

**THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS (NPT)**

(text of the treaty)

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**TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE RUSSIAN FEDERATION ON MEASURES FOR THE FURTHER REDUCTION AND LIMITATION OF STRATEGIC OFFENSIVE ARMED AND CONVENTIONAL ARMED FORCES**

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# REVITALIZING NUCLEAR ARMS CONTROL AND NON-PROLIFERATION

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**INTERNATIONAL LUXEMBOURG FORUM ON PREVENTING NUCLEAR CATASTROPHE**  
www.luxembourgforum.org

FOR THE UNITED STATES OF AMERICA:

FOR THE RUSSIAN FEDERATION:

Done at Geneva, on the eighth day of April, 2010, in two authentic copies, in English and Russian languages, both texts being equally authentic.

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ON PREVENTING NUCLEAR CATASTROPHE**

**REVITALIZING  
NUCLEAR ARMS CONTROL  
AND NON-PROLIFERATION**

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This book is published on the occasion of the 10th anniversary of the establishment of the International Luxembourg Forum on Preventing Nuclear Catastrophe. It builds on the provisions of the declaration adopted at the meeting (London, December 2016) of the Forum's Supervisory Board, a body that brings together prominent politicians, public figures and world-renowned experts. Prefaced by the President of the Forum, in their chapters the authors provide an analysis of the causes of the current critical situation in nuclear arms control, non-proliferation and international security and put forward suggestions as to how it might be resolved.

*The official website of the International Luxembourg Forum: [www.luxembourgforum.org](http://www.luxembourgforum.org)*

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on Preventing Nuclear Catastrophe, 2016

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# 1. INTRODUCTION

*Viatcheslav Kantor*<sup>1</sup>

It is a great pleasure for me to introduce this book, published on the occasion of the 10th anniversary of the establishment of the International Luxembourg Forum on Preventing Nuclear Catastrophe. I am satisfied to note that rather a lot has been done over those ten years: since the Forum commenced its work, it has held over twenty conferences and roundtables on the most pressing issues pertaining to arms control and the non-proliferation of nuclear weapons. Each meeting culminated in the adoption of a final document containing specific proposals for the heads of key states, the United Nations Security Council, the IAEA, and other leading international organizations and institutions.

But in my view, what should rightfully be considered its greatest achievement is the fact that the Forum has succeeded in bringing together leading, internationally renowned experts from 14 different countries. This has made it possible for the Forum to hold events at the highest expert level and has enabled the publication of highly rigorous analytical studies. These include: "Secure Tolerance Criteria for the Nuclear Non-Proliferation Regime" (2014), "Reykjavik Summit: Lessons for the Future of US-Russian Relations" (2016), and "Preventing

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<sup>1</sup> Viatcheslav Kantor – President of the International Luxembourg Forum on Preventing Nuclear Catastrophe; Ph.D. (Russia).

the Crisis of Nuclear Arms Control and Catastrophic Terrorism" (2016). The last of these was published in close collaboration with the well-known Nuclear Threat Initiative (NTI). Furthermore, around a dozen booklets have been published providing current Forum materials.

This book builds on the provisions of the declaration adopted at the meeting of the Forum's Supervisory Board, a body that brings together prominent politicians, public figures and world-renowned experts, in London in December 2016. It is a text permeated by a profound concern for the fate of arms control and international security.

The book provides an analysis of the causes of the current critical situation in this area and puts forward suggestions as to how it might be resolved. A key task in order to revive this process is that of restarting cooperation between Russia and the USA under the new political circumstances. One of the book's chapters is devoted to analyzing the possibilities and obstacles on this path. It would appear that, on balance, both Washington and Moscow could have shown more flexibility and willingness to compromise in order to prevent relations between their two countries from degenerating to the entirely unsatisfactory state they have now reached.

What went wrong? Why are our relations at fever pitch, teetering on the edge of a new Cold War, repeating history, having spiraled into the current state of extreme crisis?

As a result, arms control finds itself at an impasse. For the first time in many decades, no talks of any kind are underway on any aspect of this major process. This is most alarming with regard to reducing and limiting strategic nuclear weapons.

The sum of our experience in previous decades shows that without clearly stated political will and the insistence of the countries' leaders, this process cannot be successful. The examples of Reykjavik and of the New START Treaty signed in Prague, where the final provisions were personally negotiated by the presidents of Russia and the USA, clearly demonstrate this.

On the basis of a thorough analysis, this book's leading authors reach the well-founded conclusion that it is still possible to take the next

step towards reducing the nuclear arsenals of the Russian Federation and the USA, and that this will enable the retention of a sustainable strategic equilibrium while making major cost savings. However, one of the largest obstacles to this next step is the lack of trust as a result of the crisis in relations: it prevents the political decisions required in order to progress to this stage from being taken.

Something that is of ever greater concern is the increase in tit-for-tat accusations of violations of the Intermediate-Range Nuclear Forces Treaty. Without getting bogged down in analyzing the details of these accusations, it has to be said that in a positive political climate, it would be possible to put a stop to these recriminations, whose number multiplies from year to year — for example, by restarting the normal activity of the Special Verification Commission established in accordance with Article XIII of the Treaty. But such simple solutions become impossible when other, diametrically opposite political ends are pursued — when, instead of efforts being made to resolve disagreements, those disagreements are used as an excuse to make accusations against the other party.

It is true that, in recent years, there have been certain breakthroughs towards strengthening the non-proliferation regime. For many years, the Luxembourg Forum called for the resolution of the Iranian nuclear problem. We can only welcome the fact that, in July 2015, representatives of the world's leading powers — the "P5 + 1" group of international mediators — and the Islamic Republic of Iran succeeded in reaching agreement on measures to monitor and verify Iran's nuclear program. The adoption in Vienna of the Joint Comprehensive Plan of Action can, on the whole, be viewed as a success for the coordinated efforts of the international community.

However, the ever-more frequent attempts made recently — primarily by the USA and Iran — to cast doubt upon, or even torpedo, this agreement, are alarming. This is compounded by the lack of clarity as to what will happen once this agreement expires. Could Tehran not make use of the time provided by the Agreement to prepare for a new surge in its nuclear program?

Unfortunately, the modicum of progress made in this area does not signal the start of work to develop a "model approach" to resolving other force-majeure situations in terms of non-proliferation. The situation surrounding the North Korean nuclear missile program is growing ever more heated. It goes without saying that our Forum is keeping a constant and watchful eye on how this crisis unfolds and drawing up proposals for de-escalation.

Over thirty years ago, in November 1985, at the Geneva Summit, the leaders of the USSR and USA declared that "a nuclear war cannot be won and must never be fought." Nowadays, however, we hear irresponsible statements on the possibility of waging some sort of "limited" nuclear war, or even of winning such a war.

This is a dangerous delusion. The Luxembourg Forum is deeply concerned by this departure from this vital understanding that was reached by Russia and the US as the Cold War was drawing to a close.

I am certain that Russia and the US — the two greatest nuclear powers — will have to cooperate, or even be partners, in resolving global problems, whether they wish to or not. This applies, in the first place, to ensuring security. But we must work to achieve such relations while expending the least energy, means and time possible, so that we do not once again spiral into a politico-military confrontation and ruinous arms race, as has happened before. I also believe that the other responsible members of the "nuclear club" — the world's leading powers — could make a greater contribution to countering emerging negative trends in nuclear arms control and non-proliferation.

The Luxembourg Forum is applying all of its intellectual and organizational capacities to designing and putting forward practical steps that could be taken to this end. This book, which I now leave to the judgement of its readers, is an indication of our efforts.



## 2. RESTORING COOPERATION BETWEEN THE RUSSIAN FEDERATION AND THE UNITED STATES UNDER NEW POLITICAL CONDITIONS: OPPORTUNITIES AND OBSTACLES

*Dmitri Trenin*<sup>2</sup>

The main issue to bear in mind when appraising the first meeting between Presidents Putin and Trump in July 2017 in Hamburg is that the United States is in the throes of a fierce domestic political crisis. There has been nothing like it since the American Civil War. Nor is the crisis likely to end before the 2018 congressional elections in the fall, or any final resolution to come before the next presidential elections in 2020. This political crisis is playing out against the backdrop of a social and cultural rift in American society that stands little chance of healing in the next two to three years. The Russian administration will have to reckon on doing business with an unpredictable and potentially unstable America for the foreseeable future.

With that as the backdrop, the main good news to come out of the first personal contact between the heads of the Kremlin and the White

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2 Dmitri Trenin – Member of the International Advisory Committee of the International Luxembourg Forum on Preventing Nuclear Catastrophe; Director of the Carnegie Moscow Center; Ph.D. (Russia).

House has been that the current Republican administration recognizes the importance of relations with Russia. That is not merely to accommodate Moscow's traditional preoccupation with status, but because the preceding three years have entailed virtually unbridled US-Russian sparring, as a result of which the two mightiest nuclear powers have on more than one occasion come within a hair's breadth of having their combat planes or battleships collide.

Not that there should be any illusion: the standoff between Russia and the US will continue beyond Hamburg, since their differences are fundamental and have to do with the key pillars of world order. It is vital, though, that the conflict not lead to a head-on collision. Avoiding war against one another is essentially the overriding goal for both Russia and the United States. The actual issues of Syria, Ukraine, North Korea, and the like pale by comparison with the possible collision between the two superpowers; nevertheless, all of these conflicts may in fact provide a regional theater for their confrontation. It is imperative that Moscow and Washington cooperate on those terrains primarily to avoid fighting one another there.

As such, the local agreement for a de-escalation zone in southwest Syria is meaningful. If it can be upheld — as opposed to similar arrangements brokered between Moscow and Washington in 2016 — Syria might finally generate a model for Russian-American *cooperation among rivals*. That is precisely the sort of working prototype that is crucial to keeping confrontations peaceful, which is what was accomplished during the Cold War. Now, however, this is all the more essential if we are to ensure that conflicts play out peacefully at a time when the contradictions between Russia and the US are so much more narrowly defined than in the Soviet era.

The paramount concern must be to eliminate traditional warfare from the options available to the major powers in their bilateral relations. One needs to remember that the two are truly pitted against one another in a whole host of areas, such as military technology (with perpetual weapons upgrades), the economy (sanctions), on the



information front (with sophisticated propaganda campaigns using the latest technologies and methods), and in cyber-space. Even setting aside the scandal over alleged Russian interference in the US electoral campaign, it remains obvious that the US, RF, and a number of other countries are enhancing — and occasionally testing — their capacity to paralyze whole countries by disabling critical infrastructure.

Cyber-weapons are different in that the source of an attack is extremely complicated to trace, offering broad scope for abuse, including by irresponsible parties or terrorist groups. For their own sakes the major powers must begin immediate consultations, and then full-scale talks on cyber security — today's equivalent of the 20th-century strategic nuclear arms control which succeeded in keeping the Cold War cold. A decision by Putin and Trump to start discussions could kick off the process.

The conflict in Donbass is hardly going to be settled any time soon. The most one can hope for in the foreseeable future is compliance with the Minsk Agreement provisions for a cease-fire, the withdrawal of heavy weapons, and the exchange of detainees. It is not only feasible but essential that the utterly senseless shelling that often costs civilian lives stop if we are to be sure that the conflict would not escalate any more, with the potentially consequent risk of further exacerbating Russian-American tensions. The last two and a half years have demonstrated that unless the US is actively and directly involved in the process and Washington does what it takes with Kiev, the situation along the line of contact in Donbass is never going to be stabilized. The appointment of the US president's special representative for the Ukraine is a step in the right direction.

Following the presidents' meeting, means for managing Russian-American confrontation were mapped out. That is not to suggest the process will be a gradual one. Even if, as Vladimir Putin pointed out, Donald Trump is far from the televised version we have come to know, the American president is still an unpredictable leader, prone to radical about-faces. Consider, for example, the most recent erratic path of

American-Chinese relations, in particular Trump's personal contacts with China's chairman Xi Jinping.

Of course, one could only wish that President Putin's hopes pan out, and the crisis in Russian-American relations be overcome. However, in this respect one has to be aware of just two factors: the actual current dichotomy in the US, limiting the president's real options, and the broad and solid anti-Russian consensus within the American power elite. Unlike Trump, the latter want nothing to do with Putin and are prepared to bide their time until the economic ills and general mismanagement in Russia generate enough mass dissatisfaction with the country's perpetual ruler for a new leader and a new agenda to emerge. Under such conditions, Russian-American relations will for now be about the art of conflict management, in which the parties' interests will dictate the need for cooperation on certain issues and act as a safety catch.

