuclear-armed States often blame each for having created an unfavourable environment for arms control and nuclear disarmament. For example, the United States has referred to Russian violations of the INF Treaty and its alleged low first-use threshold as rationales for the development of new nuclear weapons. The Russian Federation, for its part, has justified its new nuclear delivery systems, including hypersonic weapons, in terms of US missile defence development following its withdrawal from the Anti-Ballistic Missile Treaty. Like the Russian Federation, China believes that US missile defences might undermine its nuclear second-strike capability, and this concern seems to be driving its nuclear and hypersonic weapon build-up. The latest US Missile Defense review, for its part, called for more investments in missile defences to counter Chinese and Russian hypersonic weapons.

Amidst this strategic dynamic, the NWS have occasionally signaled their readiness to engage in confidence-building. For example, in 2014 the P5 issued a joint statement on 'Enhancing Strategic Confidence' and in 2019 they agreed on the need to assess "each other's strategic intentions, enhance dialogue on nuclear policies and doctrines, [and] promote strategic trust". The US-led 'Creating the Environment for Nuclear Disarmament' initiative likewise sought to address security-related obstacles to nuclear disarmament through trust-building among a group of NWS, including the Russian Federation and China, and NNWS. In addition to these NPT-related efforts, the Russian Federation and the United States have engaged in bilateral strategic stability talks since 2017.

¹ Dr. Tytti Erästö is a Senior Researcher in the SIPRI Nuclear Disarmament, Arms Control and Non-proliferation Programme. The views expressed are her own.



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Thus far, these efforts have yielded little in either building confidence or in convincing the rest of the world of the sincerity of the NWS' determination to address the underlying problems. However, the recent US–Russian decision to extend New START has given hope that the two States might still begin negotiations on a follow-on agreement leading to further nuclear cuts.

However, this would require a change of mindset from mutual recriminations and competition to strategic empathy and compromise. In particular, the Russian Federation and the United States need to recognize and to address each other's main concerns, which seem to revolve around the possibility of nuclear first-use as well as conventional counterforce strikes. This will likely require difficult compromises, such as limits on strategic missile defences and non-strategic nuclear forces. At the level of doctrines, both States should also stop seeking the ability to win a nuclear war, and instead move towards minimal deterrence, ideally based on no-first-use or sole-purpose policy. They could also agree not to use conventional weapons against each other's nuclear forces. Both sides would benefit from such restraint in the form of greater predictability as well as reduced arms race incentives and escalation risks. Bilateral steps towards disarmament would also help to strengthen the NPT and to pave the way for multilateral arms control—not only by bringing US and Russian arsenals numerically closer to those of other nuclear-armed States, but also by addressing the threat perceptions underlying Chinese and European nuclear deterrence policies.

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OVERCOMING THE GENERIC PARADOX OF ARMS CONTROL— BENJAMIN HAUTECOUVERTURE¹

Arms controllers know that their discipline has been mostly paradoxical since its conceptualization in a rather strict sense at the turn of the 1950s—arms control is rooted in an environment of lack of trust between the subjects of international law, the States, but can only develop on the basis of mutual trust between these same subjects of law. In the first case, a well-documented mutual trust does not require finding collective security mechanisms based on reducing the volume of violence. In the second case, any attempt to set up a mechanism will remain a dead letter if a visceral distrust does not allow the most intrusive inspection mechanisms set up within the framework of this mechanism to be given credit.

Thus, in the specialized literature, one often encounters the question of what can or should generate an arms control process in the broadest sense (whether disarmament, arms control strictly speaking, confidence-building measures, etc.): should the restoration of confidence take precedence over the mechanism that makes it possible to establish it, or conversely, is the implementation of an operational mechanism supposed to help restore a cycle of confidence between adversaries? Such a question can be asked with regard to all the formats, disputes or crises underway—the denuclearization process of the security policy of the Democratic People's Republic of Korea, the renegotiation of the Joint Comprehensive Plan of Action in Vienna, the future of the START process, the strategic dialogue between the United States and China, Europe's conventional security architecture, the arms technology race, etc.

Some invariants provided by contemporary experience (since the end of the Second World War, at least) may be worth mentioning:

Firstly, a strategic dialogue between States is not an end in itself, despite what is often claimed, for lack of anything else to offer. One can have a dialogue without understanding each other or by following parallel paths (this has been the case with the Russian Federation and the States of the Organization for Security and Cooperation in Europe for more than 20 years regarding conventional arms control in Europe; it is the case with Pakistan in the Conference on Disarmament regarding the launch of negotiations on a cut-off treaty, for example).

¹ Benjamin Hautecouverture is a Senior Research Fellow on non-proliferation and disarmament issues at the Foundation for Strategic Research. The views expressed are his own.



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Secondly, arms control and collective security is not the preserve of liberal democracies based on the market economy. On the contrary, it is a discipline whose pragmatism is likely to bring together regimes that contradict each other in their objectives as well as in their foundations. As such, the restoration of trust can come from dialogue between practitioners whose approaches are not polluted by any ideology (including democratic ideology, the substance of which, under the Trump administration for example, has polluted most diplomatic initiatives in this field).

Thirdly, technical expertise must be coupled with real cultural expertise: differences in strategic culture can be so great between States that the promotion of a security initiative by one State may be rejected by another State for reasons unrelated to the security issue at stake (e.g., the culture of secrecy in Asia clashes with the desire for transparency that drives many Western arms control initiatives, although the reluctance of some Asian audiences is not related to the ultimate goal of refining the perception of a particular weapon system in the target State's security doctrine).

Fourthly, trust between States is an abstract notion or a fantasy. The only trust that exists is that between two human beings. Consequently, the only collective security mechanisms that endure are those that are built and promoted by leaders, delegates, representatives who know, respect and appreciate each other. It is not the arguments that convince, it is the quality of those who defend them (this was a fundamental dimension of US–Soviet arms control during the Cold War, for example).

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RENEWING COOPERATION WITHIN THE NPT COMMUNITY—PAUL INGRAM¹

An understandable common tactic in seeking consensus within the international community is to seek proposals that avoid serious objection from key stakeholders. This can often fail, however, not least because of the sensitivity officials have to traps or overcommitment. Sometimes there are apparent successes, only for an agreement to fail in its implementation because it offends some element of the core paradigm that determines a State's security and defence posture. Reasons for these failures lie not in the proposals, many of which ought to be within reach of agreement, but rather in the manner in which States defend their perceived interests. States will need to adapt their approach if proposals are to stand a good chance of a fair hearing. This note explores the principles behind this before exploring a particular example around negative security assurances.

The need for new approach

In trying to make sense of complexity we often oversimplify, pick a side and miss the richness of polarities at play between and within States. Each and every State has to balance the objectives of achieving effective deterrence and defence postures on the one hand, and engaging others in the international community to realize the collective benefits from disarmament diplomacy.

The relationships between States within the NPT community have always been tense. It may not be helpful to look backwards with nostalgia when previous periods had their own challenges and the seeds of the dysfunctions that we experience today. States have talked past one another because they operate with contradictory paradigms, each of which carry evidence and persuasive influence but none of which alone capture the full picture. Final documents have been negotiated and agendas agreed. But particular proposals fail to address the underlying differences in approaches taken. This would be better managed if officials recognized the truth and limitations that reside in each paradigm as dynamic questions of balance and movement that in truth permeate the interests of all States rather than dividing them cleanly between one kind of State and another.

States could consider how they can overcome their reluctance to manage these complexities together by working through the strengths and weaknesses of each. Proposals that are seen as beneficial within several perspectives then have a better chance of success. But it will take work on opening up the perspectives first and exploring with greater openness the attractions and downsides of each, with an understanding that every State will need to engage with adaptation to its opening position. This lies at the heart of the Stockholm Initiative, a courageous attempt to institutionalize the Stepping Stones Approach that attempts much of the approach described here.

¹ Paul Ingram is Director of Emergent Change. The views expressed are his own.



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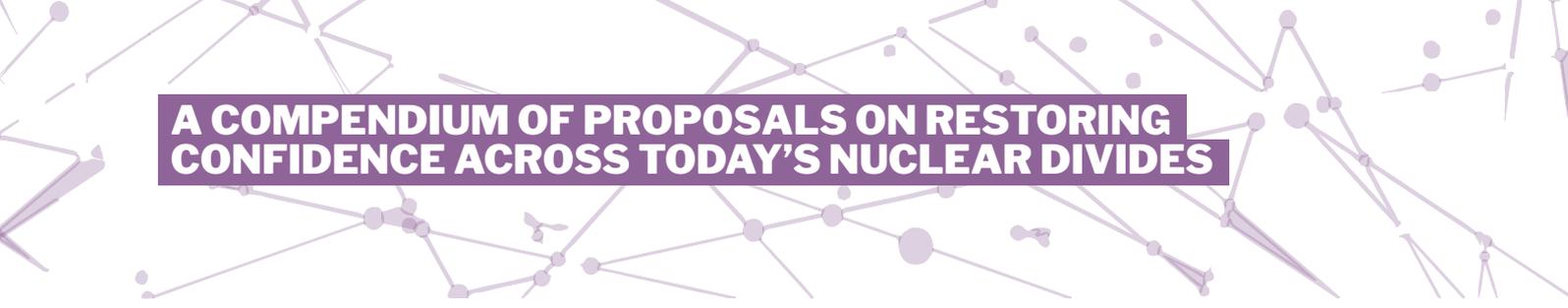
One perspective held by many NNWS sees NPT proposals as steps in a broader journey towards disarmament, greater genuine cooperation, an awareness of common security, and growing recognition that strategic stability comes from deepening interdependence governed by international regimes and a growing body of law. A competing perspective, most strongly held within the NWS, sees the NPT primarily as a collaborative tool to manage the existing nuclear order and to prevent further proliferation. Disarmament is seen as contingent on amenable circumstances, and can only be negotiated between the NWS attempting to manage their strategic relations and disruptive elements. This arises from the dominant perspective that governments have to prioritize first the security of the State itself, that of its citizens and that of its allies when engaging in diplomacy.

