

**Exploring New Approaches to Arms Control in the 21st Century:
Building Lessons from the Intermediate-Range Nuclear Forces
(INF) Treaty and Presidential Nuclear Initiatives (PNIs)**

Report of Workshop organised by

The Toda Peace Institute and the Norwegian Institute of International Affairs

Hugh Miall

Emeritus Professor, Peace and Conflict Studies, University of Kent at Canterbury

Summary

The international arms control regime is in peril, concluded a meeting of leading arms control officials, scholars and policy advisers from the US, Europe and Russia. This group was brought together by a consortium of international think tanks—Toda Peace Institute, NUPI, Chatham House, Clingendael and the Council on Strategic Risks—in a track 1.5 workshop held in Oslo, Norway in October 2018.

Following President Trump's announcement that the US will withdraw from the 1987 INF Treaty, based on its assessment that Russia has violated its terms, there are major concerns that this could poison the atmosphere for arms control and make it difficult to agree to extend the New-START (Strategic Arms Reduction Treaty). With little left of the 20th century bilateral arms control framework, the nuclear weapons states would have no progress to show under Article VI at the Non-Proliferation Treaty (NPT) Review Conference in 2020, which would endanger the future of that treaty too. Such a breakdown in arms control would remove constraints on already planned nuclear weapons modernisation that is underway in the US and Russia, and stimulate further nuclear proliferation worldwide.

The meeting discussed a wide range of proposals to deal with this situation and concluded that a new approach to arms control is needed for the 21st century. This calls for new thinking on strategic stability to take account of the evolution of a multipolar nuclear order and new technological developments that are blurring the distinction between conventional and nuclear weapons. In the past, bilateral arms control was based on numerical limits of missiles and delivery systems in categories defined by range and purpose. Now, a new framework is needed for strategic stability. It should encompass a global agreement to eliminate nuclear-armed cruise missiles, further reductions in strategic nuclear weapons and a range of trust-building and risk-reduction measures.

The US and Russian Presidents should renew President Reagan's and Gorbachev's 1987 declaration that 'nuclear war cannot be won and must never be fought'. Leaders of other countries that possess nuclear weapons and their allies could join the declaration. The nuclear weapons possessor states need to develop new crisis management and risk reduction mechanisms, adapted to the changed geopolitical environment, to reduce the risk of a crisis escalating to the use of nuclear weapons.

The State of Arms Control and Disarmament Today

The 20th century arms control regime reached its highpoint in the late 1980s and early 1990s with the Intermediate-Range Nuclear Forces (INF) Treaty, START, the Conventional Forces in Europe (CFE) Treaty and the Presidential Nuclear Initiatives (PNIs) along with the indefinite extension of the NPT, the negotiation of the Chemical Weapons Convention (CWC) and the adoption of the Comprehensive Test Ban Treaty (CTBT). In the INF Treaty, the US and the Soviet Union agreed to remove from Europe ground-launched missiles of intermediate range (between 500 to 5,500 km), including cruise and ballistic missiles. START cut the number of strategic weapons on both sides, and this was extended in the New-START agreement of 2010. The PNIs of 1991 brought about unilateral, reciprocal measures to mitigate the uncertainties and destabilizing effects associated with non-strategic or tactical nuclear weapons. All together, these measures reduced nuclear warhead stockpiles to about a fifth of their peak numbers by 2015. The CFE Treaty of 1990 capped heavy conventional weapons between the Atlantic and the Urals. The 1972 Anti-Ballistic Missile (ABM) Treaty banned strategic missile defence.

The NPT, which came into force in 1970, remains the lynchpin of the global arms control, non-proliferation and disarmament system. Under the NPT, non-nuclear weapons states have agreed never to acquire nuclear weapons and all states have agreed to share peaceful nuclear technology and to pursue nuclear disarmament, with a view to the elimination of all nuclear weapons. Measures to assure the global community of progress towards these requirements of the NPT are important for renewing confidence in its principles.