The analogy frequently drawn between current Russian-American relations and the Cold War is only valid in that relations between Moscow and Washington are tense again and fraught with the risk of confrontation. The fact is that these are two different forms of antagonism, and the present-day version is far more dangerous. With the difference in the two countries' economic and military capabilities, the elimination of buffer zones, the absence of even minimal mutual trust, the US sense of moral superiority, and the societies and elites both inured to the prospect of a nuclear war, bilateral relations become extremely tenuous, and any false move could lead to an outright showdown and subsequent escalation of conflict between the two mightiest nuclear powers in the world.

From 2015 onwards, following the 2014 crisis in Ukraine, Russian relations with the West entered a new geopolitical reality: a protracted stand-off between Russia and the United States and mutual estrangement between the RF and the European Union, including from Germany, the EU's leading force. Accordingly, Russia has been leaning ever more towards China. There may be no formal alliance between Moscow and Beijing, but a sort of entente, i.e. agreement on critical issues of world



order, has evolved. These issues are precisely what fuel the conflict between Russia and the US; they are at the heart of the contradictions between the West and leading countries in the rest of the world.

The current confrontation was not a result of error or misunderstanding. On the contrary, it is a logical outcome of how diverse tendencies have evolved in the bilateral US-Russian relations since the fall of the Soviet Union.

## **Historical preconditions of the confrontation**

In the three decades since the Cold War, Moscow has made repeated attempts to integrate Russia into the Western community. All of them ended in failure.

The main reason for the failure was the different expectations the two sides had. The last Communist Party general secretary and first (and only) president of the USSR, Mikhail Gorbachev, along with his associates formulated the "new political thinking" in the second half of the 1980's that was to replace conflict by long-term cooperation with the West, but always in an even-handed sense of all belonging to one "friendly condominium".

Gorbachev's partners in the US and in Western Europe meanwhile were working on another objective: namely, to ensure the Soviet Union's "soft landing", its geopolitical global stand-down, and its internal liberalization. They were determined to get maximum results before reactionary forces in the USSR would try and reclaim lost ground.

In "adjusting" to the new, exclusively Western imposed order, Russia was not only to jettison Communism — (which the Russian people had already done in 1991 without any outside help) — but to renounce its Soviet legacy as well, branding it as strange and alien, just like the West Germany was to distance itself from its German National-Socialist heritage.

That is not how it went, though. Boris Yeltsin, the Russian Federation's first president, rejected proposals from the very outset that the Communist Party should be put on trial, and amnestied those involved in the August 1991 coup d'état and the October 1993 standoff.

His successor Vladimir Putin lost no time in charting a course to consolidate Russian history in order to form a social consensus founded on the state and patriotism.

Although the West had never sought the fall of the Soviet Union in the Cold War, the US and its allies began to cite it as a symbol of their triumph, which could not go unnoticed in Russia. Western countries, and primarily the US, having taken the relay from the British Empire to compete with Russia geopolitically, came to be seen increasingly as Russia's historical opponents.

Accordingly, the Gorbachev administration's Euro Atlantic fiasco was due not just and not so much to an inability of the parties to properly read or interpret one another's intentions and actions. Rather, it exposed cardinal differences between Russian and Western world-views as espoused by their respective elites and societies. These differences were rooted not only in the different levels and thrusts of social-economic and political development, but, more importantly, in their respective historical experiences and realities of their geopolitics as world powers.

### ***Boris Yeltsin: from attempted integration to a U-turn over the Atlantic***

By the end of 1991 the Russian Federation was so depleted, it was desperately in need of external support. With no Russian market economy know-how to draw on, foreign specialists would have to be called in. The benchmarks would shift with the change in ideology.

The prospect of having "New Russia" integrated into the Western community immediately prompted the association with Western Germany's and Japan's inclusion in the "free world" after the Second World War ended. However, these countries' experience was not to serve as the precedent.

Unlike the West Germany and Japan of the late 1940's, Russia of the early 1990's was irrelevant for the US as a geopolitical barrier that would need to be bolstered at any cost. After the demise of the



USSR, the West did not have a substantial geopolitical, ideological, or military opponent any more. But at the time Moscow failed to understand it. By the end of 1991 Yeltsin was already cautiously knocking at NATO's door, where they chose to tune him out. In the spring of 1992 Yeltsin made his first official visit to Washington, where he proposed to George Bush they form a military alliance. The response was that alliances were by then irrelevant, although the US itself was not about to disband NATO or discontinue bilateral alliances.

What Yeltsin and Foreign Minister Andrei Kozyrev strove to obtain for Russia — i.e., integration into the institutions of the extended West — only became a reality for the former Eastern European vassals of the USSR. That fact was to put the RF and the West on a radically different footing: instead of a single union of democratic states with Russia among them that Moscow had so coveted, the old alliance to withstand the Soviet threat was extended instead excluding Russia, even though the threat had taken itself out of the equation. People in Moscow began to wonder why and for what purpose this was done.

NATO expansion was the first serious blow to new relations and was badly received in Russia, something the West dismissed as proof of how naive it had been to think the RF could ever become a strategic partner and that Moscow still harbored imperial aspirations.

The second powerful blow to Russia's faith in the West was NATO's aerial war on Yugoslavia during the 1999 Kosovo crisis. Special historical bonds between Russians and Serbs, which had considerably weakened over the preceding half a century, was not the main reason behind Russia's concerns; more important for the Russians, again, was whether the West's actions had been legitimate.

To begin with, the NATO operation against Yugoslavia was the first war in Europe since 1945. Western aviation bombed Belgrade — the capital of a European country. Secondly, the war was unlawful, waged in circumvention of the UN Security Council, where Russia had a veto power and was prepared to block a Western military intervention. Thirdly, to justify their actions, the West innovated the concept

of a "humanitarian intervention", by virtue of which the "international community" – i.e., the collective West – could arbitrarily use force to interfere in conflicts throughout the world. Having only just sworn allegiance to customary international law and denounced the Soviet Union's military action in Eastern Europe and Afghanistan, post-Communist Russia was staggered.

What followed was Prime Minister Eugene Primakov's maneuver in March 1999, when, as NATO commenced bombarding Yugoslavia, he ordered his plane to do a 180-degree turn over the Atlantic, abandoning its US-bound course, and return to Moscow.

The complete edition of the Russian military doctrine adopted in 2000 to replace the 1993 "Basic Provisions" reverted to perceiving the danger inherent in NATO actions. In November 1999, before he retired, Yeltsin cautioned US President Bill Clinton against forgetting "for a minute, for a second" about Russia's nuclear arsenal. The nineties drew to a close with the Russian leadership and the majority of Russians experiencing a profound sense of disillusionment with the West as a partner.

The RF's self-standing policy then nearly led to the first military encounter between Russian and NATO troops in the Kosovan Slatina airport area. The only thing that saved the day was the command sense and poise of the British Commander, who refused to follow the American General and NATO Supreme Allied Commander's combative lead.

### ***Vladimir Putin: from a counter-terrorism alliance with the US to war in Georgia***

Not only did Putin declare solidarity with the American people after the Al-Qaeda 9/11, 2001 terrorist attacks in New York and Washington, but he went on to act in de facto military-political alliance with the US. Moscow provided myriad and invaluable forms of assistance to the Americans, which enabled them to rout the Al-Qaeda camp swiftly and bring down the Taliban regime in Afghanistan.

It was a strategic move when Putin resolved not to react to President George W. Bush's decision in 2002 to pull out of the ABM Treaty that

Moscow had considered the bulwark of strategic stability for 30 years. At that time, the Russian leadership was genuinely prepared to form a true strategic partnership with the US.

The Atlantic community within the US and in Europe were nevertheless skeptical at the prospect of integrating Russia into the western system. By mid-2002, the George W. Bush administration had already cooled on partnership with Russia. In her book that came out in 2002, former British PM Margaret Thatcher mentioned that ten years after rejecting Communism and dissolving the Soviet Union, Russia was still nowhere near being a "normal country". More to the point, she claimed Russia would never voluntarily accept American dominance.

In the end, the Kremlin's stab at "making friends with America" did not work, both because of Thatcher's and others' doubts on both sides of the Atlantic, as well as the general low priority accorded to dealings with Russia in the Bush administration.

The Russian leadership was still relatively unperturbed about the second wave of NATO expansion. By contrast, the Ukrainian "Orange Revolution" between 2004 and 2005 and the other similar "colored" revolutions — Georgia (November 2003) and Kyrgyzstan (June 2005) — did spawn belief in the Kremlin that the US was massively engaged in a "political invasion" of post-Soviet territory, still Russia's special sphere of interest. The West, as in the case of Russian protests over NATO enlargement, took that as evidence of the Kremlin's aim to maintain the former Soviet republics within their geopolitical orbit.

In the face of ever-mounting criticism of Russia in the West, Putin, who had started out in power hoping to form an alliance with the US and integrate with the European Union, sought to engage the partners in a frank exchange. His address to the Munich Security Conference in February 2007 was his effort to "get a few things straight", especially vis-à-vis the US, by spelling out the terms for cooperation with Russia. In short, they were: sovereign equality, non-interference in internal affairs, and mutual interest as the basis for cooperation. Caught off guard by the Russian president's blunt and public criticism of the very



premises of US foreign policy, the American and European public took Putin's speech as a declaration of "cold war" on the West.

It was within that context that the US administration made efforts to fast-track Ukrainian and Georgian accession to NATO. In early 2008 the Americans suddenly took the initiative to have the Kiev leadership request a NATO membership action plan (MAP). That was the red line. Ukrainian membership in NATO would do intolerable damage to Russian security. Under no circumstances could Moscow allow such a turn of events.

Germany and France sensed the looming danger. At the NATO Summit in Bucharest they blocked passage of the MAP for Ukraine and Georgia, though it meant they had to accept the compromise that Kiev and Tbilisi be promised NATO membership at a later, unspecified date. That decision was what inspired Georgian President Mikhail Saakashvili – the favorite of the neo-conservative wing under George Bush – to try and restore the territorial integrity of Georgia by force, in order to remove the formal obstacles to their joining the Alliance. The result was the "five-day war" with Russia in August 2008. Putin was not president at the time, but the war in the Caucasus closed the chapter on his attempt to fashion an alliance with the US and NATO.

So having embarked on his presidency with the announced intention of bringing Russia into NATO, Putin then found himself faced with the prospect of Ukraine and Georgia in the Alliance. For Georgia, it meant war with Russia where the latter was. The West meanwhile was caught up in the global financial crisis and the situation in the Middle East, where Bush's military interventions in Iraq and Afghanistan had failed to achieve stated objectives and only exacerbated matters to the point of losing control. Bush's foreign policy was recognized as a failure in the US. There was a need for a general re-think, which could have consequences for relations with Moscow.

### ***Dmitri Medvedev: from "reset" to war in Libya***

Dmitri Medvedev's first diplomatic initiative upon assuming the Russian presidency in May 2008 was the draft of the European Security

Treaty (June 2008), but his first real act was to go to war against Georgia in response to Tbilisi's actions in South Ossetia, which had cost the lives of Russian peacekeepers. In its drive to gain admission to NATO, Saakashvili's government had been enjoying the support of the Bush administration and the favor of the mainstream Western media.

The war ran just five days. After expelling Georgian troops from South Ossetia and taking things to just beyond the borders of the rebellious autonomous region, Moscow nevertheless left Saakashvili in power and accepted the distinctly symbolic mediation of French President Nicolas Sarkozy, thereby demonstrating both decisiveness and moderation. Russian troops never entered Tbilisi, but Moscow did make clear it stood ready to defend its "privileged sphere of interest". The red line, beyond which a possible extension of NATO would have been reason to clash with Russia, was drawn along the borders of the CIS states.

Still, the new "cold war" between Russia and the West had as yet to really take off in 2008. The global financial crisis that exploded on the world in mid-September of that year focused the minds of world leaders on the economy. Barak Obama's victory in the November US presidential elections and a thorough-going overhaul of the Republican foreign policy legacy provided the conditions for a "reset" of Washington's relations with Moscow.

Relations with Russia were not to dominate Obama's international agenda, but they were to be seen as a potential foreign policy fallback.

Putin, even as a prime minister still the most influential figure in Russia, gave Medvedev an entirely free hand in establishing "partnerships for modernization" with the advanced West to gain a powerful foreign asset in Russia's economic remake. By the same token, Putin saw a chance to bolster Russia's security through working with the US to cut back on strategic offensive weapons (START), and especially through cooperating on antiballistic missile defense (BMD).

The "reset" initiative did pay off. The RF and the US concluded a new START treaty in the spring of 2010, and in the fall of the same year Moscow proposed a "single BMD perimeter" to NATO countries within the context of a strategic partnership, which was actually tantamount

to a defensive military alliance without the burdensome formalities and, more importantly, without the hierarchical lines.