The tension between these perspectives is illustrated when those holding the former perspective make proposals reducing the salience of nuclear weapons, which those of the other persuasion see these as premature. All NPT States are committed in principle to reducing nuclear salience, an essential step on the road to disarmament. The NWS could reconsider their discomfort with calls to reduce nuclear salience; rather they could articulate principles in which reduced salience would contribute to international security and be ready to engage in discussions in good faith.

This illustrates the tendency that even the most modest proposals flounder in the face of the apparent gulf between the perspectives. It may seem a tall barrier to some, but for proposals to have any hope of building a culture of cooperation more States need to commit to a search for inclusive approaches prior to focusing upon particular proposals, and this requires them to attach less rigidly to their positions and instead to explore the interests that underlie them in an adaptive manner. This is an explicit dimension of the Stepping Stones Approach.

Negative security assurances and sole purpose

Applying this to a particular area, let us explore negative security assurances and sole purpose. Recent years have seen the United States and the United Kingdom issue nuclear posture statements that state they could respond to future strategic non-nuclear attacks with nuclear weapons, and imply they could even do so against States without nuclear weapons, throwing into question their negative security assurances. Perceiving future uncertainty and not having clarity about how they could otherwise respond to challenging threats, they resort to seeking a nuclear deterrence effect. This is both lazy and dangerous, not least because it is almost certainly not credible. They are applying the principle of sovereignty, freedom of action in crises and the sense that—having invested in nuclear deterrence—it makes sense to get the most deterrent impact from that investment.



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The NWS and NNWS could enter into a dialogue around the values and principles in their management of future threats, and how this affects their relationships and responsibilities to one another. This should be done with a view to establishing and strengthening those values and principles that need to be based upon moves towards a cohesive international community. Sacrificing the commitment to negative security assurances specifically, and generally to imply threats to other States' security in order to plug perceived potential future gaps in one's own military options, directly harms international cohesion and thereby indirectly weakens the national security of the State engaging in this behaviour. It is premature to be talking about a global negotiation for unconditional negative security assurances, but we could be engaging in dialogue about what it would take to build a pathway towards this objective.

The NWS ought to be able to acknowledge the benefits that would in principle accrue to the international community of such an agreement if entered into in good faith even if the challenges remain too great to be overcome. This would also demonstrate their good faith to the longer term objective of a move away from dependence upon nuclear deterrence, and go a long way to restoring faith in the commitments they have made to this objective.



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THE CONVENTIONAL FORCES DIMENSION—USMAN JADOON¹

The asymmetries in conventional armed forces of nuclear-armed States, further exacerbated by the integration of advanced technologies (cyber, outer space and artificial intelligence capabilities) in the domain of conventional war-fighting, as well as aggressive postures and doctrines, especially in conflict-prone areas, potentially lower the nuclear threshold. There is a need to explore confidence-building measures along with conventional arms control and restraints on the use of force—as a step towards improving trust and reducing risks at the strategic level.

¹ Usman Jadoon is a diplomat with the Ministry of Foreign Affairs of Pakistan in Islamabad, and was until recently posted in Geneva, Switzerland, working on nuclear disarmament issues. The views expressed are his own.

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RESTORING CONFIDENCE: SOME FOOD-FOR-THOUGHT ELEMENTS— ALEXANDER KMENTT¹

The need for confidence-building measures in the nuclear weapons discourse is highlighted most frequently in the context of the relations between nuclear-armed States and the importance of reducing nuclear risks. While this is certainly a very pertinent focus, there is also a need to restore confidence in the nuclear disarmament and non-proliferation regime and, in particular, the determination in which the allegedly shared goal of achieving nuclear disarmament and a world without nuclear weapons is pursued. The TPNW is in part a manifestation of the loss of confidence that many NNWS share as regards this determination. It is also an expression of urgency and political will for more progress through multilateral cooperation. Restoring confidence by nuclear-armed States vis-à-vis the NNWS and, in particular, the TPNW States parties and signatories is, thus, also urgently required.

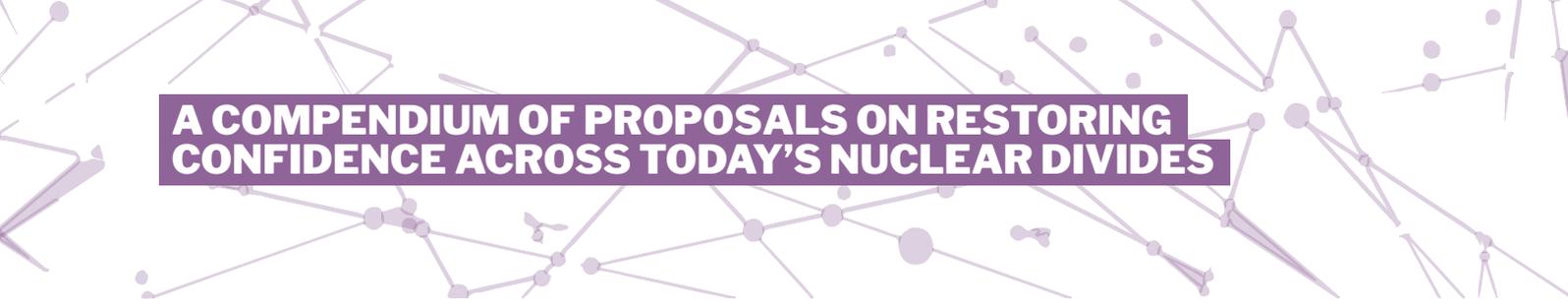
It would certainly be desirable that the new development and the message of the TPNW be taken seriously and lead to a genuine effort to build bridges across the divide in the international community on these complex and contentious issues. Supporters of the TPNW would welcome such engagement on the part of the NWS and 'nuclear umbrella' States, as they are well aware that the TPNW alone is no panacea for solving the nuclear weapons issue, but one of many necessary steps to achieve a world without nuclear weapons. In their view, the TPNW should facilitate, if not compel, the kind of engagement on the part of the NWS that has hitherto been missing. From the perspective of supporters of the TPNW, any 'bridge building' discussions would, arguably, be seen as incomplete or missing the key point without engaging constructively on the TPNW's underlying rationale—that being the knowledge of the humanitarian consequences of nuclear weapons and the many risks that the possession of these weapons entail and discussing what conclusions are therefore to be drawn regarding the veracity of nuclear deterrence and the security value of nuclear weapons.

¹ Alexander Kmentt is an Austrian diplomat. The views expressed in this article are those of the author and do not necessarily reflect the positions of the Austrian Foreign Ministry. Some of the points are included in Kmentt's book "[The Treaty Prohibiting Nuclear Weapons: How It Was Achieved And Why It Matters](#)".

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Restoring confidence from the TPNW perspective would thus comprise addressing in a constructive, inclusive and much more democratic way the *right* questions that arise from the Humanitarian Initiative and the TPNW. Ultimately, it is a discussion on the sustainability of a nuclear-deterrence-based notion of international security. Some of those possible questions are listed below:

- How can one weigh the belief that nuclear weapons deter and prevent large-scale wars with the knowledge that deterrence, including nuclear deterrence, can fail with the risk of unacceptable humanitarian and other consequences?
- What conclusions should be drawn from the fact that much in the nuclear weapons debate is based on subjective assessments, leading to the possibility of overconfidence in the respective arguments? To what extent can 'not knowing' whether nuclear deterrence works or does not work be a point of convergence?
- What would security in a world without nuclear weapons look like? Can one assess the following two statements objectively?—'A world without nuclear weapons cannot be today's world without nuclear weapons' versus 'A world without nuclear weapons would in any case be more secure as the existential threat to humanity is removed'.
- Does a more concrete and scenario-based assessment of the actual humanitarian consequences of nuclear weapon explosions undermine or strengthen the credibility of nuclear deterrence? What do we objectively know or not know on either assumption?
- Does a focus on the measurable humanitarian and other consequences of nuclear explosions and on risks associated with nuclear weapons have the potential for changing the nuclear deterrence calculus and its cost-benefit analysis? If not now, what would be the changed parameters, such as consequences and risks, where this would be the case?
- How do 'nuclear deterrence risks' compare to the 'risks of the elimination of nuclear weapons'?
- To what extent do nuclear deterrence doctrines and targeting plans go beyond a predominantly abstract consideration of the consequences of the use of nuclear weapons due to the assumption of ultimate non-use because deterrence will not fail?
- How concretely do nuclear-armed States integrate the humanitarian and other consequences on their own population, on the presumptive opponent's population and on populations in third countries into their nuclear-weapons-use scenarios?