This arms control regime has been under pressure for some time. The US decided to withdraw from the ABM Treaty in 2002. The presidency of George W. Bush brought critics of arms control into the White House, and with President Trump's election and the new Nuclear Posture Review, US criticisms of arms control agreements have intensified. On the Russian side, too, there are those who question the value of the INF Treaty and discuss the benefits of abandoning New-START and the CTBT. In 2014 the US accused Russia of violating the INF by testing an extended-range missile. Russia denied the accusation and countered that the US was violating the treaty by using missiles banned under its terms as test targets, developing drones and deploying missile launchers as part of theatre missile defences that are capable of firing intermediate-range nuclear missiles.

The deterioration of relations between the US and Russia in recent years has made conditions worse for promoting arms control and confidence-building measures. Russia's fears of NATO's expansion, and US and European reactions to Russia's military actions in Ukraine and annexation of Crimea, have played a major part. From a European point of view, the breach in the principle of territorial integrity marks a sharp distinction between the present era and the one that came before. Trust has been broken, and it will not be easy to rebuild.

Meanwhile, both the US and Russia are embarking on programmes to modernise their nuclear forces. China's national security posture is developing rapidly. The US appears to have abandoned its leadership of the liberal international order, preparing itself for a new era of national competition instead, while Russia and China are seen to be challenging the legitimacy of the international rules-based system. States are becoming acutely conscious that they are in a security dilemma.

Two important developments affect the prospects for arms control. The first is the increase in the number of nuclear-armed states. Apart from the US and Russia, all of the other nuclear-armed states have missiles of intermediate range. Approximately half of these missiles are ground-based. Over 90 per cent of China's missiles are of intermediate range, and Pakistani, Indian and North Korean weapons would also be banned if those states were parties to the INF.

The second is the rapid developments in military technologies, including the development of hypersonic missiles and new conventional weapons of such accuracy and destructive power that they could substitute for the missions designated for nuclear weapons alone in the past. To adapt the 20th century arms control regime to 21st century conditions, it has to cover more actors and more types of weapons systems.

Preserving the NPT is a shared security imperative for all. The NPT is the backbone of a comprehensive non-proliferation regime including international safeguards, restrictions on technology transfers, export controls and nuclear weapon-free zones. The regime has been exposed to a variety of challenges over the years but has turned out to be resilient against external and internal shocks. Today, however, it is under stronger pressure than ever before, in particular because the nuclear weapon states behave as if Article VI of the NPT (the disarmament article) does not have the same legal force as the rest of the treaty.

The US threat to withdraw from the INF Treaty suggests to some that it is incapable of making lasting treaties. The US has left the ABM, refused to ratify the CTBT, would not agree to the new CFE, left the JCPOA, and declared its intent to walk back on its Paris climate change commitments.

If the US were to site new ballistic or cruise missiles in Germany or eastern and central Europe, the Russians would see this as a highly provocative and would take steps either to prevent or respond to it. It would be seen as a Cuba crisis in reverse.

From the perspective of European governments, the new developments in weapons and the threats to the arms control regime pose a real security risk. Representatives of European and Japanese perspectives were disturbed that their governments had not been forewarned about the announcement of the US INF decision. Germany and Japan – along with other European countries – would likely not be willing to host new INF weapons should that be in US plans; several have already declared publicly that this is the case.

Intermediate-Range Nuclear Forces: Can the INF Treaty Be Saved?

Until the point at which the US formally withdraws from the INF Treaty there will be different views as to whether it could be saved or if it is desirable to do so. The US has not yet given the six months' notice and the justifications that are required to withdraw formally from the treaty. There are, however, several analysts who conclude that we are already at

the treaty's post-mortem. Others view the INF Treaty as salvageable if technical issues are addressed but admit that the political will to do so is lacking. The Putin-Trump summit at Helsinki suggested that progress on INF and other arms control issues was possible, but subsequent political developments suggest that this assessment may have been overly optimistic. Both the US and Russia have recently seemed reluctant to make use of the Special Verification Commission under the INF as a means of fully settling compliance issues. Nevertheless, the Special Verification Commission remains for this purpose. Moreover, the treaty could be amended, and efforts could be made to extend its geographical scope. Many countries and experts believe that it is desirable to preserve the treaty, and that measures to explore complaints and return to compliance have not been exhausted. Flight tests might help to determine the range of disputed missiles. Multilateral verification could be conducted based on the Open Skies framework. On-site challenge inspections could be adopted. There remains scope for exchanges of data, telemetry and technical information. The response to compliance issues in the 1970s to 1990s was to develop and strengthen verification measures, rather than abandon arms control.