Yet the sense of mutual disenchantment was not far behind. NATO's operation in Libya — military backing for the insurgents and overthrow of the Gaddafi regime — went far beyond the bounds of the UN Security Council's humanitarian mandate, and Moscow became convinced that the West had just used and abused them again. US actions during the Arab Spring that began towards the end of 2010 sowed doubt among Russian analysts about how adequate the Washington administration's policy on the Middle East was. But the overriding reason why the "Medvedev round" foundered was the US administration's rejection of any joint NATO-Russia BMD system. We know that for Putin even a negative result is a result. He drew his own conclusions. And the Russian defense system was adjusted accordingly to account for a potentially hostile NATO missile defense system.

### ***En route to confrontation: Syria and Snowden***

Putin's verdict on the foreign policy outcomes from the "Medvedev round" was probably one of the reasons he decided to run in the 2012 elections. Despite the West's negative reaction to his decision, Putin was ready to renew cooperation once he became president again, but on his own terms, as he had set them out back in Munich in 2007. When he met with Obama in June 2012 at the G-20 in Los Cabos (Mexico), Putin suggested to the US president that they divorce politics from economics and tackle the issues separately.

That proved untenable. By the spring of 2012, one of the dire problems that had the RF and the US at loggerheads was the Syrian crisis. By then Moscow was not only protesting against US policies on Syria, as they had with Serbia, Iraq, and Libya, but was taking specific action — supplying weapons and diplomatic and financial support to Damascus — to confound Washington in its aim to overthrow President Bashar Assad's regime in Syria.

As far as the Kremlin was concerned, Syria was primarily about what kind of world order should prevail, and what part the major powers and the UN Security Council should play in joint global governance. Of



lesser account was the Syrian problem as part of the Middle Eastern aftermath to the tumultuous Arab Spring, which Moscow, unlike the Western capitals, considered to be more about Islamism than democracy from the outset. Russia's precise geopolitical interests in the region were but a third consideration. Realistically, Russia was not to be bought off with promises of minor concessions.

The last straw for the White House in its revised "reset" policy was the Edward Snowden affair. Obama took it as a personal affront that the runaway American intelligence contractor was granted political asylum in the RF, and he canceled his visit to Moscow, something that had only ever happened once before, in 1960, at the height of the Cold War.

So the new normal in Russian-American relations turned out to be a flash in the pan. The fragile balance between rivalry and cooperation might have held a while longer, but it would never have withstood any serious strain. The events surrounding Ukraine were just the climax of the deeper-seated crisis afflicting Russian Euro-Atlantic aspirations, which had become obvious by the second half of the new millennium's first decade. Exactly seven years after Putin's address in Munich, the situation in Ukraine had shifted Russian-American and Russian-Western relations into the equivalent of "cold war" mode.

Meanwhile, the NATO alliance, which had gained a hold in the Black Sea by admitting Bulgaria and Romania to its ranks in 2007, was keeping the door open for Ukraine and Georgia since 2008.

### ***The 2014 Ukrainian crisis and the new geopolitical reality***

The gathering contradictions in Russian-US bilateral relations erupted in Ukraine in the winter of 2014 with the deposition of the president at the time — Viktor Yanukovich — in an armed uprising headed by the opposition. Although Yanukovich had arrived at an agreement with the opposition the day before, certified by the foreign ministers of Germany, France and Poland, who put their signatures to it, the insurgents spurned the conditions for a political settlement of

the crisis. The leaders of the Maidan seized power, with backing from ultra-nationalists within the country and Western countries abroad.

When Russia followed up the events in Kiev by taking control in the Crimea and Sevastopol, then admitted both to the Russian Federation soon after, and helped to set up and defend the self-proclaimed people's republics in Donets and Lugansk, that caused the US and the EU to hit Russia with personal and sectoral sanctions. The Russians responded with counter-sanctions. The stand-off took on legal trappings in the form of official government and legislative body statements in the US, the European Union, and Russia.

In his speech to mark Crimean accession to the Russian Federation (March 2014), Putin referred to Moscow's actions as having been primarily dictated by a concern to prevent NATO from gaining control there. Moscow's extensive support for the Donbass resistance was motivated chiefly by the need to thwart Ukraine's entry into NATO. Putin dubbed the Ukrainian armed forces in February 2015 "NATO's foreign legion". Strategic thinking, it would seem, was namely what governed Moscow's actions over 2014-2015.

The Ukrainian crisis did make Russia's geopolitical position enormously complex. In that regard there was:

- the definitive loss of a buffer zone of neutral states around Russia that had provided a sense of security even after the demise of the Warsaw Pact;
- the rise in anti-Russian sentiment within the Alliance as the likes of Poland and the Baltic states gained greater influence, portraying themselves as the next potential victims of Russian aggression;
- US acquisition of additional capacity for intelligence gathering on Russian territory, as well as for striking at Russian targets in a crisis;
- Russia being forced into investing more to shore up its western and southwestern flanks;
- The Russian sphere of influence irrevocably shorn of neighboring states and, with Ukraine possibly joining NATO, the last hopes dashed for the so-called "Russian World" as a Eurasian civilization union.

## **Confrontation: the security concerns**

With the 2014 crisis in Ukraine, Russian security concerns hit a completely new pitch. The acts of the incoming Ukrainian authorities and Moscow's reaction to Yanukovych's ousting sparked local armed resistance that could potentially grow into a regional conflict, and — given the right circumstances — into a head-on collision between the US and Russia. The levels of mutual hostility between NATO and Russia were practically back to what they had been with the Soviet Union. Moscow saw the US as its chief foe again. Washington in turn reverted to identifying “the Russian problem” as something to be contained. US allies like Great Britain, Poland, the Baltics, and Canada assumed a radically negative stance towards Moscow. Pursuant to the decisions taken at the NATO Summits in Wales (2014) and Warsaw (2016), the infrastructure was beginning to be assembled — even if only relatively modestly — along the RF's western borders for a new and permanent military show-down between Russia and the Western countries.

Yet the situation is fundamentally distinct from the Cold War era. The US-Russia conflict does not predetermine the system of international relations in general. And the conflict is deeply asymmetrical in terms of the capabilities involved and the interests at stake. As opposed to Russia, the US sees the situation in Ukraine and Ukraine itself as peripheral. And there is no antagonistic ideology or “iron curtain” between Russia and the West to prevent people from getting together or exchanging information.

While endeavoring to secure the RF's geopolitical interests in the immediate vicinity of its borders, the Russian leadership is not aiming at destroying the US or at changing the American way of life. Furthermore, and contrary to frequent and malicious speculation, Russia is not about to seize neighboring states like the Baltics or Poland as part of a move to reestablish the USSR or any Soviet zone of influence in Europe.

Nor does the US, for its part, aim to destroy or wipe out Russia. Rather, Washington is trying to make Moscow play by its rules, set up



in the wake of the Cold War. Russia has refused to do that, seeking to create a polycentric global system instead.

Moscow's conflict with Washington is real and serious. The US and Russia are political opponents; however, they are also nuclear superpowers, and presumably not intending to become military combatants. But a Russian-American military clash could come about from a combination of circumstances, where a situation spins out of control, there are gross miscalculations or tragic errors.

In fact, the risk of having a confrontation spiral into outright warfare is entirely real. The US and its NATO allies will continue to keep Russia in check, increasing the pressure on the Russian leadership while sidestepping head-on clashes. Poland and the Baltic states will continue to tremble before Russia and strive for tougher security guarantees from NATO in the form of a permanent US and other allied military presence on their territories. As matters currently stand, there is little chance of an attack against Russia from Poland or the Baltics. The main threat to Russian security along the western or southwestern strategic flanks is from conflicts in which Russia is already embroiled.

The Ukrainian situation is the prime case in point. The political and economic ruling class in that country, intellectuals, and the new middle classes will long remain hostile to the RF. The conflict in the Donbass, which was only partially damped down in February 2015, has persisted as a long-term source of tensions between Russia and Ukraine, the RF and NATO, and the RF and the US. The chances of there being any conflict settlement with special status for the region and integration into a revised Ukrainian constitution are remote. It is in Russia's interest to stabilize the economic, socio-political and administrative set-up in the part of the Donbass independent of Kiev. Moscow also needs to be prepared for both change on the ground in Ukraine and for Kiev's attempts to regain control of the Donbass.

If a settlement in the Donbass remains implausible for the foreseeable future, the 2015 Minsk Agreement notwithstanding, then it is unthinkable for Russia that the Crimea would be returned to Ukraine.

Both the Crimea and the Donbass seem fated to epitomize the Russian-Ukrainian conflict for a long while to come. Ukraine will not assent to Russian status for the Crimea any time soon, and in the interim relations between the two states will remain on a knife-edge.

It seems unlikely Ukraine will obtain formal membership of NATO in the near future, since not only is there no "revanchist" Russian threat to Europe or the US according to serious-minded Western government experts, but any move toward admitting Ukraine to NATO ranks would in all likelihood trigger a direct clash with the RF. However, Ukraine as a country is slated to remain practically wholly dependent on the US and the EU. Should the West fail to provide adequate financial backing for Ukraine, the internal crisis there could worsen and intensify, compromising regional stability.

Russia has regained the military lead in the Black Sea, with Crimean accession and additional Russian military deployment on the peninsula. Conversely, the Russian Kaliningrad in the Baltic encircled on land by NATO countries enclave is clearly vulnerable, although Lithuania and Poland are unlikely to provoke the situation for now.

What is somewhat more problematic is the physical isolation endured by the small Russian military detachment in Transnistria, especially since Kiev's decision to bar Russian military transit to that point. The prospects are slim at best for a settlement of the Chişinău – Tiraspol conflict, while the status quo is becoming harder and harder to maintain in the present international context. If an attempt is made to squeeze Russia out of Transnistria – of which there is no indication as yet – then Ukraine and Moldova could be caught up in a regional conflict.

Ukrainian and NATO demands for a return to the territorial status quo predating Crimean accession to the RF have effectively long stalled any Europe-wide security dialogue.

## **The Trump factor**

Russia was inclined to cheer Hillary Clinton's defeat in November 2016. Had she become president, the risk of a direct confrontation

between the two countries would have increased several fold compared to a Trump win, where the only thing anyone knew for sure about him was how absolutely unpredictable he was.

Still, with Trump's victory in the 2016 presidential race, cautious hopes began to emerge for a new chapter in American-Russian relations. Trump's election was the clearest example of a global tendency to put national interests first. That had already been demonstrated earlier in the Brexit referendum, as well as amply established in leading non-Western countries: e.g., China, India, and Russia. The same is discernible in Japan's increasingly self-minded policies.

For a candidate who was so focused on the domestic scene to sweep the polls over the champion of the Democrats' liberal establishment world view was thought at first to herald a major shift in US foreign policy, which people explained as weariness at the US having shouldered too many international commitments for too little in return and at too great a cost. From Moscow's vantage point, the US started tailoring its policies to world realities, and the expectation was that relations with Russia would be normalized, not equated, as the previous administration had done, with global threats like the Islamic State or the Ebola virus.

Like his predecessor, President Trump wants to consolidate America's lead in the world. However, where Obama sought to accomplish that largely through multilateral instruments and alliances founded on the liberal democratic values of the collective West, Trump prefers unilateral US action, including the use of military pressure. Instead of seeking the moral high ground, the new president relies on material persuasion. The US politics have always involved a measure of idealism and realism, but now the emphasis has changed, and the ratios are different:

Of course, the current head of the White House is not renouncing the US global preeminence; Trump is determined to re-format the present system of American hegemony by making it serve US interests more. With such an approach, Washington could either transform an America-centered system by doctoring the internal balance to forge greater unity or could set off centrifugal processes.

Though the principles behind the 45th American president's policy may not yet be clear, the team he has assembled is not known to have any soft spot for Russia, and some of its members are even outspokenly anti-Moscow. There is no revolution on the way in NATO, and Russia will continue to be seen as a threat, while the US military-industrial complex is racking up its lobbying for more weapons, including nuclear forces and BMDs that worry Moscow so much.

Trump has identified the main threats to American security — ISIS, Iran, and North Korea — and already given them all a taste of US muscle. That has ranged from a destruction campaign (ISIS) to geopolitical rollback and pressure (Iran) to military-political containment (DPRK).

With Trump's inauguration, people in Russia have increasingly come to appreciate that the US has entered a political crisis not seen for generations. Unable to carry the day at elections, the American pro-Pax Americana establishment has had to beat a tactical retreat, quickly regroup, and launch a vigorous offensive on Trump in an effort to turn his win into a Pyrrhic victory. The bulk of American media frown on Trump's policies and Trump himself. The rejection rates scored for Trump are off the charts: he is ten times more unpopular than even George W. Bush was in office.