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- How, and in which concrete scenarios, do nuclear deterrence doctrines and targeting plans ensure compliance with international humanitarian law and the principles of distinction and proportionality? In this context, what exactly do notions of 'existential threat', 'extreme self-defence', 'undiminished security' and 'unacceptable damage' mean today, and for whom?
- How are international humanitarian law principles considered in relation to populations in third countries that are not party to a conflict, given the likely or possible transboundary humanitarian consequences of nuclear weapons?
- How are issues, such as the responsibility and the ability to clean up after an accident or use of nuclear weapons, included and considered in the decision-making process and in nuclear doctrines in nuclear-armed States?
- To what extent does nuclear deterrence require a readiness to take risks in order to underscore its 'credibility', possibly resulting in a propensity towards probing and dangerous behaviour and a false sense of security?

A broad dialogue and engagement on such a range of questions would certainly be difficult for all sides of the disarmament/deterrence divide, given the acrimonious history of the nuclear disarmament debate and the strongly held views on the nuclear weapons issue. They are, however, among the legitimate and pertinent questions derived from the arguments made in the context of the Humanitarian Initiative and the TPNW. Opposing, dismissing or deflecting these issues exacerbates existing disagreements. A more constructive dialogue on those issues would in itself be a positive contribution to nuclear weapons discourse and, hence, strengthen the cohesion of the multilateral nuclear disarmament and non-proliferation regime. This important conversation should take place more broadly, more inclusively and urgently.

THOUGHTS ON RESTORING CONFIDENCE AND TRUST AMONG THE P5— LI CHIJIANG¹

As requested by distinguished Dr. Lewis Dunn, I would like to share some thought on how to restore confidence and trust among the P5 (that is, the NPT NWS). In recent years, the P5 mechanism has played an important role to promote dialogue and trust among the five NWS. Yet, this mechanism is facing challenges given the intensified big power competition among the P5, as well as the increasing salience of nuclear weapons in some P5 States, which may give rise to greater nuclear dangers. In order to promote collaborative actions among the P5, I would like to suggest the following measures:

- 1.** Consolidate the existing dialogues in the P5 mechanism to enhance the mutual understanding, such as the doctrine and policies discussion, and the nuclear glossary group. A special focus would be how to reduce the role of nuclear weapons in national security strategy, including a possible policy discussion on 'no-use' and 'no-first-use' of nuclear weapons.
- 2.** Political declarations are by far the most achievable way to help confidence-building—joint statements by the P5, such as reiteration of the Reagan–Gorbachev principle that 'a nuclear war cannot be won and must never be fought' or some similar expression would be quite useful. Another possible declaration could be a reiteration of the P5's commitment that 'their nuclear weapons would not be aimed at any State'.
- 3.** Bringing the discussion of the impact of new technologies on strategic security calculations into the P5 process is a tricky issue. On the one hand, it may generate more debate as the impact of new technologies on the nuclear domain is not fully explored and understood. On the other hand, the necessity and urgency of such a discussion is obvious for all the relevant parties. A starting point would be to discuss the impact of the military application of new technologies on strategic stability and to explore feasible solutions, with a view to building more trust among the P5.
- 4.** The P5 States should also work together towards a successful Review Conference of the NPT. They may explore the possibility of issuing a joint statement to the Review Conference, which will reiterate their strong commitment and support to promote and implement the three pillars of the NPT. The P5 should also strengthen dialogue with other States parties of the NPT, with a view to reaching more consensus towards the Review Conference.

¹ Li Chijiang is Vice President and Secretary-General of the China Arms Control and Disarmament Association, based in Beijing. The views expressed here are his own.

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CONFIDENCE-BUILDING AND RISK REDUCTION: WORDS AND DEEDS REQUIRED— PAUL MEYER¹

There has long been an entanglement between the concepts of confidence and agreement in the realm of arms control and disarmament. At times it is depicted as a ‘what comes first: the chicken or the egg?’ type question—is confidence necessary before agreements are possible or does concluding agreements build confidence? While many will acknowledge that a modicum of confidence between parties facilitates arriving at cooperative agreements, it is still possible, when mutual perceptions of security benefits pertain, for cooperation to result even in conditions of sharp confrontation and deep distrust. Suffice it to consider the many agreements emerging from the Cold War period when ideological conflict and armed confrontation was at a peak.

If we are to focus on the issue of nuclear risk reduction and consider how confidence might be enhanced at the same time as significant steps are taken to lower the risk of nuclear weapon use, it could be helpful to start with the distinct, but related, fields of outer space and cyberspace security. Space assets perform a crucial role as part of nuclear forces providing early warning and communication functions. The use of anti-satellite weapons against these components of a State’s nuclear deterrent forces would be a highly dangerous action that could lead to nuclear weapon use. The threat of a cyber attack against nuclear forces is a recent but potent one, with an intrusion potentially leading to false warnings and even unauthorized launch of missiles. It would seem very much to be in the interest of conflict prevention for risk reduction measures to be negotiated among rival powers in both of these security realms.

For space security, the ‘ripest’ measure would be a ban on testing debris-causing anti-satellite weapons given the universal interest in maintaining safe satellite operations, especially in the low-Earth orbits where the vast majority of assets are to be found. Other possible steps would be an agreement on norms for proximity operations or a wider code of conduct that could incorporate both cooperative measures and a much-needed consultative framework for space operations.

¹ Paul Meyer is Fellow in International Security and Adjunct Professor of International Studies at Simon Fraser University, and a Senior Advisor to ICT4Peace. The views expressed are his own.



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Implementing any of the recommended transparency and confidence-building measures from the 2013 United Nations Group of Governmental Experts report would represent positive action, as enhanced transparency on space doctrines and programmes would encourage both restraint and preventive action. Overtime new legal instruments such as an optional protocol to the Outer Space Treaty prohibiting weaponization or harmful interference with space objects could be contemplated.

In the cyber field, calls have been made for a ban on targeting nuclear weapon complexes which could be added to the existing norm that protects critical infrastructure from such attacks. Since any cyber intrusion carries with it a potential for damage or disruption, such a ban would have to be of a blanket nature. This danger should not be left unaddressed.

Finally, none of the above ideas can be advanced in the absence of dialogue. The revival between adversarial States of suspended strategic stability dialogues, or their initiation, is a must for any meaningful cooperative security arrangements to emerge. An 'I will punish you by not speaking to you' approach reflects the logic of the schoolyard and should not figure in relations between States. The risk of silence and sulking far outweigh those of dialogue and engagement.

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A MULTILEVEL, MULTISECTOR CRISIS COMMUNICATION CAMPAIGN— TANYA OGILVIE-WHITE ¹

Establishing reliable channels of communication between nuclear-armed States is an urgent priority. All States have an interest in preventing nuclear war, which could be triggered by accidents, misperceptions, and breakdowns (unintended or deliberate) in communication systems. To reduce the chances of this happening, political leaders need to develop shared understandings of these risks and to commit to building robust mechanisms that allow them to clarify their intentions and step back from the brink. Expert studies show existing mechanisms are weak and vulnerable, and in some cases non-existent; building and strengthening them and ensuring that they are used as intended therefore constitute crucial areas of common ground among allies and adversaries.

This challenge needs to be addressed in earnest at the highest levels, via a multilevel, multi-sector diplomatic campaign that focuses on the role of effective communication in preventing nuclear catastrophe. Using existing diplomatic forums, the formal campaign could begin with a statement from political leaders (at the delayed 2020 NPT Review Conference) that a nuclear war cannot be won and must never be fought, combined with a universal pledge to improve communication to reduce nuclear risks. A global push to augment and to protect strategic hotlines could follow, with dialogue taking place at all levels (in bilateral, minilateral, regional and multilateral forums) and with input from communications experts from relevant sectors (policy, security, law, engineering, computer science, etc.).

This multilevel, multisector campaign would have three immediate goals:

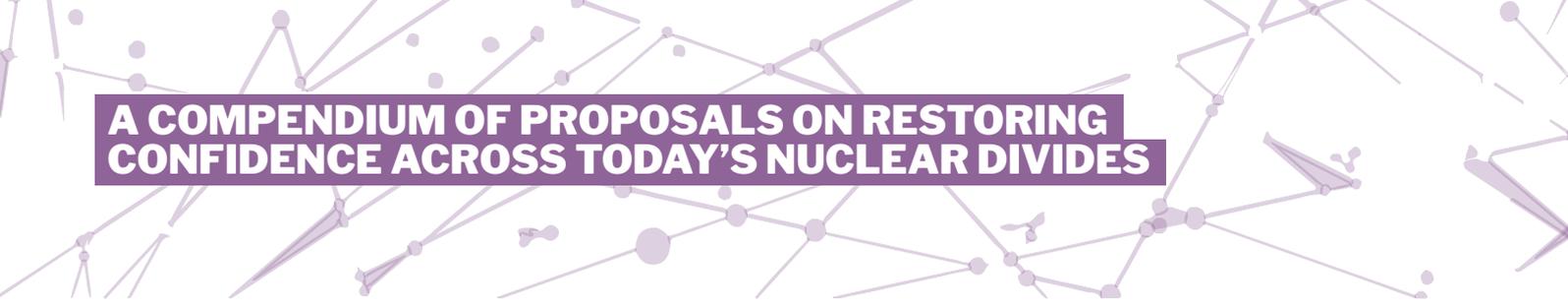
- To develop shared understandings of nuclear risks, especially those related to NC3;
- To highlight the role and function of hotlines as critical crisis management mechanisms and to highlight man-made² and natural³ vulnerabilities; and
- To discuss collaboration on developing a secure global communication system that would upgrade and augment nuclear hotlines and generate political buy-in to that project. (Informal collaboration on this is taking place via the CATALINK Project,⁴ which could be included in discussions.)