However, officials and analysts from many countries in Europe take the view that Russia is in violation and are not hopeful that the treaty could be saved. Instead, they urge measures to preserve and uphold New-START as a matter of urgency, with follow-on arms control measures to be considered as well.

Some analysts suggest that it would be helpful if European governments declared that they would not accept new US nuclear weapons on their territory. With the gulf widening between the US and Europe, it might be necessary to think in terms of European strategic autonomy. The NATO-Russia Founding Act stipulates that there should be no permanent additional combat forces in Europe and up to now this has been complied with. It could be taken as a basis for further constructive ideas, limiting exercises, exchanging data, and similar steps.

Experts differ on the extent to which US commitments to East Asian security considering China's capabilities are an important factor in the US decision to withdraw from the INF Treaty. Some US security analysts view concerns with the broad Chinese military build-up as the real reason for the US to consider withdrawal from the INF Treaty. Others viewed the issue as entirely one of compliance. If the US and Russia were to decide they wanted to keep the treaty, ways could be explored to adjust it to take account of relevant Chinese capabilities. It should be in the US and Russia's interests to bring China into arms control agreements as a significant international actor. It has to be recognised that this would be an ambitious task, since medium-range ground-based missiles account for a significant proportion of China's nuclear forces, but it can be argued that similar ambitions in arms control have been achieved in the past, for example in Russia's acceptance of intrusive verification measures in the 1980s.

From a civil society perspective, trust depends on enlightened cosmopolitanism and humanity. The world cannot afford a retreat into national boundaries. We need to reassert multilateral institutions and the rule of law. Violation or abrogation of international agreements damages the multilateral order. If the US and Russia mutually agreed to leave or to renegotiate the treaty or to develop a subsequent treaty that incorporates the same measures of mutual security and restraint, that would be a different matter.

If the arms control regime could be expanded to take in China, then India and Pakistan could be invited to join in too. It is critical to begin exploring options for more global approaches. The INF crisis is a reminder that the international arms control community needs to develop new concepts and bring in new partners in order to manage the proliferation of intermediate-range nuclear-armed ballistic and cruise missiles around the world.

Returning to the short-term consequences of the US withdrawal, the concern was expressed that if the US were to choose to deploy new INF weapons on the territory of its European allies, Russia would be provoked to take military measures to stop it. However, NATO is an alliance of 29 sovereign states, and a decision to deploy was considered highly unlikely since it would need a positive consensus for a deployment decision, as well as the willingness of a host state.

New Frameworks for Arms Control

Three substantive proposals are proposed below as steps towards a new and more comprehensive approach to arms control and disarmament:

(i) A ban on nuclear-armed cruise missiles

The first is a proposal for a ban on all nuclear-armed cruise missiles. It has been observed that if a missile were coming towards any country (e.g., Russia or the United States) that could carry a nuclear warhead, that country would assume that it carried one and react in accordance with that assumption. Yet both countries have nuclear-armed cruise missiles and are likely to develop new capabilities for this type of weapon in their arsenals. The UK has conventional Tomahawk cruise missiles but made a transparent decision not to develop new nuclear-tipped cruise missiles due to their inherent ambiguity and other strategic stability concerns. France has only air-launched nuclear cruise missiles. China, India, and Pakistan have thus far refrained from developing them but there are grave concerns that the Asia-Pacific is about to see a dangerous proliferation of this type of nuclear weapon. US, Russian, and international analysts have developed multiple concepts for verifying that any country's cruise missiles are non-nuclear, indicating that eliminating this class of weapons could be a focal point for multilateral arms control.

Whatever the outcome of the INF Treaty, a better framework is needed as we move forward. The crisis over the treaty could be an opportunity for re-invigorating arms control. It is necessary first to focus on types of nuclear weapons that are most destabilising. More usable, lower-yield weapons muddy the line between the strategic and the non-strategic. Creating a clear boundary between nuclear and conventional weapons is important to many countries.