Moreover, the power elite's crisis of self-esteem, which is taking the form of a persecution complex at the hands of the Kremlin, is spurring ever more attacks on the president, foiling his initiatives or even intentions, especially if they have to do with normalizing relations with Russia. The US now has a broad and firm bipartisan anti-Russian consensus. One of the more powerful weapons being trained on Trump's policies has been the large-scale investigation into his ties with Moscow during the elections and prior to the inauguration. Trump's enemies see the "hand of the Kremlin" not just in the way public opinion was manipulated and the very idea of democratic elections compromised in the US, but also in how Trump was "enlisted" through his many advisors well before the elections ever took place.



Against that backdrop, the chances of the US coming to an agreement with Russia on Syria, Iran, ISIS, or North Korea are severely diminished, though not altogether doomed.

## **Moscow's agenda**

With the sharp rise in uncertainty, Russia's foreign policy vis-à-vis the US has to cover several priorities. The first is to avoid a direct military run-in between the two countries in Syria or Ukraine. The second is to have the US acknowledge Russia's national interests in Europe as a means of averting any further security crises in the region. The last is to get cooperation on a range of global issues where both countries have a stake: e.g. combating terrorism, reinforcing the nuclear non-proliferation regime, maintaining global stability, and cyber-security.

Nor would it make sense for Moscow to be seeking short-term gains. At the moment, getting sanctions lifted is not the point. US sanctions are here for the long haul. Moscow is trying to affect the sanction policies of EU member countries who are far more dependent than the US on trade and economic ties with Russia. Besides, sanctions in the US may acquire the force of law, which means they could be kept on the books indefinitely.

The gradual build-up of an American global BMD configuration has so far been well parried by Russian new-generation offensive weaponry. Deployment of a NATO military force in Eastern Europe has as yet to seriously compromise Russian security and serves more as a form of psychotherapy for Eastern European countries.

## **The feasible little things**

As their personal meeting showed, Putin and Trump seem perfectly capable of coming to terms. A personal rapport between the two countries' leaders is an important ingredient for constructive dialogue, though not enough to compensate for the fundamental causes of the rivalry between Russia and the US. Deterioration of the relations has only been put on hold, mainly because anything else further down that

path would mean a head-on collision. Even under Trump, the United States will continue to wage policy as if they were the one and only global hegemon, which flies against the very grain of Russian foreign policy. Moscow, for its part, is working to replace the US sole dominion with a concert of major powers, of which Russia would be part. Vying with one another looks to be the way Russia and the US will be taking things forward for now.

Clearly, they will not be evenly matched. The two extremes in the paradigm for rivalry are confrontation and competition. The job of the US and RF administrations is to manage their renewed wrangles so as not to get caught up in the confrontation end. By that standard, good relations between them would mean those that safely preclude the risk of confrontation; and the opportunity would remain for constructive dialogue and even implementation of joint decisions. For example, if the Syrian problem is to be settled by Russia and the US, then it can be done only with the help of the US.

## **Conclusion: moving from high-risk confrontation to managed rivalry**

The world has entered a period of geopolitical turbulence. The quarter-century of relatively conflict-free coexistence between the major powers during which the United States of America has enjoyed unchallenged global dominion has drawn to a close. The Ukrainian crisis is only the most glaring case in point. Territorial disputes in the East China and South China Seas, involving not just China and its neighbors but the US as well, are an even graver symptom. However much the US and China may be interdependent, their bilateral relations have become a critical axis of global politics.

Japan is easing toward a lifting of curbs on the use of military force (for the time being still under US control). India is becoming increasingly aware of itself as a major Asian power — with prospects of becoming a blue-water naval and global power. Brazil too is edging into the world arena. And Europe — still a US protectorate in the military-

political sense — has seen Germany emerge as the leading nation, assisted by France. For the time being, Berlin is exercising its leadership along the lines cleared with Washington, but that will not last forever.

In the Middle East, which featured as a jousting ground among the major European powers from the 19th century onwards, and then for the US and the Soviet Union in the second half of the 20th century, the main players now are the local contenders Iran and Saudi Arabia, the Shia and Sunni coalitions, and, for a while, the Islamic State extremist group. US global might peaked with the invasion of Afghanistan in 2001 and Iraq in 2003, after which America's dominant on the region as a result of the first Gulf War in 1991 slackened.

The geopolitical turbulence has been compounded by geo-economic upsets. The global financial crisis of 2008-2009 did not usher in a new phase of brisk economic growth. On the contrary, it led to profound shifts in the world economy which could, in theory, take us into a new growth model. A crucial tectonic movement occurred in high technology — primarily in bio-technology and IT, robotics, and artificial intelligence. Primary commodities and processing industries find themselves on the losing end. There is a new economic mainstream in the making. The driving force behind these processes and behind the world economy overall has been the US and not emerging markets, despite how things seemed at the start of the millennium.

Russia is not among the leaders in this world. US, China, and — in economic terms — the European Union, with Germany clearly at the helm, remain in the lead. By comparison, the RF's capabilities in economics, science and technology are still relatively frail and vulnerable. It is all the more important then that Russia pin down its economic and especially its overall political strategy. The success of that strategy will determine not only Russia's place and role in the world, but possibly the Russian Federation's very viability in its current form. It is safe to say that constantly growing confrontation with the US and the arms race will only drain Russia in the end and drive not only the political regime and the state, but the very country itself into another historical collapse.

As for more stable relations with the West, one has to realize that even if the conflict with the US is somewhat assuaged, it is not going to go away anytime soon and is likely to become chronic. Moscow and Washington are deeply divided over issues of the world order, as well as on specific regional problems. In principle, Russia aims to reduce American supremacy in the world, while the US, defending its global position, will continue pushing Russia as the comparatively weak and vulnerable challenger. Given the dynamics of the situation, though, a new, however shaky, balance could be struck.

Russia and America could create a tentative equilibrium by agreeing to refrain from actions that carry the risk of a direct military clash between them and by pursuing a pragmatic form of cooperation on matters where their interests overlap. Beyond Ukraine, avoiding confrontation would mean refraining from dangerous military activity and provocative measures in the strategic arms arena. For its part, the cooperation would primarily involve nuclear arms, global military strategic stability, non-proliferation of weapons of mass destruction, combating terrorism and extremism, promoting regional stability in various ways, most pointedly in the Middle East, as well as working on cybersecurity.



## 2. RUSSIA-NATO: A BREAKTHROUGH TO THE PAST

*Sergey Oznobishchev<sup>3</sup>, Andrey Zagorsky<sup>4</sup>*

After the end of the Cold War, the armed forces of all NATO members were not only significantly downsized, but also underwent a radical transformation. The US military presence in Europe suffered the most significant cuts. While during the Cold War around 200,000 US servicemen were stationed in Europe on a permanent basis (under the CFE, the Treaty on Conventional Armed Forces in Europe, the ceiling for the USA's military personnel in Europe was set at 250,000), by 2007 that number had been cut by more than half, down to 90,000 troops. Four US Army brigades remained on the continent, and these were mainly used for operations outside of Europe. Following the withdrawal of American troops from Iraq and the transformation of NATO operations in Afghanistan, these cuts continued. In 2013, a mechanized brigade was withdrawn, and the last American tank left Europe. By

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2015, the total number of US Army troops in Europe had been further reduced threefold, down to 33,000, with two brigades deployed there on a permanent basis. Starting from 2006, more than 100 American military bases and other military sites in Europe were closed.<sup>5</sup>

The situation only began to change after 2015 when, amid the Ukrainian crisis, measures to ensure the permanent presence of armed forces along the eastern borders of the Alliance were adopted at the NATO summits in Wales (2014) and Warsaw (2016). In parallel to implementing these decisions, the United States deployed a number of mechanized infantry brigade units to several central and eastern European countries (from 4 to 5 thousand troops, 90 tanks, 90 infantry fighting vehicles), bringing the number of their brigades in Europe up to three, and since 2017 US troops have additionally formed the core of NATO's multinational battalion in Poland, which also includes British and Belgian units (all in all, about 1,000 soldiers). But even with these increases, the level of the United States' military presence in Europe remains less than half that of what it was in 2007 and is five times lower than its 1991 level.<sup>6</sup>

The process of Europe's "demilitarization" was not simple or linear. The joint work that took place within the framework of the NATO-Russia Council was not equally effective in all areas. NATO's continuous policy of enlargement, which was pursued despite vocal objections and opposition from Moscow, proved very damaging for their bilateral relations. There has been mounting discord about issues of European security and the means for ensuring it (the European BMD system, nonstrategic nuclear weapons, et al.). Against the backdrop of a general deterioration in relations between Russia and the West, the arms reduction and limitation process has stalled, including in areas directly affecting European security.

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5 Andersson J.J. US forces — between Europe and Asia. EU ISS Alert. 2016. No. 20. P. 1; Cancian M.F., Samp L.S. The European Reassurance Initiative. CSIS. February 9, 2016. Available at: <https://www.csis.org/analysis/european-reassurance-initiative-0> (accessed 8 June 2017).

6 Cancian M.F., Samp L.S. The European Reassurance Initiative...; Durkalec J. et al. Trends in Force Posture in Europe. PISM Strategic File. 2017. No 1. P. 7; European Reassurance Initiative Fact Sheet. US European Command Public Affairs Office. May 1, 2017.

## Strengthening the Alliance's security: "restraint" called into question

For a long time, the aspiration of new NATO members to secure the presence of NATO forces on their territories found little sympathy in Brussels. It is true that the Alliance drafted contingency plans for Poland (but no potential opponent was defined). For the Baltic States however, no such plans were drawn up after they joined the Alliance in 2004. This issue was considered too sensitive because it had the potential to ruin NATO's relations with Russia.

This policy did not come under revision until 2008, when in August, in the immediate aftermath of the brief war in Georgia, the Baltic States (Latvia, Lithuania and Estonia) raised the question of the need to develop contingency plans for them too and to station NATO forces on their territory on a permanent basis. Poland also raised the issue of a permanent deployment of NATO troops to its territory. Despite the initial skepticism of US leaders and Germany's objections, two years later the Baltic States' demands were partially met. Germany suggested a compromise solution, which consisted in extending Poland's updated contingency planning to the Baltic States<sup>7</sup> as well. Based on this planning, joint exercises were carried out in these countries, involving units specially allocated by their allies for this purpose. However, their request for a permanent NATO presence in the East was denied.

In 2014, the same group of countries, this time with the support of Romania, came back to the need for more credible guarantees for their security; this was in the run-up to the NATO summit in Wales which took place against the backdrop of the armed conflict in Ukraine and a large-scale offensive by DPR and LPR forces. They insisted on a

<sup>7</sup> Demmer U., Neurirch R. Fear for Russia. NATO Developed Secret Contingency Plans for Baltic States // Spiegel Online. 2010. 7 December. Available at: <http://www.spiegel.de/international/europe/fear-of-russia-nato-developed-secret-contingency-plans-for-baltic-statesa733361.html> (accessed 8 June 2017); Kramer M. Russia, the Baltic Region, and the Challenge for NATO. PONARS Eurasia Policy Memo No. 267. July 2013. Available at: [http://www.ponarseurasia.org/sites/default/files/policy-memos-pdf/Peppm\\_267\\_Kramer\\_-July2013.pdf](http://www.ponarseurasia.org/sites/default/files/policy-memos-pdf/Peppm_267_Kramer_-July2013.pdf) (accessed 8 June 2017); Wikileaks Cables Reveal Secret NATO Plans to Defend Baltics from Russia // The Guardian. 2010. 6 December. Available at: <https://www.theguardian.com/world/2010/dec/06/-wikileaks-cables-nato-russia-baltics> (accessed 8 June 2017).

permanent deployment of NATO forces to their territories, on stepping up military exercises there and on adjusting the contingency plans.<sup>8</sup>

During the preparations for the summit in Wales (September 2014), the rationale for concerted action to enhance the credibility of collective security guarantees for Poland and the Baltic States, as well as for "the containment of Russia", was no longer disputed. The discussions within the Alliance revolved around what measures should be taken: measures that would, were the need to arise, enable the strategic reinforcement of the Alliance's capabilities, or should NATO embrace the idea of providing a permanent military presence in the region? In the latter case, the quantitative levels of such a presence would also need to be defined (Poland suggested two brigades).<sup>9</sup>

In Wales, it was decided that measures would be taken to enhance NATO's ability to reinforce its eastern members. The Readiness Action Plan adopted at the summit provided for, inter alia: a continuous air, land and maritime presence; the establishment as part of the NATO Response Force of a Very High Readiness Joint Task Force, able to deploy to the eastern periphery of the Alliance within 48 to 72 hours; an intensification of training exercises in Poland and the Baltic States with the participation of this task force (since 2015 such exercises have been almost continuous); the prepositioning of equipment and supplies in these countries, and the establishment of command posts.<sup>10</sup>

The next NATO summit, which was held in Warsaw (July 2016), focused mainly on the threats and challenges to member states' security, which were perceived as coming both from the East (specifically the Baltic and Black Sea regions) and from the South (Middle East and Northern Africa). Among the summit's key outcomes, it is worth mentioning the reinforcement of the NATO Response Force to 40,000 soldiers, a

8 Madej M. Nehmt die Verteidigung ernst! Polens Erwartungen an die NATO // Internationale Politik und Gesellschaft. 2014. 18 August. Available at: <http://www.ipg-journal.de/kommentar/artikel/nehmt-die-verteidigung-ernst-542/> (accessed 8 June 2017).