¹ Tanya Ogilvie-White, PhD, is Senior Research Advisor at APLN, director of the New Zealand Centre for Global Studies, and senior fellow at the Coral Bell School of Asia Pacific Affairs, Australian National University. The views expressed are her own.

² For example, the impact of a deliberate cyber attack on communication systems

³ Such as the impact of a massive solar storm on communication satellites.

⁴ According to its creators, CATALINK aims to be an internationally driven, secure, and resilient twenty-first century hotline, with the capability to avert catastrophe amid rising tensions between adversaries. Such a system is technically possible to build but more difficult to implement, requiring trust and a shared sense of ownership. To be feasible, it would need to be built collaboratively from the outset and implemented according to clearly defined norms. For further information, please see <https://nautilus.org/wp-content/uploads/2020/05/Last-Chance-Synthesis-Report-May-14-2020.pdf>.



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The longer-term goal of the campaign would be to help restore trust and confidence by bringing political leaders and a wide range of relevant experts together to discuss practical proposals around the shared goal of preventing nuclear war. Doing so would concentrate minds on real and growing dangers of nuclear escalation, generate concrete de-escalation proposals, and foster new habits of cooperation among States that are currently being driven further and further apart by fear and suspicion.

Although critics might argue that this campaign would risk legitimizing the continued possession of nuclear weapons by nuclear-armed States, steps could be taken throughout it (by civil society, the NNWS, and communication experts) to emphasize the role of nuclear disarmament as the ultimate form of nuclear risk reduction.

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CONFIDENCE-RESTORING MEASURES—GEORGE PERKOVICH¹

Whatever nuanced meaning is suggested by confidence-restoring measures, the fact is that the world needs nuclear-armed States, starting with the United States and the Russian Federation, to say and do things that indicate they will manage their competitions and differences without blowing up each other and the rest of the world. The United States and the Russian Federation must lead. China must show more willingness to engage these issues seriously if the United States indicates it is prepared to address concerns that China has regarding weapons systems that could conduct strategic attacks, including against Chinese nuclear forces and command and control.

NATO and the Russian Federation

As my colleague, Dmitri Trenin, writes, “The most likely danger is no longer a massive cross-border invasion or a large-scale nuclear attack, but an inadvertent direct collision between Russian and Western forces where they operate close to each other, or a miscalculation by one side linked to misperception about the other”. One potentially catalytic risk is that aggressive/showy patrolling by Russian aircraft on the periphery of Russian/NATO boundaries (or beyond) could lead to an accident or, at some point, to an action by a NATO pilot (or other actor) that creates a crisis. Much would depend on the international political situation at that moment. But the risk is greater than zero that such an incident could escalate to the use of force, which then opens the way to the most likely scenario for nuclear war between NATO and the Russian Federation: a conventional conflict that neither side is willing to voluntarily de-escalate. Thus, Russian and NATO military leaders should negotiate a code of conduct that would reduce such risks and have agreed procedures for investigating and addressing alleged violations of it. Other States, including US allies in Europe, should press the Russian Federation and the United States to do this. Yes, there will continue to be disputes, tensions and recriminations over Crimea, Ukraine, chemical weapons, sanctions, etc., but none of this justifies risky (adolescent male) behaviour of air forces patrolling too close to each other.

A NATO–Russian initiative would have the added value of involving, by definition, the three NWS of concern to the Russian Federation—the United States, France and the United Kingdom—and need not be as hostage to domestic politics as bilateral US–Russian relations are.

¹ Dr. George Perkovich is the Ken Olivier and Angela Nomellini Chair and vice president for studies at the Carnegie Endowment for International Peace, overseeing the Technology and International Affairs Program and Nuclear Policy Program. The views expressed are his own.

United States and the Russian Federation (NATO too)

To reduce risks of worse arms racing, the United States should declare that it will not deploy on European soil any intermediate-range missiles (formerly proscribed under the INF Treaty). Period. Not conventional or nuclear. Some in the West will find this controversial as the Russian Federation has deployed a missile that violates the INF Treaty and the United States now would be saying that it will not respond symmetrically. However, a move to deploy intermediate-range missiles in Europe could create controversy in some countries that would please the Russian Federation too. The point is to change the dynamic and set the stage for reducing deployments in Europe.

The United States and the Russian Federation have made little progress in increasing mutual transparency regarding non-strategic nuclear weapons. An intrusive agreement to inspect active warhead storage facilities is not now politically feasible. However, inspecting empty formerly active warhead storage facilities on NATO and Russian territory would demonstrate that an inspection regime for such weapons is feasible. Each State would gain valuable information on the types of non-strategic nuclear weapons storage practices and facilities that the other side possesses. Such inspections also could reduce fears that either side has secretly located non-deployed breakout potential in non-strategic warheads.

United States and China

Relevant US and Chinese experts and officials should declare that they would view any attempt by the other to interfere with the effective operations of NC3 systems as a grave threat to security. Further, they could acknowledge their understanding that the other would view such an attempt similarly. This understanding could be conveyed at first publicly by experts—including former officials. Officials from both States could later privately convey this understanding to each other. This would convey that senior leaders have been briefed on the risks in such operations, which (hopefully) would require often-stove-piped cyber and nuclear operators to communicate directly with each other and with political leaders.

Another way to improve stability would be for the United States and China to declare that, in a conflict, any decision to intentionally attack nuclear weapons and NC3 systems—by conventional or cyber means—should be made by the same level of authority that would authorize nuclear use.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

Nuclear-armed States collectively

Declarations: If the US Department of Defense continues to resist having US leaders repeat the Reagan–Gorbachev line that ‘a nuclear war cannot be won and must never be fought’, leaders of other States could declare it. A less-sweeping formulation that is factual would be: ‘no one knows if nuclear use can be kept limited, and if it is not limited there will be no winner. Everyone will lose’. It would be interesting for NGOs and some governments to urge nuclear-armed States to make such a declaration and see what argument that they would make against doing so.

New commitment: all nuclear-armed States (perhaps excepting the Democratic People’s Republic of Korea) should be willing to declare that they would not conduct cyber operations against nuclear power plants anywhere in the world. This would not deal directly with nuclear weapons, but it would reinforce support for safe and environmentally sensitive peaceful uses of atomic energy, and negotiating a shared declaration like this could demonstrate that despite their various antagonisms all nuclear-armed States can cooperate in ways that respect the rest of the world’s interests.

Further, this act could uniquely involve India, Israel and Pakistan with the five NWS, which ultimately will be necessary in any deep disarmament process. India and Pakistan have sustained since 1988 an agreement not to attack each other’s civilian nuclear facilities. These two States could explicitly add that their restraint will include cyber operations. There is no reason why other nuclear-armed States should be unwilling to make similar commitments to their adversaries and, more obviously, to all other States.

NWS and NNWS

Recognizing that the humanitarian implications of nuclear war motivate many of the supporters of the TPNW and also many NNWS, the NWS should offer to engage in serious dialogue on whether and how the use of nuclear weapons could comport with international humanitarian law (as the United States and the United Kingdom, for example, have committed to do). Such dialogue could be preceded by submission of written questions and provision of written answers to them. The dialogue would seek to explore differences and seek to identify potential common ground on ways to reduce risks of outcomes that everyone would agree would violate international humanitarian law. (This would set aside other scenarios which some governments and experts argue could comport with international humanitarian law and others disagree).

NNWS and NGO advocates of nuclear disarmament could help to motivate nuclear-armed States (and US allies) by declaring that such risk reduction steps would be credited as contributions towards fulfilling NPT disarmament obligations.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

CONFIDENCE-RESTORING MEASURES—PAVEL PODVIG¹

Author	Specific Proposals
NWS and NNWS— and across disarmament and deterrence communities P5 (and P5- NNWS)	NWS and nuclear-armed States political commitment not to increase the size of their nuclear arsenals (not to produce more warheads). Without verification at this point but consider launching expert consultations on the potential approaches to verification.
	Confirm/call for/secure universal commitment to stop production of fissile materials for weapons. Renew efforts to begin negotiations on a fissile material cut-off treaty.
	Reiterate the Reagan–Gorbachev pledge, preferably in a stronger form—as a commitment to avoid the use of nuclear weapons.
	Commit to specific risk-reduction measures, such as ballistic missile launch notifications (modeled after US–Russia and Russia–China).
TPNW supporters and opponents	Focus on shared interests—making sure that nuclear weapons are not used (see Reagan–Gorbachev pledge).
United States and the Russian Federation	Commit to reduce the number of deployed strategic warheads to 1,000-1,200 while New START in force.
	A commitment to conclude a new treaty before New START expires. Launch post-New START negotiations.
	Discuss the Russian Federation’s offer not to deploy INF-range missiles in Europe (and, potentially, in Asia). Establish a working group to discuss verification provisions.