Eliminating an entire class of nuclear weapons may be easier than regulating numbers or missile ranges. Moreover, it can apply globally. Bringing China into new arms control arrangements to end nuclear cruise missiles would only require them not to develop such weapons systems, since China does not yet have an arsenal of these types of nuclear weapons. The International Partnership for Nuclear Disarmament Verification (IPNDV) and others could undertake case studies on how countries could collaborate to verify that cruise missile stocks are solely conventional.

(ii) A new framework for strategic nuclear arms control

Another proposal is for a framework for reducing strategic nuclear weapons to lower levels. Going beyond the New-START framework, this would aim to regain strategic stability and eliminate the consideration of nuclear weapons either for war-fighting or as a tool of international statecraft other than deterrence purposes. The framework seeks to reduce miscalculation by avoiding the resurgence of dual-capable and non-strategic weapons; this would help contribute to NPT disarmament obligations by eliminating many tactical and delegated-control systems. Under such a concept, nuclear weapons-possessing states would progressively move towards holding only a single survivable strategic system each, pending further reductions to zero. Nuclear weapons-possessing states would agree on a Code of Nuclear Responsibility, and arms control agreements and confidence-building measures would be adopted to contribute towards this goal. Under a Code of Nuclear Responsibility, nuclear weapons-capable states would exercise restraint in posture, rhetoric and readiness, ensure unambiguous communications, refrain from using nuclear weapons for any purpose other than deterrence of other nuclear states, pursue reciprocity, avoid attacking strategic command and control systems and take steps to reduce the salience of nuclear weapons. This framework seeks to adhere to the NPT Article VI commitments while maintaining minimum credible strategic deterrence.

(iii) A new framework for confidence-building and risk reduction

The third proposal is for a new approach to confidence-building and risk reduction. The European arms control architecture is collapsing, and a more globalised approach is needed. But the trust that has existed between the US, Europe and Russia has eroded, and this makes Europe in need of a new risk reduction architecture. This is a top priority.

Leaders need to reaffirm that nuclear war cannot be won and must never be fought. There is widespread support for seeking a re-statement of the original 1987 Reagan-Gorbachev declaration. Leaders of other nuclear weapons-capable states and allied states should endorse it too. The UN Under-Secretary for Disarmament has called for such a declaration. A global declaration along these lines could help to bolster confidence that nuclear doctrines and deployments are not aimed at war-fighting.

At a time when the security environment is deteriorating, negative security assurances can help. The principles of the NATO-Russia Founding Act could be reaffirmed. In order to build confidence, NATO could declare that there is no need, no plan and no intention to deploy nuclear weapons further east than they are now; and Russia could declare that there is no need, plan or intention to move nuclear weapons to Kaliningrad. It would be helpful to publicly confirm that there is no intention to bring back Cold War-era nuclear postures in Europe. It would also help if the P5 would reaffirm the negative security assurances of 1995. Even more important, adoption of no first use doctrines should remain a high priority objective. Other declarations could include a resolution not to interfere in each other's internal affairs and a common area of equal security, in which no side would seek security gains at the expense of others. It would be helpful for Russia to declare it does not have an 'escalate to de-escalate' policy, as Western defence planners are assuming it has.

Crisis communications are essential, and measures should be developed and extended to give states better capacities for managing nuclear crises. At the moment, nuclear states are incapable of a point-to-point dialogue between key policy-makers in times of crisis.

Military-to-military contacts could be improved. Cooperation in Syria has shown this is possible. The practice of 'buzzing' the aircraft and airspace of states can be dangerous in a crisis, and incident prevention mechanisms should be implemented and developed. Existing bilateral and multilateral mechanisms could be extended to other areas. For instance, satellite buzzing could also be stopped. Russia has made proposals to extend the Open Skies agreement and has suggested an addendum.

The International Code of Conduct against Ballistic Missile Proliferation, which requires states to give notice of ballistic missiles launches, could be extended to cover information exchange on dual-capable missiles. A Vienna Document for missiles may be one useful concept to explore.