9 Ibid.

10 Secretary-General's 2014 Annual Report. Official website of the NATO. January 2015. Available at: [http://www.nato.int/nato\\_static\\_fl2014/assets/pdf/pdf\\_2015\\_01/20150130\\_SG\\_AnnualReport\\_2014\\_en.pdf](http://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2015_01/20150130_SG_AnnualReport_2014_en.pdf) (accessed 8 June 2017).



major increase from its initial level of 13,000<sup>11</sup> troops, and its enhanced readiness. A Very High Readiness Joint Task Force capable of deploying within the space of two to three days was also established. The rotation plan for this Task Force was approved until the year 2022.<sup>12</sup>

The most talked-about decision in Russia was the Warsaw summit decision to station extra military formations in countries sharing a border with Russia, namely in Estonia, Latvia, Lithuania, and Poland. What this involved was the deployment on a rotational basis of four tactical units, each of battalion strength and interoperable with the armed forces of the host countries.<sup>13</sup>

The outcomes of the Warsaw summit marked a further shift in emphasis in NATO's policy, away from building reinforcement capabilities for allied forces toward the deployment of NATO combat troops to Poland and the Baltic States. Meanwhile, the quantitative parameters agreed upon for a de facto permanent military presence in the region were carefully measured, so that they will not openly call into question the provisions of the NATO-Russia Founding Act of 1997.

Thus, the decisions taken in Warsaw fit neatly into the overarching logic behind a gradual overhaul of the Alliance's policy undertaken in response to the persistent demands that have been coming from several new member states for a number of years now. Moreover, each new crisis in Russia's relations with its neighbors and the West merely strengthens their case, just as it bolsters the position of those political forces, in these countries and in other NATO states, who perceive Russia's policy as a threat to their own security.

Tensions and mistrust in the relations between the two sides have accumulated over many years. Given the unquestionable progress that had been achieved in terms of developing cooperation between

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11 Defense Ministers decide to bolster the NATO Response Force, reinforce collective defense. Official website of the NATO. June 24, 2015. Available at: [http://www.nato.int/cps/ru/natohq/news\\_120993.htm](http://www.nato.int/cps/ru/natohq/news_120993.htm) (accessed 8 June 2017).

12 Ibid.

13 Warsaw Summit Communiqu . Official website of the NATO. July 8-9, 2016. Available at: [http://www.nato.int/cps/ru/natohq/official\\_texts\\_133169.htm?selectedLocale=en](http://www.nato.int/cps/ru/natohq/official_texts_133169.htm?selectedLocale=en) (accessed 8 June 2017).

Russia and NATO, NATO's expansion eastward — an integral part of the Alliance's policy — has had a devastating impact on relations between Russia and the West. The argument according to which this enlargement policy "poses no threat" to Moscow, which Brussels has been putting forward for more than twenty years now, have never been accepted at face value by the Russian political and expert elite.

The expected attempt to pull Ukraine into NATO's orbit became one of the reasons behind the deep Ukrainian crisis that led to the collapse of relations between Russia and the West. Cooperation between Moscow and Brussels was set back a long way, bringing them almost back to square one. How this state of affairs was perceived by Russian official circles can be summed up in the conclusion drawn by the Russian Chief of the General Staff, Valery Gerasimov, when he said that relations between Russia and NATO today "are at the lowest point since the end of the cold war."<sup>14</sup>

In Russia, the issue of the European BMD is associated not just with the US, but also with NATO. Since the very beginning, the US and NATO representatives have asserted that the purpose of deploying a limited missile defense system in Europe was only to counter missile launches by third countries (primarily Iran). But Russia did not take this assurance for granted. On the contrary, Russia accused the United States of deliberately seeking to weaken the country's retaliatory strike potential and undermine strategic stability. The preparation and deployment of each new element of the missile defense system in Europe (such as those happening now in Romania and Poland) sparks a fresh wave of accusations from the Russian side. The lack of progress toward a compromise on this matter is a serious obstacle to restoring trust between Russia and NATO.

For many years, NATO countries engaged in a dialogue with Russia on the control of conventional armed forces in Europe, but that

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<sup>14</sup> Chief of the General Staff of the Russian Armed Forces General of the Army Valery Gerasimov assessed prospects of the European security. VI Moscow Conference on International Security, 26-27 April 2017. Official website of the Ministry of Defense of the Russian Federation. Available at: [http://eng.mil.ru/en/news\\_page/country/more.htm?id=12120701@egNews](http://eng.mil.ru/en/news_page/country/more.htm?id=12120701@egNews) (accessed on 8 June 2017).

dialogue has now been brought to a halt. This came as a consequence of the gradual deterioration of relations between Russia and the West, a deterioration which began long before the Ukrainian crisis.

In 2007, Russia "suspended" its participation in the CFE Treaty (i.e. the country ceased to take part in the annual exchange of information and stopped accepting inspections, and although Moscow no longer regarded the ceilings for weapons and technology limited by the Treaty as binding on Russia – TLE (Treaty-Limited Equipment), including flank limits – it did say that it would show restraint in terms of their deployment); then in 2015, Russia decided to suspend its participation in the meetings of the CFE's Joint Consultative Group. One of the stated reasons for Moscow's decision to suspend its CFE Treaty activities was the fact that NATO countries insisted on linking the ratification of the Agreement on the Adaptation of the CFE Treaty, signed at the OSCE summit in Istanbul in 1999, with Russia's implementation of bilateral agreements with Georgia and Moldova concluded in Istanbul at the same time.

However, the erosion of the CFE regime did not lead to a surge in the actual amount of TLEs in Europe.<sup>15</sup> The total amount of TLEs did not increase as one might have expected given the revival of the "Russian threat" thesis, but actually dropped significantly. The size of the reductions that took place during the five years up to and including 2016 ranged from a 17% cutback in tanks (in NATO countries overall) to a 23% reduction in attack helicopters.<sup>16</sup>

It should also be noted that the actual quantities of TLEs held by NATO countries and Russia today are much lower than the initial ceilings established by the CFE Treaty (and by the 1999 agreement on its adaptation). Russia's holdings fall well below its TLE ceilings, from

15 There are five categories of weapons limited by the CFE Treaty: tanks, armored combat vehicles, artillery systems, combat aircraft, and attack helicopters.

16 Estimates by: Vehicle & Aircraft Holdings within the scope of the Conventional Armed Forces in Europe Treaty 2016. Official website of the Ministry of Defense of Great Britain. February 25, 2016. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/502574/Vehicle\\_Aircraft\\_Holdings\\_within\\_the\\_scope\\_of\\_the\\_Conventional\\_Armed\\_Forces\\_in\\_Europe\\_Treaty\\_2016.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/502574/Vehicle_Aircraft_Holdings_within_the_scope_of_the_Conventional_Armed_Forces_in_Europe_Treaty_2016.pdf) (accessed 9 June 2017).

37% lower for armored vehicles to 56% lower for combat aircraft. The same trend can be seen within NATO – as of the 1 of January 2016, the NATO countries fell 54% short of overall ceilings for armored vehicles and 66% short for combat aircraft.<sup>17</sup>

This state of affairs indicates that, firstly, the parties have absolutely no intention of preparing for a serious military confrontation, let alone a full-blown war. Secondly, it is a clear sign that the logic of “self-restraint” by each country, set out in the Agreement on the Adaptation of the CFE, is very much alive.

The conclusion to be drawn here is that despite multiple statements about the process for the control of conventional armed forces in Europe being dead, the real situation is somewhat different. The ideological underpinnings of the process itself remain alive, which means it can be revived. What is lacking in order to achieve this are not technical solutions but rather the political will and readiness for dialogue which at one time served to quickly advance the CFE-1, from the first steps of its negotiation process early in 1989 to the final document reached towards the end of 1990.

In the context of the current gridlock on arms control, where with every passing day things become more and more entangled in an increasingly tight knot of interrelated problems, progress can only be achieved if both sides show willingness to seek mutual compromises. That is why, for instance, there can be no separate dialogue between Russia and the West on questions that are primarily of interest to the West, such as reducing tactical nuclear weapons (TNWs), the expansion of confidence-building measures in Europe, or the improvement of the Treaty on Open Skies, if in exchange no dialogue is initiated on issues that are of paramount interest to Russia. Moreover, a constructive dialogue can hardly begin here without first addressing the risk of further disintegration of the very foundation of the arms control regime – if, for example, Moscow and Washington cannot settle

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<sup>17</sup> Ibid.



their mutual grievances concerning compliance with the Intermediate-Range Nuclear Forces Treaty (INF) of 1987.

The Russian political and expert establishment often claims that NATO "is surrounding Russia with military bases." It is only fair to say that, for now, such assertions seem to carry a strong whiff of exaggeration. Though many politicians and experts portray the measures taken by NATO as rather large-scale, there are clear elements of restraint in them.

First of all, NATO officials constantly highlight their commitment to the provisions of the 1997 NATO-Russia Founding Act, in particular to the provision whereby security should not be ensured "by additional permanent stationing of substantial combat forces."<sup>18</sup> In the same vein, a constant emphasis is placed on the fact that the stationing of four battalions in the vicinity of Russia's borders takes place on a rotational basis, and that their manpower is relatively small.

Furthermore, there is a clear understanding that the total number of personnel present in the three Baltic States and Poland should not exceed brigade size, a level that was proposed by Russia in 2009 as a quantitative limit for the stationing of combat forces that under the 1997 NATO-Russia Founding Act would not be considered as substantial forces.

Secondly, despite unprecedented tensions with Russia, the language regarding nuclear weapons in NATO documents remains unchanged, and they contain no new, menacing overtones.

Thirdly, at all NATO summits it is not just the decisions proclaimed in official documents that matter, but also those that were not actually adopted. Notably, Poland's request for a heavy division of NATO forces to be permanently stationed on its territory was turned down, as was the wish professed by politicians from the Baltic States to see substantial numbers of NATO forces permanently garrisoned in their countries. And at the Warsaw summit there was no support for Romania's proposal to establish a NATO Black Sea Fleet.

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18 Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation. Official website of the NATO. May 27, 1997. Available at: [http://www.nato.int/cps/en/natohq/official\\_texts\\_25468.htm](http://www.nato.int/cps/en/natohq/official_texts_25468.htm) (accessed on 9 June 2017).

Fourthly, NATO's Secretary General J. Stoltenberg devised and insists on a format for NATO's relations with Russia, which would be based on the formula of "defense and dialogue."<sup>19</sup> This format does not preclude the possibility of meaningful and practical cooperation. At the same time, the high level of mistrust created by the Ukrainian crisis remains an obstacle, especially during this political cycle, preventing ideas for partnerships from being put into practice.

The stalemate between the parties in terms of advancing their interests in Eastern Ukraine, the arrival of President Trump in the White House and the ensuing hope that the US might change its policy towards Russia, have started to have a noticeable impact on the political rhetoric. Both Western and Russian politicians have started to express an ever more explicit hope that security concerns could be resolved on the basis of compromise and cooperation by returning to the already tried and tested ways of settling matters of European security.

The Defense Minister of the Russian Federation Sergei Shoigu called for this himself, saying that the NATO-Russia Founding Act, signed 20 years ago, sets one thinking about how to breath fresh life into its key premise that "Russia and NATO do not consider each other as adversaries, but share the goal of overcoming the vestiges of earlier confrontation and competition."<sup>20</sup> In this regard, Sergey Lavrov, Russia's Minister of Foreign Affairs, pointed out that the NATO-Russia Council is a well-proven mechanism that already exists and reaffirmed Moscow's "firm belief" in the "need to establish an area of equal and indivisible security from Vancouver to Vladivostok, as foreseen, inter alia, by earlier decisions from OSCE summits and the NATO-Russia Council."<sup>21</sup>

19 See, for example: Jens Stoltenberg: NATO needs a strong defense and a dialogue with Russia. Radio Svoboda. June 20, 2016. Available at: <http://www.svoboda.org/a/27810028.html> (accessed on 9 June 2017).