¹ Dr. Pavel Podvig is a Senior Researcher in the WMD Programme at UNIDIR. The views expressed are his own.

CONFIDENCE-RESTORING SYMPOSIUM: INITIAL IDEAS—WILLIAM POTTER¹

I have relatively few really new ideas or approaches, but there may be utility in organizing them in different time frames. Most of my suggestions relate to the two areas I know best: the NPT review process, and (2) bilateral US–Russian relations. I also wish to acknowledge that some of my recommendations related to the NPT are informed by and build on the risk reduction package outlined in the excellent Stockholm Initiative working paper submitted to the tenth NPT Review Conference on 11 May 2021.

I. NPT Review Process

Immediate

- Communicate urgency of nuclear risk reduction in current environment; treat as an immediate problem that requires immediate action.
- Counter misperception, common among NNWS (especially within the Non-Aligned Movement), that nuclear risk reduction is a substitute for nuclear disarmament; develop a communications strategy that depicts nuclear risk reduction as an enabler/facilitator of nuclear disarmament [My own view is that nuclear risk reduction is far more important at this moment of crisis and strategic instability than are further modest reductions in the number of nuclear weapons.]
- Affirm/reaffirm the Reagan–Gorbachev Principle or an equivalent commitment.
- Restore civility and respect in diplomatic discourse.

Short to Midterm

- NPT States parties should endorse the creation of a group of governmental experts on nuclear risk reduction.
- NPT States parties should endorse convening of a high-level and inclusive nuclear risk reduction summit.
- Attempt to introduce nuclear risk reduction into NPT review process as a standing agenda item for Cluster 1/Main Committee 1 agenda but recognize likely pushback by the Non-Aligned Movement.

¹ Dr. William C. Potter is a Professor of Nonproliferation Studies and Director of the James Martin Center for Nonproliferation Studies at the Middlebury Institute of International Studies at Monterey. The views expressed are his own.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

Longer term

- Build greater support for and identify more concrete actions on means to implement General Assembly and NPT recommendations related to disarmament and nonproliferation education (Action 22 of the 2010 Review Conference Final Document), including expanded use of active learning tools such as role playing and simulations.
- Conduct simulations on the margins of future NPT Review Conference and Preparatory Committee meetings for 'next generation' attendees.

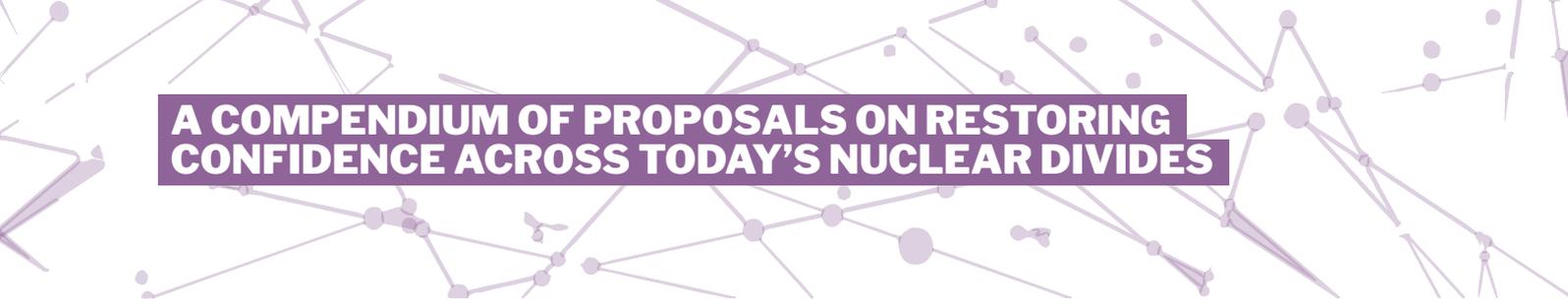
II. US–Russian Federation

Immediate

- Revive US–Russian Bilateral Presidential Commission, including working groups on arms control and nuclear security; perhaps add new working group on nuclear risk reduction.
- Resume US–Russian cooperation on non-proliferation in advance of the tenth NPT Review Conference.
- Restore civility in bilateral diplomatic intercourse.
- Routinize US–Russian bilateral military and other government working level interactions.

Short to Midterm

- Revitalize existing bilateral nuclear risk reduction measures (e.g., the 1971 Agreement on Measures to Reduce the Outbreak of Nuclear War, the 1972 Agreement on Basic Principles between the United States and the USSR, the 1972 Agreement on the Prevention of Incidents on or over the High Seas, and the 1973 Agreement on the Prevention of Nuclear War).
- Expand tacit cooperation on export controls, perhaps with an initial focus on Saudi Arabia.
- Revive biannual, high-level US–Russian non-proliferation meetings.
- Revive the 'Space Bridge' as a tool for citizen diplomacy, perhaps utilizing social media platforms as well as television.
- Initiate GRIT strategy (graduated and reciprocated initiatives in tension reduction) to build trust one step at a time.
- Employ variety of US–Russian negotiation simulations as means to foster empathy/seeing with the eyes of others.



A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

- Undertake comparative nuclear threat assessments.
- Undertake nuclear audits as recommended by Sam Nunn and Ernest Moniz.
- Engage representatives from media (traditional and more contemporary) in dialogues designed to break down enemy images and encourage more factual depictions of the other.

Longer term

- Expand US–Russian dual degrees in areas related to nuclear arms control and non-proliferation.
- Invest substantially in Track 2.5 diplomacy involving younger professionals

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

COLLECTIVE NUCLEAR CONFLICT PREVENTION—NICK RITCHIE ¹

Proposals abound for managing or reducing 'nuclear risk' and for confidence-building measures to rebuild trust between nuclear-armed adversaries sufficient to facilitate reciprocal controls on nuclear weapon systems, policies and practices.

Most frameworks and proposals for nuclear risk reduction centre on what some or all nuclear-armed States can and should do. This is naturally central, but it does miss the question about what everyone else can and should do. The question is valid given the climatic, humanitarian and economic consequences of a nuclear war that would inevitably hit the poorest hardest outside of the immediate (though possibly very large) conflict zone. The humanitarian initiative and the TPNW were driven in part by the collective right of the non-nuclear-armed majority—notably across the global South—to try and shift the global politics of nuclear weapons in the direction of elimination precisely because these States have a shared and potentially existential stake in the avoidance of nuclear war and deep misgivings about the efficacy of nuclear deterrence.

The prevention and management of inter-State war in world politics post-1945 was assigned to the permanent members of the Security Council as an institutionalized concert of powers under Chapter 7 of the Charter of the United Nations. The problem, as we know, is that nuclear war is likely to be the result of an escalating conflict between some of these States, with the exception of an India–Pakistan scenario. In the circumstance of an inter-P5 violent conflict escalating perhaps out of control, what should everyone else who will be disastrously affected do if nuclear deterrence collapses? Given the power asymmetries between the P5 and other States, coercive power (military or economic) is unlikely to be practicable, leaving the power of institutions, law and norms exercised through diplomacy and institutions and done so collectively, including through the General Assembly and the Secretary-General. Transnational corporations do, on the other hand, have the capacity to exercise significant coercive economic power, more so collectively. At a local level, civil society organizations can also play a very important role in bridging conflict divides.

¹ Dr. Nick Ritchie is a senior lecturer in international security at the Department of Politics, University of York. The views expressed are his own.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

I can find little evidence of serious thinking about what the rest of the world can and should do to dial down an escalating conflict between nuclear-armed States caught in a spiral of escalation (though I might not be looking in the right places). At the same time, there has been a significant amount of work done on conflict early warning systems, conflict management, conflict prevention and peacekeeping. Much of this thinking and practice was developed by the West for application in the global South, notably for African civil wars. Over the past two decades a 'crisis of the liberal peace' resulted in more attention and investment in local, national and regional thinking and practice, including through regional organizations such as the African Union and the Economic Community of West African States. Given that trusting to nuclear deterrence is not sufficient, what can we learn and apply from this trove of thinking, experience and practice to the (imagined) case of an escalating violent conflict between nuclear-armed adversaries? What role can and should States individually (or more likely through regional organizations) play to engage with and dampen an escalating conflict of this type to prevent a *nuclear war*? What role can and should transnational corporations play in incentivizing reassurance and diplomacy over brinkmanship and violence?

We also have an archive of cases that have been studied in detail where nuclear-armed States have engaged in violent conflict or where a nuclear-armed State has engaged in conflict with the ally of another nuclear-armed State. None escalated to nuclear use because the conflict was managed in some sense. How was it managed? What role did diplomacy take? What actors were mobilized? What threats or incentives were offered and by whom? What role did luck play? (Sarkozy's frantic shuttle diplomacy between Moscow and Tbilisi in 2008 as president of the European Union comes to mind).