The Vienna Document of the OSCE provides for exchange of military information and notifications to reduce risk from the Atlantic to the Urals. This process could be made stronger, and its scope could be extended to include modern weapons systems and other forces. It was helpful when the US declared its nuclear stockpile numbers under the Obama Administration; others could be encouraged to reciprocate. Notifications and data exchange could be supplemented by track 1.5 meetings to improve communications on threat assessment and confidence building. A serious discussion of force postures and threat assessments goes on within the OSCE, but this does not take place directly between Russia and the US. States could fortify their efforts in this structured dialogue to achieve tangible results.

There is a need for new crisis machinery between new nuclear weapons-possessing states. In particular, measures to avoid incidents between India and Pakistan are crucial.

Verification also remains vital. It is worthwhile to put in place the systems required to make treaties verifiable. All such risk reduction and crisis management measures contribute to the important goal of building trust.

Arms control benefits from a stable multilateral order, and contributes to stability and multilateralism. The biggest low-hanging fruit at present is the extension of New-START. This is of great importance, in its own right and as a signal of intent to continue arms control. It could give the two nuclear weapons states party to the treaty a basis for going in to the 2020 NPT Review Conference. Although the threat to the INF Treaty worsens the prospects for the New-START extension, President Trump likes to be seen as a deal-maker and a saviour, and this measure could provide him and President Putin with an easy win.

It was recognised, however, that the institutional support for arms control is not as strong now as it has been in the past. In the US, a current of hostility towards arms control is running among many politicians. Defence planners are developing nuclear strategy in war-fighting (rather than solely deterrence) terms. The institutional memory of the security benefits of arms control is limited. In Russia, while the official attitude towards arms control remains supportive in principle, the approach is to invest in military modernisation first, and then approach arms control from a position of strength. However Russia still seeks to return to the club of respectable international actors and arms control may be one way to achieve that aim.

Unilateral Reciprocated Measures—Building on the PNIs

In preparation for this meeting, studies were undertaken to assess the relevance of unilateral reciprocated measures for the arms control situation today. In the 1990s, the Presidential Nuclear Initiatives (PNIs) undertaken by President George H.W. Bush, and reciprocated by Presidents Gorbachev and Yeltsin, were important steps in reducing the numbers and tactical capabilities of nuclear weapons stockpiles. A confluence of factors made this possible. Geopolitical changes in Europe and the Soviet Union made rapid action necessary. US and Soviet leaders seized the opportunity. The US withdrew all of its tactical nuclear weapons from European soil and from ships and submarines, except a few hundred gravity bombs for delivery by aircraft. At the same time, strategic bombers were taken off alert, and mobile nuclear missile programs were cancelled. The Soviet response was faster and more sweeping than the US expected. The Soviet Union declared that it would eliminate its nuclear artillery, short-range nuclear warheads and nuclear mines. Nuclear weapons outside Russia were returned to Russian territory. Some of these weapons were put in central storage, though Russia defined this concept in a different way than the US, which has given rise to accusations of non-compliance. Gorbachev also cancelled several new missile programmes, removed several nuclear submarines from duty and announced a one-year moratorium on nuclear tests.

Are there lessons from this remarkable episode in arms control for the present day? Some experts felt that today's geopolitical context is so different that lessons cannot be drawn. They observed that Russia's fulfilment of its PNI declarations had been disappointing and considered the prospects poor for using PNIs again in the light of events in Crimea, Russian threats to its neighbours, and the Trump Administration's scepticism about arms control. The PNIs were seen as a product of a time when arms control was on the rise, and when Russia hoped to be welcomed into a new political order. Some experts thought it was inconceivable that Russia would undertake unilateral measures while it faces sanctions and US withdrawal from the INF Treaty. However, it was pointed out that President Putin has declared that Russia does not have a policy of planning a first strike. Moreover, Russia has declared that it will not use nuclear weapons first unless there is an incursion into Russian territory putting the very existence of the state at risk.

For other analysts, the principle of unilateral actions leading to reciprocation still holds potential. The case of the PNIs indicated that in the right circumstances, strong national leaders can see their way through the nuclear bureaucracies to take measures that are clearly in their countries' security interests.