20 Speech of the Minister of Defense of the Russian Federation General of the Army Sergei Shoigu at the opening ceremony of the VI Moscow Conference on International Security. Official website of the Ministry of Defense of the Russian Federation. April 26-27, 2017. Available at: <http://eng.mil.ru/en/mcis/news/more.htm?id=12120678@cmsArticle> (accessed on 9 June 2017).

21 Foreign Minister Sergey Lavrov's remarks at the Sixth Moscow Conference on International Security. Official website of the Ministry of Foreign Affairs of the Russian Federation. April 26, 2017. Available at: [http://www.mid.ru/en/foreign\\_policy/news/-/asset\\_publisher/cKNonkJE02Bw/](http://www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/)

## Prospects for NATO-Russia relations: reminiscing about the future

In 2016 and 2017, there have been no notable improvements in terms of strengthening European security, or even any effective measures. The same can be said about the relations between Russia and NATO.

At the initiative of the president of Finland, a dialogue was begun on making the use of transponders by military aircraft mandatory during flights over the Baltic Sea. However, this initiative was never put into practice. Meanwhile, not only has the risk of direct military confrontation not disappeared, it has increased, partly in connection with the implementation of the decisions from the NATO Warsaw summit, such as the stationing of the four battle groups in the so-called "forward area" in close proximity to the Russian border (specifically in the Baltic States and Poland).

The United States is not "NATO's dictator"; however, the North Atlantic Alliance is a collective politico-military bloc in which Washington certainly plays a pivotal role, both politically and financially.

The election of Donald Trump as the president of the United States has brought about significant and unexpected recalibrations in Washington's relations with NATO. This is a clear example of just how significant a role subjective factors can play in relations between countries today. The effect of such factors was fully felt even amidst the devastating Ukrainian crisis. This underscores once again the need to adopt systemic measures in order to build a system of European security less dependent on the political climate and on the moods, attitudes and ideas of individual leaders and politicians.

Until quite recently, it seemed that such a system of European security did exist and that it rested firmly on the principles set forth in the 1975 Helsinki Final Act and the entire framework of treaties. However, as it turned out, the narrow understanding and perception of national

interests by national elites and individual politicians, as well as the arbitrary interpretation of international law and a number of other factors previously seen as secondary in "civilized Europe", all conspired to blow the Helsinki process to pieces from the inside. There can be no doubt that the profound crisis in relations between Russia and the West calls for a much more sophisticated and efficient system of European security, aimed both at eliminating crises and at preventing them from happening.

One of the things the Ukrainian crisis has done has been to burnish the importance of the OSCE, whose eminence in terms of collective political decision-making on the European continent may well continue to grow in the future. This would foster a better political equilibrium on the continent because it would reduce the current precedence given to politico-military decisions taken within NATO. Meanwhile, even just a partial departure from today's prevailing "NATO-centric" approach to building European security would help resolve the deep disagreements between Russia and the West in the field of security.

Many politicians and experts, both in Russia and abroad, expected the Ukrainian crisis to usher in a new era for strengthening European security and breathe fresh life into the process of arms reduction and limitation, both in Europe and in the world at large. But this has not yet happened.

In fact, the future of these two vital and interrelated processes has never been more uncertain. This uncertainty also stems from the arrival of President Trump in the White House, which was initially regarded by some Russian politicians as a "Russian victory."

The Ukrainian crisis has once again cast a light on the systemic cleavages that separate Russia and the West in terms of their understanding of the fundamental norms of political relations, international law and, in practice, of the use of force. And this time the disagreements run so deep that overcoming them will require extraordinary efforts and much more time than politicians and experts had anticipated.

In these conditions, the first task will be to stabilize the still very volatile situation and to adopt urgent and effective measures to prevent

the crisis from getting any worse. But this cannot be done without establishing a political dialogue and practical cooperation.

In the current situation, the most pressing challenge is to defuse the inordinate and ever-rising tensions along the contact line between Russia and NATO. In any case, working relations between Moscow and Brussels must be restored. Both sides should avoid statements and actions that would likely give rise to new problems and divergences.

The "platform" for their bilateral dialogue, namely the NATO-Russia Council (NRC), should be revived as a matter of priority. Its meetings should take place regularly and should strive to find meaningful solutions to real and potentially dangerous situations. In the past, some areas of cooperation would be declared as such within the Council largely for the sake of "political reporting." This practice needs to stop. It is clear that in the future, the "areas for bilateral consultation and cooperation" already mentioned must have a clearly defined and relevant purpose and should preferably come with goals attached and timelines for achieving them.

In the meantime, so as to avoid any unintentional escalation of hazardous military incidents, one of the most crucial priorities is to take measures to contain the possible consequences of dangerous encounters or near-collisions occurring almost daily between the parties' military vessels and aircraft. With this in mind, Russia and the United States could reaffirm their adherence to the Agreement between the USA and the USSR on the Prevention of Dangerous Military Activities (1989) and to the Agreement on the Prevention of Incidents On and Over the High Seas (1972).

As a first step in this direction the parties could make a brief, binding statement on their readiness to take all necessary measures to prevent and avert the escalation of such incidents. A second step could be the development and adoption by Russia and NATO of a multilateral agreement like the ones mentioned above.

Concretely defining NATO and Russia's mutual obligations (namely those taken on by the Alliance in the framework of the 1997 NATO-



Russia Founding Act, whereby the security of the bloc would not be ensured "by additional permanent stationing of substantial combat forces") would help ease the tensions in Russia and NATO's relations.<sup>22</sup> For now, the state of play is that of teetering on the brink, with Russia having proposed a provision which, although not fully coordinated, stipulates that the total number of additional NATO contingents deployed on a permanent basis should not exceed brigade size. However, without a clear understanding formally agreed upon by the parties of what a "substantial" combat force actually means, stabilizing relations between Moscow and Brussels will prove difficult.

Since the outbreak of the Ukrainian crisis, tensions along the border between Russia and NATO countries periodically flare up. The frequency and scope of military exercises have increased. Russia has been conducting sweeping spot checks of its combat readiness. The prospects for further strengthening and bolstering the alliance's military structures are constantly on the agenda of NATO summits and are also discussed at other meetings of various kinds. Until recently, you would have been hard pressed to find any statement made by a Russian political or military figure on political and military issues that did not include a reference to the "unprecedented" rise in NATO's activities in the vicinity of Russia's borders.

And even if growing military confrontation and acrimonious political rhetoric today do not always match the indicators used to characterize the Cold War, the situation is just as dangerous, if not more so, as it was at the height of that historical period. And this is happening at a time when arms control negotiations are at an impasse and when many of the mechanisms that worked during the Cold War and that were created to prevent crises and their escalation seem to have slipped from memory. The parties are unable to reach lasting and stable solutions for hazardous situations, even in areas for which there is a robust body of experience of effective agreements.

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22 Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation...

In such circumstances, the primary, across-the-board goal should be to ease mutual tensions along the line of contact between Russia and NATO. Although Russia and NATO have not yet settled the quantitative parameters for what should be considered "substantial" combat forces, the Warsaw decision to place four multinational Alliance battalions in the Baltic countries and Poland is demonstratively in line with the restrictive definition of such forces put forward by Russia in 2009.<sup>23</sup>

Despite the rhetoric, Russia too has so far strictly complied with its obligations on military restraint in the Northwest, i.e. in the Pskov and Kaliningrad regions. The forces deployed by Russia in the Western Military District are not stationed in these two regions. The inspections conducted by NATO countries within the framework of the Vienna Document and the Treaty on Open Skies did not detect any augmentation of Russian military forces or unusual military activities in these areas.

This means that, on the basis of the Founding Act – the only still relevant document somehow restricting NATO military activities in the vicinity of Russia's borders – Russia and NATO countries can at least agree on the need to limit themselves to the decisions taken to date and on the need to show military restraint and take measures aimed at de-escalating military activities in the region.

Such measures might include arrangements for the non-deployment of additional forces in the sub-region; the non-conduct of military exercises within an area to be determined near the border between Russia and NATO states; limitations of the scale and intensity of military exercises in the sub-region and the inadmissibility of training for offensive operations and use of nuclear weapons in such exercises; the mandatory prior notification of exercises to be conducted within the stipulated area and the invitation of observers to these exercises, regardless of their scale.

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<sup>23</sup> Back from the Brink: Towards Restraint and Dialogue Between Russia and the West. Third report of the Deep Cuts Commission. Hamburg, Moscow, Washington, 2016. P. 13. Available at: [http://deepcuts.org/images/PDF/Third\\_Report\\_of\\_the\\_Deep\\_Cuts\\_Commission\\_English.pdf](http://deepcuts.org/images/PDF/Third_Report_of_the_Deep_Cuts_Commission_English.pdf) (accessed 9 June 2017); Nopens P. A New Security Architecture for Europe? Russian Proposals and Western Reactions. Egmont Institute Security Policy Brief. 2010. No. 10. P. 2.

At some point, it might be possible to agree on the creation of a special zone with a lower concentration of troops and military activities along the border between Russia and NATO countries. Separate arrangements, such as mutual visits to reinforcement infrastructure, will be required for ongoing military activities carried out by both sides and during which movements of reinforcement troops take place in the sub-region. All in all, with the right political will, an agreement comprising a number of key confidence-building measures<sup>24</sup> could be developed relatively quickly.

What we are in fact talking about here is enhancing and increasing the effectiveness of confidence-building and transparency measures. These could include, for instance, declarations (mutual obligations) to exclude any actions that could be perceived as posing a threat to the other side's security (alongside the development of a concerted list of such actions).

It would also make sense for discussions about all aspects of military restraint to take place in the Russia-NATO format, rather than on a bilateral basis. Since there is no consensus within the Alliance that could unlock cooperation with Russia along military lines, such arrangements could be sought in a special format and outside of the NATO-Russia Council. At the beginning these arrangements might be informal, i.e. they could be unilateral in form, but agreed upon during informal discussions.

Subsequently, such a process could consider matters such as lowering the thresholds for prior notifications of military exercises in accordance with the 2011 Vienna Document, as well as more far-reaching confidence- and security-building measures. It would also be advisable to reinstate the bilateral agreements on confidence and security-building measures (CSBMs) between Russia and the Baltic States

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24 Steps in this direction are also considered in: Arbatov A. Beyond the Nuclear Threshold: Russia, NATO, and Nuclear First Use. European Leadership Network. April 2017. Available at: [medialibrary/2017/04/21/94c24315/Beyond%20the%20Nuclear%20Threshold.pdf](http://medialibrary/2017/04/21/94c24315/Beyond%20the%20Nuclear%20Threshold.pdf) (accessed 9 June 2017); Oznobishchev S. Russia and NATO: From the Ukrainian Crisis to the Renewed Interaction. In *Russia: arms control, disarmament and international security*. IMEMO supplement to the Russian edition of the SIPRI Yearbook 2015. Moscow: IMEMO, 2016. Pp. 57-71.

which Russia withdrew from in 2014, and to show a willingness to forge a bilateral agreement on additional CSBMs with Poland (Russia had no such agreement with Warsaw prior to the Ukrainian crisis).

The beginning of a constructive dialogue that would achieve some results could also serve to revive the process of conventional arms control in Europe and to rekindle that of arms reduction and limitation, which had been frozen even before it was kicked into the long grass. Consultations on this issue could build on those initiatives that are currently being discussed within the OSCE.

Even if, as the Russian side believes, "returning to the topic of the long and hopelessly obsolete CFE Treaty makes no sense",<sup>25</sup> actually formalizing the current levels of national weapons holdings, which fall well below the obligations assumed under the 1999 adapted treaty, would have a stabilizing effect.

It seems that more recently Moscow's position has become less rigid. There is now less talk about the imbalance in the number of TLEs compared with NATO (though it's also obvious that, in a realistic case scenario for Russia's development, redressing this balance will be impossible), and now other factors are being held up as obstacles to dialogue, but these can be more easily overcome. As an official document from the Russian Ministry of Foreign Affairs states, "As for the prospects for the elaboration of a new CACE [conventional arms control in Europe – *authors*] regime based on the principles of equal and indivisible security and the balanced rights and obligations of the sides, they must be considered in conjunction with NATO's refusing to further strengthen its military "deterrence" measures against Russia in Europe and thereby restoring normal relations with the Russian Federation, including in military cooperation."<sup>26</sup>

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25 Comment by the MFA of Russia on the US Department of State's Annual Report on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments. Official website of the Ministry of Foreign Affairs of the Russian Federation. April 29, 2017. Available at: [http://www.mid.ru/en/foreign\\_policy/news/-/asset\\_publisher/cKNonkJE02Bw/content/id/2740264](http://www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/2740264) (accessed on 10 June 2017).