Can we plausibly rely on this collection of practices in a 'missile crisis 2.0', or should we think more systematically now, while we can enjoy Jonathan Schell's 'Gift of Time'? More specifically, how can we institutionalize norms and practices of nuclear conflict management and prevention, especially *by* the global South drawing on experiences *from* the global South?

Where the TPNW reinforces the illegitimacy of nuclear weapons and, by extension, of nuclear deterrence, what I am (fancifully) imagining here is a process to delegitimize the very *idea* and practice of escalating a conflict to anywhere *near* nuclear weapons by manifesting the unacceptability of doing so through norms, practices and institutions led by non-nuclear-armed States, transnational corporations, and other actors.

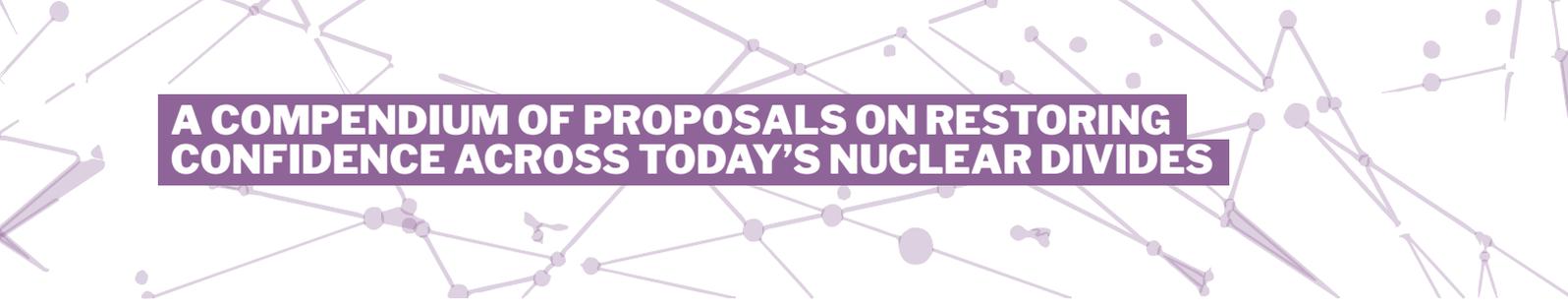
Finally, this is also—at least in part—about revisiting past conversations and practices that found form in the 1973 US–Soviet Agreement on the Prevention of Nuclear War, the Helsinki Final Act, and the 1990 Charter of Paris, among others.

TRUST BUILDING IN AN ERA OF MAJOR POWER RIVALRY—BRAD ROBERTS¹

Assessments:

- The leaders of the major powers do not trust each other and to expect them to do so is unrealistic in an era marked by perceived conflicts of vital interest over regional and global orders.
- From a Russian perspective, the United States proved itself to be dangerous in its unipolar moment, abandoned strategic stability by withdrawing from the Anti-Ballistic Missile Treaty, put itself above international law with the war to capture Saddam Hussein, and pursues an unstated strategy of encirclement and containment to 'enslave' the Russian Federation.
- From a Chinese perspective, the United States is the principal barrier to final recovery from the 'century of humiliation', presides over an alliance network aimed at preventing China's return to its rightful place in the international order, and pursues 'absolute security' so that it is free to remake the world in its own image, including through the use of military force against other major nuclear-armed powers.
- From a US perspective, President Putin's embrace of 'new rules or no rules' has made trust impossible. His abandonment of the Russian Federation's arms control obligations without exercising the withdrawal clause(s) has had a poisonous effect on US willingness to 'trust but verify.' The US Senate is unlikely to ratify another treaty with the Russian Federation for a long time to come. President Xi's embrace of President Putin's worldview only magnifies the problem.
- The traditional western way of thinking about trust-building (that cooperative measures to solve particular problems can, over time, improve these political relationships) seems unpromising, given the depth of animosity at upper levels.
- The United States and Soviet Union lived with the absence of trust for decades before a change of leaders in Moscow, and of leadership perceptions, made new things possible, including 'trust but verify'. In the interim, the two sides found some common interests and cooperated to mutual benefit.
- Rather than focus on building trust, focus on understanding the sources of mistrust, the perceived conflicts of interest, and common interests where cooperation may be possible. Talk is no guarantee of trust. But without talk, trust is impossible.

¹ Dr. Brad Roberts is director of the Center for Global Security Research at Lawrence Livermore National Laboratory in California. From April 2009 to March 2013 he served as Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy. The views expressed are his own.



A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

Recommendations:

- In the US–Russian relationship:
 - Resurrect a mechanism for official strategic dialogue that is high-level, substantive, and sustained.
 - Create a commission for strategic dialogue between the Congress and Duma.
- In the US–Chinese relationship:
 - Create a mechanism for official strategic dialogue that is high-level, substantive, and sustained.
 - Resurrect the Track 1.5 process (suspended since 2019).

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

CONFIDENCE-RESTORING MEASURES: NUCLEAR RISK REDUCTION SUMMIT PROCESS—MANPREET SETHI¹

Confidence restoration is more difficult than confidence-building since States are weighed down by memories of past breaches in confidence. It may be best, therefore, to start with a personal coming together of leaders. Reversal of inter-State trust deficits needs political will and hence a top-down approach could work best. Presently, there is no platform that allows leaders of the nine nuclear-armed States to meet, except the Conference on Disarmament, which, however, does not offer summit possibilities.

In order to restore confidence among the nuclear-armed States, and between them and the NNWS that are frustrated with lack of action, a *Nuclear Risk Reduction Summit* is recommended. This may develop into a process loosely modelled on the Nuclear Security Summit process.

The idea will face challenges—resistance to bringing non-NPT members onto a platform along with the ‘legitimate’ NWS; scepticism that this may be a trap, especially since there is no uniform appreciation of nuclear risks; and criticism that focus on nuclear risks would distract progress from total elimination of nuclear weapons.

Overcoming these will require strong conviction in the convenor of the summit that addressing nuclear risks requires participation of *all* nuclear weapon possessors, irrespective of how they are placed in the global order. Suspicions about the initiative can be addressed by crafting a narrow agenda of the summit based on clear and precise definition of the kinds of nuclear risks sought to be mitigated. These could be precisely identified as those of inadvertent escalation owing to misperceptions and miscalculations, and which concern all States—nuclear or non-nuclear. Risk reduction would have to be framed as contributing to building an environment that lowers trust deficits, enables more steps to reduce salience of nuclear weapons, and thus, nudges gradual progress towards nuclear disarmament.

I tentatively sketch out this idea, which would, of course, gain by collective thinking of the group.

¹ Dr. Manpreet Sethi is Distinguished Fellow at the Centre for Air Power Studies, based in New Delhi, where she leads its programme on nuclear security. The views expressed are her own.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

Purpose of Summit Process

- To focus attention at highest political level of the nuclear-armed States on types of nuclear risks, contemporary factors exacerbating these risks and consequences of deterrence breakdown
- To foster shared understanding of nuclear risks

Participants

- Heads of government of all nuclear-armed States
- Secretariats of Conference on Disarmament/Office for Disarmament Affairs and Secretary-General as observers

Agenda

1. Raising awareness on nuclear risks of inadvertent escalation and consequences of deterrence breakdown
 - Presentations on risks of inadvertent escalation—by international subject experts
 - Presentations on *consequences* of deterrence breakdown—by international subject experts
 - Simulation exercise conducted by experts (in second/third iteration of the summit)
2. State positions on risk perceptions and mitigation—by leaders

Deliverables—Political and Practical Outcomes

- Political statement/joint communique:
 - On nuclear war (akin to Reagan–Gorbachev formulation)
 - On commitment to promoting trust and confidence
 - On commitment to finding ways of reducing nuclear risks
- Identification of list of measures of risk reduction
- State offerings on measures to reduce risks
 - ‘House gifts’ by States
 - ‘Gift baskets’ by regional players
- Establishing agenda for Conference on Disarmament for negotiations of agreements on risk reduction once the summit process winds up

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

Possible Summit Convenor

- President Biden—international stature of United States and ability to influence nuclear direction; personal conviction on the matter and desire for legacy given his age and experience; US clout with allies; relatively easier to do course correction by new government

Preparation Process

- Informal consultations by summit convenor with other States for buy-in into summit
- Designation of ‘sherpas’ by each State to work on agenda
- Briefings of leaders and sherpas at national level by governmental and NGO experts on nuclear risks
- Sherpa-level interaction
 - Sharing of State positions on risks perceived from the adversary’s doctrine and capability build-up
 - Chance for other side to explain
 - Identification of points of convergences and divergences
 - Negotiate outcome documents
- US outreach to umbrella States

Possible Side Events (during second or third iteration)

- Discussions among former strategic forces commanders on utility/futility of first-use of nuclear weapons
- Others can be considered

Possible Timeline

- Mid-2022—to recall 60 years of Cuban Missile Crisis

Periodicity of Summit

- Every two years (hosted by rotation, individually or jointly)

CONFIDENCE-RESTORING MEASURES—RAKESH SOOD¹

The fact that we are discussing confidence-restoring measures (a new term) rather than the more established concept of confidence-building measures is indicative of the new challenge that we face. Since I do not know why Lewis Dunn has introduced it, let me explain what I make of it.