A number of possible unilateral measures were canvassed. For example, measures to refrain from developing new technological capacities in destabilising domains could be taken unilaterally at first. States could declare they would not make cyber-attacks on critical infrastructure, that they would respect assets in space which are critical for early-warning and communications and that they would commit to keeping command, control and intelligence systems under human control rather than allowing algorithms to determine judgements. Nuclear command and control systems should not be subject to cyber-attacks. Declarations could be made that tactical nuclear weapons in Europe would not be mated with delivery vehicles. Unilateral declarations on these measures could lead to reciprocated agreements. Verification measures for such commitments should be elaborated further.

Follow-up Measures

Participants wanted to follow up this meeting with further meetings, studies and policy briefs. This closing section lists a number of follow-up actions that could be taken.

The main conclusion was the need to develop new concepts of arms control and strategic stability for the 21st century that governments may adopt. This should take account of the wider range of actors in the current multilateral nuclear order, and of the rapid and transformative developments in technology. In a possible follow-on meeting, a wider group of participants including experts and officials from China, India and Pakistan would be desirable, keeping in mind the security needs and nuances of each region. The conversation on nuclear cruise missile control urgently needs to be continued.

Further reports building on the concept of a new framework for strategic stability are needed. They should consider the security implications of the proposed measures for 'umbrella' countries, and how to convince countries to reduce nuclear weapons step by step if they fear their security is diminished by the removal of the umbrella over time.

There is scope for academic work in this area, since new concepts, visions and paradigms of arms control and disarmament are needed. What does the concept of strategic stability mean in the 21st century context and how does it apply in different regions?

There is also the important dimension of discussion between the nuclear weapon states and non-nuclear weapons states. For some, the threat to the arms control regime serves to reinforce the importance of the Treaty on the Prohibition of Nuclear Weapons (also known as the Ban Treaty); others considered that the significance of this treaty remains to be seen. It was suggested that a new dialogue on prevention of nuclear war and on the risks of nuclear war would be timely, in the light of new research on the humanitarian and environmental consequences of even a limited nuclear exchange.

It was considered important to find ways to re-engage civil society, which was crucial in the genesis of the INF Treaty. Track 1.5 meetings involving parliamentarians or parliamentary hearings might be encouraged.

If the INF Treaty fails, a report on how to build on its ruins would be helpful. The priority is how to limit the fallout.

The concept of common and cooperative security is worth re-examining. This was formulated by the Palme Commission, taken up by Mikhail Gorbachev and European leaders, and recently recapitulated as a declaratory policy by Xi Jinping. This remains a potential lynchpin of a 21st century approach to arms control and disarmament.

There is scope for more academic work in the area of crisis management, risk reduction and confidence building. There is a poor understanding of the potential escalation of crises in the Twitter Age, and it might be helpful to review Cold War reports on crisis behaviour and crisis management. A policy brief on declarations such as the Reagan-Gorbachev one and similar security assurances could be useful.

The Author

Dr. Hugh Miall is Emeritus Professor of International Relations at the University of Kent, and Chair of the Conflict Research Society, the main professional association for peace and conflict researchers in the UK. He has been Director of the Conflict Analysis Research Centre and Head of the School of Politics and International Relations at the University of Kent and a Research Fellow in the European Programme at Chatham House.

Toda Peace Institute

The **Toda Peace Institute** is an independent, nonpartisan institute committed to advancing a more just and peaceful world through policy-oriented peace research and practice. The Institute commissions evidence-based research, convenes multi-track and multi-disciplinary problem-solving workshops and seminars, and promotes dialogue across ethnic, cultural, religious and political divides. It catalyzes practical, policy-oriented conversations between theoretical experts, practitioners, policymakers and civil society leaders in order to discern innovative and creative solutions to the major problems confronting the world in the twenty-first century (see www.toda.org for more information).

Contact Us

Toda Peace Institute
Samon Eleven Bldg. 5th Floor
3-1 Samon-cho, Shinjuku-ku, Tokyo 160-0017, Japan
Email: contact@toda.org