26 Ibid.

A good way to advance these objectives could be to hold more military doctrine seminars, which first began back in 1990, under the aegis of the OSCE. These seminars prompt official representatives of European countries to present their military doctrines by going beyond mere declarations: representatives are compelled to also explain the expediency of a particular doctrine for a particular time in the military and political situation, to clarify certain provisions and choices of wording contained in doctrinal documents, and to set forth the purpose of adopting them and the plans for their future evolution.

Any actions that could foreseeably be negatively perceived by the other party should be avoided (regardless of the degree of understanding for the other party's arguments). However, for more than twenty years the West has been doing the exact opposite of this by pressing on with NATO's eastward enlargement in defiance of Russia's objections and growing opposition to this policy. The practice of following unilateral decisions like this must cease to avoid even more destructive crises in the relations between Russia and the West in the future.

For quite some time now, Russia's view on the unfolding of the Ukrainian crisis has not attracted many followers from among Western political figures. Even the hopes pinned on the new US administration and the newly elected Congress have been dashed, with Russia's position gaining no support from those quarters. As a result, Russia has lost its benefit of the doubt in the West, whereas in Moscow the level of wariness and suspicion concerning the "real motives" behind NATO and US military preparations has skyrocketed.

Against this backdrop, relations between Russia and NATO have been set back decades. With tensions constantly running high and with no prospect of a return to constructive cooperation between Russia and the West in sight, it seems unrealistic to promote or discuss, let alone flesh out, big ideas like the convening of a new conference on security and cooperation in Europe.

Instead, there is one possible way forward that is taking shape and which, within the current political cycle, should mostly consist of



working hard to reduce tensions and minimize the damage that has arisen as a result of the Ukrainian crisis. The main task here will be to salvage as much as possible of the achievements from earlier periods in the field of arms control and non-proliferation for both European and global security. An elementary form of cooperation will need to be established as a matter of priority in order to address the most "critical" areas of security threats and challenges, including efforts to restore and create mechanisms for accident prevention, counter terrorism, non-proliferation of WMDs and other obvious common threats. As for Russia and NATO moving on to new and higher levels of cooperation, it is extremely difficult to imagine that happening without any clear political impetus in the foreseeable future.

## 4. INTERMEDIATE-RANGE NUCLEAR FORCES TREATY: THIRTY YEARS LATER

*Alexey Arbatov*<sup>1</sup>

The situation around the Treaty between the United States and the Union of the Soviet Socialist Republics (and Russia as its successor state) on the Elimination of their Intermediate-Range and Shorter-Range Missiles (INF Treaty) signed in 1987 is one of the most dramatic manifestations of the current deep crisis of global nuclear arms control.

For some years Moscow and Washington have been accusing one another of violating this fundamental treaty. At the same time, their perception of this Treaty differs greatly. The United States has never challenged the value of this agreement despite the fact that it has never been a priority for the US. Indeed, as the missiles prohibited under the Treaty cannot reach the American territory, the Treaty eliminates threats to the United States' European and Asian allies rather than ensures the security of the United States itself.

In Russia, by contrast, over the past decade the value of the INF Treaty has been both questioned by the leadership<sup>2</sup> and expressly denied

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2 Speech and the Following Discussion at the Munich Conference on Security Policy. Official website of the President of Russia. February 10, 2007. Available at: <http://en.kremlin.ru/events/president/>

by the majority of its political elite, strategic experts' community,<sup>3</sup> and electronic and print media. It is indicative that the latest version of the Foreign Policy Concept of the Russian Federation issued in 2016 does not even mention the INF Treaty among the arms control agreements to which Russia is committed.<sup>4</sup>

The Administration of Donald Trump which was expected by some people in Moscow to make steps towards improving relations with Russia, so far has made no significant steps in this area. Even worse, after the new leadership came to power its members once again accused Russia of violating the INF Treaty in the same harsh manner. Moscow did not leave the favor unanswered and declared in March 2017 that the United States has committed a "grave violation" of the Treaty.<sup>5</sup>

## Domino effect

Unless the parties make steps to revitalize the INF Treaty in the near future, the Treaty will most likely be denounced by either Washington or Moscow under the pretext that the other party has violated it. In addition to directly undermining European security (which is discussed below), this could provoke a "chain reaction" and the collapse of the nuclear arms control system in general. For over half a century since the 1963 Partial Test Ban Treaty was signed, this system was shaped through hard work and dedication of national leaders and policy-makers, diplomats and military, academics and engineers, public figures

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transcripts/24034 (accessed on 12 June 2017).

3 See, e.g.: Litovkin D. Adequate Iskander // *Izvestiya*. 2007. 21 February. Available at: <http://izvestia.ru/news/321928> (accessed on 12 June 2017); Shirokorad A. To return and to turn back are not the same // *Nezavisimoye voyennoye obozreniye*. 2013. 12-18 July. Available at: [http://nvo.ng.ru/armament/2013-07-12/6\\_rockets.html](http://nvo.ng.ru/armament/2013-07-12/6_rockets.html) (accessed on 12 June 2017); Karaganov S. On a new nuclear world // *Rossiya v globalnoy politike*. 2017. 4 April. Available at: <http://www.globalaffairs.ru/number/O-novom-yadernom-mire-18644> (accessed on 12 June 2017).

4 Foreign Policy Concept of the Russian Federation, approved by President of the Russian Federation Vladimir Putin on November 30, 2016. Para. 27. Official website of the Ministry of Foreign Affairs of the Russian Federation. Available at: [http://www.mid.ru/en/foreign\\_policy/official\\_documents/-/asset\\_publisher/CptICkB6BZ29/content/id/2542248](http://www.mid.ru/en/foreign_policy/official_documents/-/asset_publisher/CptICkB6BZ29/content/id/2542248) (accessed on 12 June 2017).

5 Comment by the MFA of Russia on the US Department of State's Annual Report on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments. Official website of the Ministry of Foreign Affairs of the Russian Federation. April 29, 2017. Available at: [http://www.mid.ru/foreign\\_policy/news/-/asset\\_publisher/cKNonkJE02Bw/content/id/2740264](http://www.mid.ru/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/2740264) (accessed on 12 June 2017).

and associations of many countries across the world. The INF Treaty signed thirty years ago served as a cornerstone and a starting point of the process of real nuclear disarmament.

If the Treaty collapses, the New START (signed in 2010) and subsequently the Comprehensive Nuclear Test Ban Treaty (CTBT)<sup>6</sup> of 1996 would probably also head to the dustbin of history. That would be followed by a de-facto, if not a de-jure, collapse of the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

The world would face a new offensive nuclear arms race, and it will be supplemented by competition in offensive and defensive strategic non-nuclear arms, and the development of space weapons and cyber warfare. What is more, this multi-channel arms race would become multilateral and involve, in addition to the United States and Russia, China, NATO countries, India and Pakistan, Israel and North Korea. The proliferation of nuclear weapons that would be inevitable in this case, would take place mainly in the vicinity of Russia's borders (Iran, Turkey, Egypt, Saudi Arabia, South Korea and Japan).

As the United States and Russia have completely ceased their cooperation in ensuring safety and security of nuclear materials in recent years, terrorists would sooner or later but inevitably gain access to nuclear weapons. Because Russia has taken the lead recently in combating terrorism, it may become a prime target for their revenge, especially in view of its vulnerable geopolitical situation and porous southern borders.

There is no doubting such a prospect would have provoked extreme concern in the Soviet Union and produced active counter-measures. What is astonishing is that the current "resurgent" state-capitalist Russia seems undaunted by those foreseeable risks. Apparently, the new American Republican administration is neither worried about that, as it has ambitious plans of upgrading the United States' nuclear arsenal, missile defense and long-range high-precision non-nuclear weapons.

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<sup>6</sup> This Treaty was signed, is de-facto observed and its implementation is verified, yet it has not entered into force so far due to the fact that the United States and a number of other states are still to ratify it.

## Motives for withdrawing from the Treaty

The INF Treaty was agreed after five years of difficult and interrupted negotiations, and has unlimited duration. It envisaged an unprecedented regime of monitoring of the testing, production, deployment, transportation and elimination of the addressed nuclear weapons. The Treaty was implemented as scheduled, yet twenty years after it was signed, in 2006-2007 Russian political and military leadership and experts started talking about Russia's possible withdrawing from the Treaty. At that point Russia did not make this step, but after a few years' pause, in 2013 the issue was raised again at high level and has been actively discussed ever since.

Indeed, under Article XV.2 the Treaty does provide for the right to withdraw from it if a party decides that "extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests" and gives notice of its decision to the other Party six months prior to withdrawal. However, strange as it may seem, Russia's position on such important matter as identifying these "extraordinary events" has been plainly inconsistent.

First and foremost, the Treaty has been criticized for having eliminated over two times more Soviet missiles than American ones (1836 and 859, respectively) and about three times more Soviet nuclear warheads on such delivery vehicles. This ratio still causes indignation of many Russian experts, both military and civilian. Yet strategically the USSR gained qualitative advantage, as the Treaty has essentially eliminated the element of the US strategic nuclear threat for it. As for the United States, the Treaty eliminated no threats for its territory.

What is more, the United States' Pershing II missiles had short flight time (6-7 minutes) and were able to destroy highly protected underground command posts of the USSR leadership. It was for this reason why Moscow insisted on the elimination of all American missiles, rather than limiting their quantity. As a result, the Soviet Union had to consent to the elimination of all of its arms of the matching class on a



global scale (an option dubbed "double global zero"). Despite the previous assurances of the Soviet Ministry of Defense that the two countries had parity, the USSR had much more weapons of this class than the United States did.

Another issue was raised by President Vladimir Putin in his remarks in Munich in 2007. He referred to the development of intermediate-range missiles by a number of third countries, while only the United States and Russia were prohibited to possess this class of weapons.<sup>7</sup> This was also repeatedly mentioned by the then Minister of Defense Sergey Ivanov who after 2012 raised the issue of Russia's withdrawal from the Treaty as a head of the presidential administration. In other words, they apparently viewed the United States and Russia as sort of "fellows in misery" although no intermediate-range missiles posed threat to the United States' territory.

However, in 2007 then Head of the General Staff Yuri Baluyevski cited the US plans to deploy missile defense in Poland and the Czech Republic by 2012 as a motive for possible Russia's withdrawal from the INF Treaty.<sup>8</sup> This implied that Russia needed intermediate-range missiles as a weapon against the United States and NATO rather than as a means of deterring third countries.

After that Obama administration came to power and in 2009 repealed its Republican predecessors' program to replace it with the European Phased Adaptive Approach (EPAA) for deploying missile defense. In 2013, President Obama cancelled Phase Four of this program that concerned Russia most.<sup>9</sup>

Nevertheless, Moscow found this concession insufficient. The necessity to counter the United States' missile defense is still cited as one of the reasons for Russia to acquire intermediate-range missiles and

<sup>7</sup> Speech and the Following Discussion at the Munich Conference on Security Policy...

<sup>8</sup> See: Safranchuk I. Confusion of military and diplomatic azimuths // *Nezavisimaya gazeta*. 2007. 26 February. Available at: [http://www.ng.ru/politics/2007-02-26/3\\_kartblansh.html](http://www.ng.ru/politics/2007-02-26/3_kartblansh.html) (accessed on 12 June 2017); and Litovkin D. Adequate Iskander...

<sup>9</sup> Phase Four envisaged the deployment of the advanced modification of SM-3 Block IIB missiles with increased velocity and range capability on ships and land bases in Eastern Europe, which could, in theory, intercept some of Russian intercontinental missiles.

withdraw from the INF Treaty. In particular, options involving the deployment of Iskander (NATO name — SS-26 Stone) ground-based tactical missile systems carrying cruise missiles with an increased range capability (in excess of 500 km) were discussed.<sup>10</sup>

Additionally, among experts such a move is substantiated by the need to repel American air-launched and sea-launched cruise missiles.<sup>11</sup> Finally, withdrawing from the INF Treaty is suggested as a response by those who argue that the United States has technically breached the Treaty using partially similar missiles as targets when testing missile defense systems.<sup>12</sup>

Thus, such a serious step is substantiated by a number of reasons completely unrelated to one another. The suspicion involuntarily arises that none of this really provides reasons so much as an excuse to denounce the Treaty for altogether different purposes which one can only guess at. Nevertheless, for the sake of proper analysis, let us examine the postulates advanced.