The challenge is three-fold. First, the bilateral arms control process of the US–USSR type has reached a dead end because it is no longer possible to ignore other nuclear rivalries; second, the United States and the Russian Federation have lost the strategic convergence that underpinned their bilateral arms control process; and third, we need to find a way to design new deliberative formats because the old methodologies appear inadequate.

The following platforms are suggested:

US–Russian Dialogue

In many ways, it is the easiest to revive because it has a history that both Biden and Putin are aware of. What it needs is renewing the seed of strategic convergence around the need to preserve the taboo and lengthen the nuclear fuse.

Dialogues will be at both diplomatic and military levels and straddle mutual threat perceptions and crisis prevention measures.

US–Chinese Dialogue

A US–Chinese dialogue is difficult because the US–Chinese dynamic has already shifted from cooperation and competition to confrontation and containment; dialling this back is difficult unless issues like Taiwan, Japan and First Island Chain and Second Island Chain are squarely discussed. If this is not politically feasible, it may be easier to develop a US–Russian–China dialogue centred exclusively around crisis prevention.

US–Russia–China–India–Pakistan or China–India–Pakistan

These are alternates, depending on which model finds greater political acceptability. Since China–India–Pakistan are involved in territorial disputes and China is unwilling to engage with India in a nuclear dialogue, it may be necessary to explore these larger platforms. The dialogue could be at Track 2 or Track 1.5 levels to begin with, covering crisis prevention and risk-assessment scenarios before moving to Track 1.

¹ Ambassador Rakesh Sood is a Distinguished Fellow at the Observer Research Foundation in New Delhi, and a former Indian diplomat. The views expressed are his own.



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Nuclear Dependents and TPNW Members

This will be a new format that should focus only on preserving the taboo, lengthening the fuse, and building confidence that nuclear risk is perceived as a shared threat that can only be dealt with collectively. (This is suggested because while the NPT Review Conference is a forum for exchanges, these are limited to P5 and the NNWS and there are new cleavages among the NNWS).

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CONFIDENCE-RESTORING MEASURES—PETER WATKINS¹

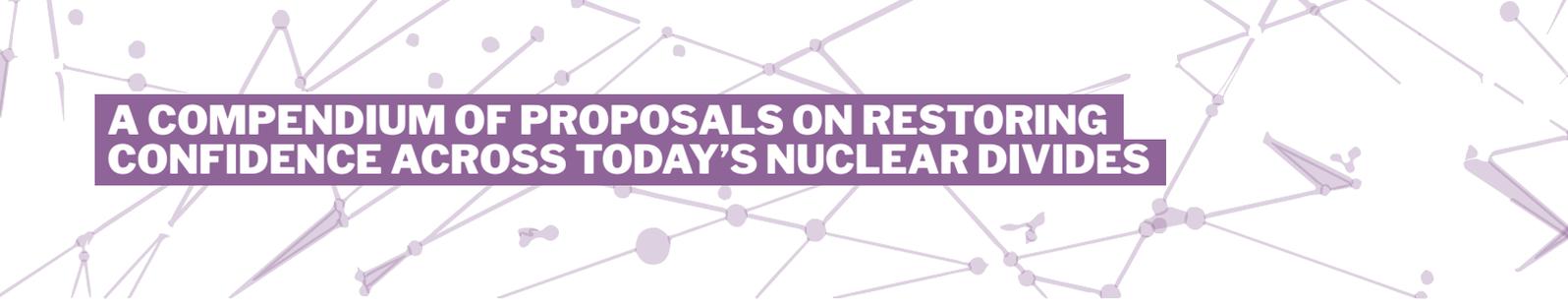
Few observers would dispute that the prospects for arms control and disarmament currently appear bleak, even with the extension of New START by the United States and the Russian Federation following the inauguration of the Biden administration. There is perhaps less agreement on the reasons for this state of affairs, with some elements at least believing that it is still possible to generate moral pressure on the nuclear powers to disarm (for instance, through the TPNW).

Significant advances in arms control and disarmament have occurred in the past in varying circumstances—in the aftermath of crises which persuaded leaderships of the need to reduce risk; in periods of uneasy *détente* between the great powers; and in periods of reducing tension. Conversely, we currently see growing competition between the great powers (between the United States on the one hand and the Russian Federation and China on the other, with friendly relations but not an alliance between the latter two). There is not only chronic mistrust but a fundamental divergence of interests—the United States wishes to uphold the existing ‘rules-based international order’ which it helped create and which has served its interests (and those of its allies) well; the Russian Federation makes little secret of its desire to change that order; and China complies (or not) with the order according to its national priorities. In these circumstances, it is not in the interests of the great powers to agree further restraints on or reductions in their holdings of nuclear weapons or the capabilities of their armed forces—quite the opposite. While this is the case, there will be little further progress on arms control and disarmament—whatever the NNWS or other powers, middle or small, may want.

The great powers can agree, however, on the desirability of confidence-building or -restoring measures, at least in the abstract. For example, “The Security Council emphasizes the importance of promoting confidence building and dialogue in a sustained manner as one of the essential components in conflict prevention and resolution”.² Since the great powers will not resolve their fundamental differences, they should focus on managing them—trying to ensure that competition does not escalate into conflict. In this respect, several actions could be taken:

¹ Peter Watkins is an Associate Fellow at Chatham House, and a retired British defence official. The views expressed are his own.

² United Nations, Statement by the President of the Security Council in connection with consideration of the item “Cooperation between the United Nations and regional and subregional organisations in maintaining international peace and security”, 19 April 2021.



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- as great powers tend to be paranoid, they could issue assurances that they do not seek the total demise of the other(s);
- they could issue assurances that they would not deliberately target the NC3 systems of the other(s) in a crisis, by kinetic or cyber means;
- they could take further steps to reduce the risk of incidents between their deployed forces operating in close proximity, building on existing agreements such as the Agreement on the Prevention of Incidents on and over the High Seas;
- they could increase the number of secure communications links between their respective military headquarters for use in the event of incidents (or near misses) and exercise these regularly; and
- they could revive (or inaugurate) quasi-official (Track 1.5) dialogues on their respective deterrence policies and doctrines.

This is a modest list—but these steps might help to reduce the current level of distrust between the great powers and perhaps the risk of arms racing. Things have to stop getting worse before they can get better.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

TRUST TO DO WHAT? RESTORING CONFIDENCE BETWEEN TPNW SUPPORTERS AND OPPONENTS—HEATHER WILLIAMS¹

A primary challenge for the upcoming tenth Review Conference of the NPT will be the polarization between opponents and supporters of the TPNW. That Treaty is one of the major developments in the nuclear community since the NPT's last review in 2015, and while its supporters point to it as a contribution towards their NPT commitments, opponents argue that it is “at odds with the existing non-proliferation and disarmament architecture”.² These dynamics raise important questions for the nuclear community (States, officials, and civil society): how might this polarization impact the existing nuclear regime, and what, if anything, can be done to reconcile these two camps?

This polarized relationship between supporters and opponents of the TPNW is often described as distrust or a lack of confidence.³ But this is a simplification of a diverse range of views. Instead, I argue, a more granular and useful approach would be to ask, trust *to do what*?⁴ Or to put it another way, if TPNW supporters and opponents did trust each other, how would they expect each other to behave (or not to behave), and to what end? Trust does not happen in a vacuum and it is not necessarily absolute. Two States might trust each other in one context, such as joint military operations, but not in another, such as nuclear disarmament. Efforts to restore trust and confidence, therefore, should focus on specific situations and objectives. With this in mind, supporters and opponents of the TPNW alike should be working to restore trust and confidence specifically towards two goals: 1) their commitment to the NPT, and 2) that they will *not* undermine each other's national and international security.

¹ Dr. Heather Williams is a Stanton Nuclear Security Fellow at MIT, and a Lecturer in the Defence Studies Department and Centre for Science and Security Studies at King's College London. The views expressed here are her own.

² NATO, “North Atlantic Council Statement as the Treaty on the Prohibition of Nuclear Weapons Enters into Force”, 15 December 2020.

³ See, for example, Lukasz Kulesa, “Reinventing Nuclear Disarmament and Nonproliferation Endeavors”, Council on Foreign Relations, 21 April 2021.

⁴ There are, of course, numerous academic debates about the difference between trust and confidence, whether or not trust is general or situation-specific, and whether States can trust or only individuals. For the purposes of this discussion, I am treating ‘confidence’ as “the calculation that an actor will reciprocate cooperation or follow an agreement or social norm” (Keating and Ruzicka, p. 756), whereas ‘trust’ is “the expectation of favorable behavior in a mutually vulnerable and reciprocal relationship” (Williams, “Negotiated Trust”, PhD Dissertation, May 2015). Trust entails some degree of vulnerability, whereas confidence does not. See, for example, Vincent Charles Keating and Jan Ruzicka, “Trusting Relationships in International Politics: No Need to Hedge”, *Review of International Studies*, 40 (2014), pp. 753–770.

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From the perspective of TPNW supporters, the NWS and many of their allies have not upheld their NPT commitments, particularly article VI, and their continued reliance on nuclear deterrence undermines the Treaty.⁵ Additionally, the continued existence of nuclear weapons, arguably, poses a threat to their national and international security, because the consequences of nuclear explosion might not be confined to national borders.⁶ Therefore, the NWS are putting everyone's security at risk by continuing to rely on nuclear weapons in their national security strategies. From the perspective of the NWS and their allies, however, the TPNW is at odds with the NPT because it does not require NPT membership and has created an alternate, potentially competing, disarmament forum.⁷ These States, particularly many NATO members, also see the TPNW's mission to undermine deterrence as undermining their national security. Given States' rights to sovereignty and to self defence, efforts to undermine deterrence and the strength of an alliance, arguably, impose on those rights. On the one hand, this brief overview suggests that TPNW supporters and opponents are fundamentally at odds; but on the other hand, it points to common interests in upholding the NPT and to security, albeit by different means.

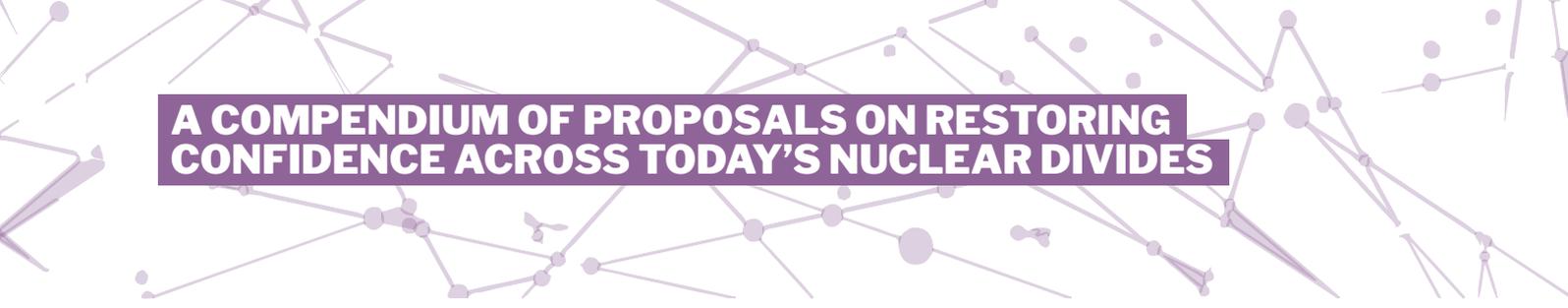
This situation-specific approach points to numerous steps both sides could pursue to restore trust and confidence in each other, but that will require acknowledgement of shared interests and a willingness to compromise on both sides. Supporters of the TPNW can confirm their commitment to the NPT, demonstrated in both words and deeds. For example, at the first Meeting of States Parties, participants might clarify how they envision the TPNW in relation to the NPT, state that the NPT remains the primary mechanism for nuclear non-proliferation and disarmament, and refute suggestions by some civil society actors that the TPNW might replace the NPT. Indeed, many TPNW supporters have already taken steps in this direction.⁸ But continued pressure on NATO members, arguably at the expense of their security, is perhaps the greatest source of distrust on the part of the TPNW opponents. To reassure nuclear possessors and their allies that the TPNW does not aim to undermine their security, TPNW supporters might refrain from trying to undermine NATO's nuclear deterrence posture, which could undermine alliance unity overtime, embolden the Russian Federation, and risk destabilizing Europe. It would be difficult for the NWS and NATO members to trust TPNW supporters' intentions if they are seemingly putting national and international security at risk.

⁵ See, for example, Alexander Kmentt, "Nuclear deterrence perpetuates nuclear risks: the risk reduction perspective of TPNW supporters", European Leadership Network, December 4, 2020.

⁶ ICRC, "Humanitarian impacts and risks of use of nuclear weapons", August 29, 2020.

⁷ Newell Highsmith and Mallory Stewart, "The Nuclear Ban Treaty: A Legal Analysis", *Survival*, 60:1 (2018), pp. 129–152.

⁸ Thomas Hajnoczi, "The Relationship between the NPT and the TPNW", *Journal for Peace and Nuclear Disarmament*, 3:1 (2020).



A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

Opponents of the TPNW can similarly take steps to rebuild confidence that they are committed to the NPT and do not seek to undermine international security. At the upcoming Review Conference, the NWS should: 1) state a renewed commitment to the Reagan–Gorbachev statement that ‘a nuclear war cannot be won and must never be fought’, adapted to the contemporary security environment; 2) recognize the validity of commitments from previous Review Conferences, as far as the security environment allows; and 3) provide a vision for future cooperation in the P5 process towards nuclear disarmament. To address concerns of TPNW supporters and opponents alike about the risks of nuclear war, they can strengthen cooperation around nuclear risk reduction, to include reducing the risks of misperception, building crisis communication channels, and promoting transparency in their nuclear doctrines.

It is, of course, possible that the principles of TPNW supporters and opponents are irreconcilable. Indeed, given the TPNW’s prohibition of the threat to use nuclear weapons (i.e. deterrence), its supporters may be unwilling to shift their focus away from NATO’s nuclear doctrine. If this is the case, trust can and should be built specifically around strengthening the NPT and both sides reassuring each other of their intention to remain committed to the NPT. This more tailored approach of ‘trust to do what’ might yet identify additional areas of common interest.

A COMPENDIUM OF PROPOSALS ON RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES

PROPOSALS FOR CONFIDENCE-RESTORING MEASURES—ISABELLE WILLIAMS¹

This paper suggests two proposals to address the following challenges: First, addressing the lack of trust among the NPT States parties and confidence in the NPT regime; and Second, addressing the lack of confidence of the NNWS and civil society that the NWS and their allies remain committed to disarmament. If implemented, the following proposals could have longer-term impact, and they are presented based on the understanding that critical near-term actions, such as risk-reduction steps, that will help restore confidence among States are being actively considered by several NGOs and governments.

1. Strengthen the NPT

The divisions, frustrations, and decreasing trust among NPT States parties is having a detrimental effect on the health of the NPT regime. Given the critical importance of the Treaty for long-term global security, States should focus on efforts to strengthen the regime and to restore confidence among States parties. One challenging but overdue task is to transform and to update the NPT review process so that it is more productive, transparent, and inclusive. Officials and observers widely express several criticisms of the current process, including that there are a lack of opportunities to interact constructively on challenging issues; debates tend to be dominated by a small number of States; NPT delegations and discussions lack gender parity and generational representation; and formal sessions can be unproductive (e.g. States repeating national positions), wasting valuable time and resources. The process increasingly feels dated, expensive, lacking in accountability, and not conducive to dialogue, problem-solving, or confidence-building which is so critical today.

Proposal:

Establish a working group tasked with identifying the shortcomings of the current way of working and devising a plan that proposes phased solutions and new ideas that can be introduced into the process to increase transparency and the efficiency of the process. This effort would focus on building structures into the process that can increase trust among the States parties and confidence in the Treaty. There are numerous ideas that have been proposed by NGOs and officials that should be considered, including creating regular opportunities for interactive dialogue among all States parties (with civil society) on NPT-related issues of concern; exploring ways to enhance transparency and dialogue for NNWS on the discussions and progress of the P5; and overhauling the current Review Conference procedures so that those meetings are used more effectively and efficiently, for example, to assess the environment and developments that impact the NPT and to promote concrete actions by States to implement the NPT goals.

¹ Isabelle Williams serves as senior adviser to the Global Nuclear Policy Program at the Nuclear Threat Initiative. The views expressed here are her own.

2. Renewed Focus on Vision

Debates around nuclear disarmament have become increasingly polarized and segregated. One area that has not received sufficient attention in recent years is serious discussion on the critical components—political, diplomatic, and technical—of the future where States no longer rely on nuclear weapons for deterrence or security. Focusing collectively on this question could help to rebuild confidence among States in the future of disarmament by creating a shared vision of a sustainable prohibition regime. It could provide an opportunity to move away from a focus on the problems/risks with the current nuclear system, to bring in new voices from different backgrounds to help solve the anticipated challenges, and to reveal new ways of looking at how we transition to this vision, including the required way stations to get there. Efforts focused on desired futures could also open new ways of understanding how nuclear weapons can and will intersect with other critical global challenges that the planet is facing, most notably climate change.

Proposal:

Design and implement a series of multilateral activities—debates, analysis, workshops—to map out the desired future and to identify the challenges that will need to be addressed to build and to sustain confidence in a disarmed world where the technology and knowhow to rebuild the weapons will continue to exist. For example, topics could include the future role of the International Atomic Energy Agency, verification and enforcement measures, and future safeguards/guidelines on civil nuclear energy. This proposal would draw upon and update existing work on this question and would aim to shift current debates and to find new ways of collaborating on the pathways to disarmament.

RESTORING CONFIDENCE ACROSS TODAY'S NUCLEAR DIVIDES: SYMPOSIUM REPORT

How might States begin to restore confidence and trust across today's various nuclear divides? What are some feasible measures that they could take towards the possibility of collaborative actions to reduce nuclear risks, to recraft arms control, and to revitalize pursuit of nuclear disarmament? This paper, the seventh in UNIDIR's nuclear dialogue series, summarizes a virtual symposium the Institute organized on 6 July 2021 to identify promising 'Confidence-Restoring Measures' with a diverse group of policymakers, experts, and civil society representatives—and includes a compendium of papers prepared on the topic by some of those participants.

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