## Threat posed by third countries

At present, there are seven states that possess intermediate-range ground-launched ballistic missiles (the INF Treaty defines them as missiles with a range of 1000-5500 km). Those are China, India, Israel, DPRK, Pakistan, Iran, and Saudi Arabia. The United Kingdom and France have no missiles of this type. The Treaty also prohibits tactical missiles (with a range of 500 to 1000 km) which make part of the arsenals of the following countries (in addition to the seven countries mentioned above): Egypt, Syria, Libya, Yemen, Turkey, South Korea. Earlier this list had also included Brazil, Argentina, South Africa and Iraq.<sup>13</sup> Geographically,

10 Kotenok Yu. Russia will perforate the missile defense system. *Utro.ru*. June 4, 2007. Available at: <https://www.utro.ru/articles/2007/06/04/652965.shtml> (accessed on 12 June 2017); Myasnikov V. Full steam backwards // *Nezavisimoye voyennoye obozreniye*. 2007. 23 November. Available at: [http://nvo.ng.ru/forces/2007-11-23/3\\_nazad.html](http://nvo.ng.ru/forces/2007-11-23/3_nazad.html) (accessed on 12 June 2017).

11 Shirokorad A. To return and to turn back are not the same...

12 Vildanov M. Better sweep your own porch clean first... // *Nezavisimoye voyennoye obozreniye*. 2013. 19-25 July. Available at: [http://nvo.ng.ru/concepts/2013-07-19/1\\_rsvn\\_snv.html](http://nvo.ng.ru/concepts/2013-07-19/1_rsvn_snv.html) (accessed on 12 June 2017).

13 See: Mizin V. Missiles and missile technologies. In *Nuclear Arms after the Cold War*, ed. by A. Arba-

Russian territory is located within the reach of intermediate-range missiles of all the seven countries possessing such missiles (with China, India, Israel, and Pakistan possessing nuclear weapons to arm such missiles), and for some of them (China and DPRK) even shorter-range missiles would be enough to destroy targets in the areas along the national borders of Russia.

In 2007 in the United Nations, Russia and the United States co-sponsored an initiative to universalize the INF Treaty through the accession to it of the third countries possessing intermediate-range missiles. Expectably, this proposal was taken as a pure promotional stunt and was rejected by the states concerned. At that moment, the share of those countries in the global stockpile of nuclear warheads stood at about 4%, and in case their intermediate-range missiles were eliminated, this share would decrease to 3%.<sup>14</sup> Moreover they would lose major parts of their nuclear capability while the strategic and tactical nuclear missile capabilities of the two superpowers (that is, their missiles with ranges of up to 500 km and in excess of 5500 km) would remain intact, not to mention the latter two countries' heavy bombers.

As the initiative put forward at the UN failed, Russia's acquisition of intermediate-range missiles (and the withdrawal from the INF Treaty) could seem a logical response to the mentioned threat. Nevertheless, however simple and attractive this mechanistic approach may seem, it can hardly stand up to the test of thorough strategic analysis.

To begin with, the states that possess this class of weapons do not actually target Russia. China is Russia's strategic partner and, unlike the United States, is not mentioned in any official documents as a potential threat to Russia and a subject for its deterrence strategy. This is even truer of India that intends its missiles as a means of deterring PRC and Pakistan, and by no means Russia. Pakistan's missiles are targeted exclusively against India, while Israel's ones are aimed against

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tov, V. Dvorkin. Moscow: Moscow Carnegie Moscow Center, Rosspen, 2006. Pp. 274-277.

14 Kile S.N., Fedchenko V., Kristensen H.M. World Nuclear Forces, 2006. In SIPRI Yearbook 2006: Armaments, Disarmament and International Security. Oxford: Oxford University Press, 2006. Pp. 639-668.

Iran and Israel's adversaries in Arab states. The DPRK attempts to use its missiles to threaten the United States' military bases and the US allies such as South Korea and Japan. Saudi Arabia and Iran so far possess no nuclear weapons, but aim their missiles against each other and Israel.

It is often said that political intentions may change (this mostly refers to China, and sometimes to Pakistan, Iran and DPRK as well), but missiles remain. This is true, however it can hardly be expected that the mentioned countries become allied to the United States and start threatening Russia. Hence, Russia's deterrent against the United States is more than enough to deter all the third countries separately and jointly.

Calls for Russia to enter competition with all such countries in intermediate-range and shorter-range missiles is a misconception, and a very expensive one. The weapons that Russia has today would be enough to negate possible threats posed by the third countries. These weapons include intercontinental ballistic missiles (ICBMs) the range of which can be diminished to intermediate scale, medium and heavy bombers carrying both nuclear and conventional bombs and cruise missiles. Russia can also use tactical attack aircraft armed with nuclear bombs, ground-based tactical missile systems, and tactical missiles on ships and submarines armed with both nuclear and conventional warheads, against some of the countries that are located closest to it.

At present, Russia has a total of 520 strategic missiles and bombers and over 2000 nuclear warheads (based on the number of warheads that the bombers can actually carry)<sup>15</sup> almost all of which can be targeted (or re-targeted) at objects in Eurasia. The data on Russia's non-strategic nuclear weapons (medium-range aircraft, and tactical aircraft and missiles) is classified, yet the majority of unofficial assessments

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<sup>15</sup> Each heavy bomber of the two powers can carry up to 16 nuclear-armed cruise missiles or bombs, yet under the 2010 New START Treaty each of them is counted as one delivery vehicle and one warhead.

agree on a number of 2000 nuclear warheads,<sup>16</sup> most of which can also be used against the targets in the vicinity of Russia's borders.

In general, the nuclear forces of the Russian Federation are 4 to 5 times stronger in terms of quantity of warheads (not to mention the quality of weapon systems) than the nuclear forces of the other seven states possessing nuclear weapons (with the exception of the United States). If all this power is not enough to deter the third countries, the deployment of additional intermediate-range missiles through withdrawing from the INF Treaty would not make things better.

## **Confronting the United States**

Some experts point to the growing threat from the United States, mostly in the form of wide deployment of conventionally armed sea- and air-launched precision cruise missiles – of which there are more than 7000. Yet again, this is the sort of argument pitched for emotional effect that will not stand up to strategic analysis.

In the first place, firing such weapons at Russia – a nuclear superpower – would be a hideously reckless gamble with immense risk of nuclear retaliation, as the Russian Military Doctrine makes unequivocally clear. What could possibly persuade the United States to engage in such madness, knowingly hobbling themselves by not using nuclear weapons which would be so infinitely more effective in wielding a disabling blow? The United States is not even going to launch their thousands of cruise missiles at North Korea with its 19-20 nuclear weapons which cannot reach the US territory. Despite all their threats in the past, the United States never even opted for such an operation against Iran, which is without nuclear arms or intercontinental delivery vehicles.

In the second place, if we are seriously concerned about sea-launched and air-launched US cruise missiles, how do we expect the new Russian intermediate-range missiles that INF treaty opponents are

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16 Diakov A., Miasnikov E., Kadyshchev T. Non-Strategic Nuclear Weapons: Problems of the Control and Reduction. *Dolgoprudny*, 2004; Sivkov V. Disarmed and extremely dangerous // *Voyenno-promyshlennyy kur'yer*. 2017. 22-28 March. Available at: <http://vpk-news.ru/articles/35718> (accessed on 13 June 2017).



calling for to help? Such missiles would be useless against cruise missile delivery vehicles launched from submarines or heavy bombers.

Russia already has diverse surface-launched, sea- and air-launched anti-ship missiles,<sup>17</sup> as well as long-range Kalibr cruise missiles (conventionally-armed or nuclear-armed) to strike at the US Navy's surface launch platforms and aircraft carriers in the Black Sea, Baltic Sea, Mediterranean, North Atlantic, Arctic or in Western Pacific. (According to Russian Defense Minister Sergei Shoigu, Russian cruise missile holdings are set to quadruple by 2021).<sup>18</sup> In addition, to further stave off any such missile attack, Russia is developing aerospace defense systems costing about 4.6 trillion rubles (or \$80 billion), which represents 20% of the entire State Armaments Program through to 2020 (SAP 2020).<sup>19</sup>

## Responding to missile defense

Due to both the number of planned interceptors and their range, velocity and other specifications the deployment of missile defense under the European Phased Adaptive Approach would hardly affect Russia's strategic nuclear deterrent. Those who argue that the SM-3 missiles pose threat<sup>20</sup> to Russia, for some reason overlook the fact that this missile has never been tested to intercept ballistic missiles at the boost stage of their flight, and that BMD tracking systems and sensors<sup>21</sup> were not designed to perform such tasks. This threat is even lesser after

17 These include Utyes, Bastion, and Bal surface-based missile systems, the older sea-based Granit and Bazalt missiles, the latest Kalibr systems, supersonic Onyx and hypersonic Zirconii, and air-to-sea X-31, X-35, X-38, and X-41 missiles. See: Ramm A., Korniyev D. Zircon: five Machs from target // *Voyenno-promyshlennyy kur'yer*. 2016. 30 March. Available at: <http://vpk-news.ru/articles/29966> (accessed on 13 June 2017); Cherkasov S. A PACKaged secret // *Voyenno-promyshlennyy kur'yer*. 2017. 19 April. Available at: <http://vpk-news.ru/articles/36291> (accessed on 13 June 2017).

18 Shoigu described how the Russian Army is to develop (from now) to 2021 // *Komsomolskaya Pravda*. 2017. 12 January. Available at: <http://www.kp.ru/daily/26629/3647870/> (accessed on 13 June 2017).

19 One out of every five rubles goes to aerospace defense // *Voyenno-promyshlennyy kur'yer*. 2012. 21 February. Available at: <http://www.vpk-news.ru/news/403> (accessed on 13 June 2017).

20 US Missile Defense System disbalances deterrent forces. Official website of the Ministry of Defense of the Russian Federation. April 26, 2017. Available at: [http://eng.mil.ru/en/news\\_page/country/more.htm?id=12120786@egNews](http://eng.mil.ru/en/news_page/country/more.htm?id=12120786@egNews) (accessed on 13 June 2017).

21 In particular, the infra-red seeker of the kinetic warhead of the SM-3 missile can detect a nuclear warhead with low thermal emission in cold outer space at a distance of 200 km, but not the blast of the boost stage of ballistic missiles.

the cancellation of Phase Four of the EPAA envisaging the deployment of SM-3 Block IIB interceptors in Poland and on ships in northern seas. No missile defense system — which is the critical element of defense — would ever be deployed without extensive flight testing. All impartial assessments have demonstrated that the European missile defense cannot intercept Russian ICBMs either at boost stage of their flight or later. Indeed, President Putin also said that new Russian missiles can penetrate any United States' missile defense.<sup>22</sup>

If Russia withdraws from the 1987 INF Treaty and develops new intermediate-range missiles, those could in theory become a target for the United States' interceptors in Europe, yet in this case everything will depend on the ratio of the missiles numbers and their technical specifications. So far, Russia has nothing for NATO to intercept with its missile defense systems based in Romania and Poland deployed or to be deployed in 2016-2018 under Phase Three of EPAA. Therefore, withdrawal from the INF Treaty which would enable Russia to acquire new intermediate-range missiles does not correlate with the perceived threat posed by the US/NATO European Missile Defense.

As is often the case, the reasoning against the INF Treaty is extremely difficult to refute precisely due to its groundlessness. Russia's political elite and government institutions are obsessed with the idea that this agreement disadvantages Russia, and it is not easy to prove it wrong using rational strategic analysis. One must not discard the notion that behind this anti-INF barrage there are ulterior ideological or political motives. The Treaty is of enormous symbolic importance, having laid the foundation for a series of critical agreements on strategic and tactical nuclear arms reductions, as well as conventional arms and armed forces limitations. In effect, that process put a stop to the arms race and marked an end to the Cold War on the brink of the 1990's.

Today's Russia still keenly resents the way the Cold War came to a close, as people associate it in their mass consciousness with the fall of

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22 Speech at the opening ceremony of the ARMY-2015 International Military-Technical Forum. Official website of the President of Russia. June 16, 2015. Available at: <http://en.kremlin.ru/events/president/transcripts/49712> (accessed on 13 June 2017).

the military, economic, political, and ideological system and global empire that was the USSR, something Vladimir Putin chose to describe as "the greatest geopolitical tragedy of the twentieth century". The result was a US-dominated monopolar world for a decade, NATO's increasing encroachment on Russia's western borders, and the West's wanton use of military force in Europe (Yugoslavia) and around the world. The stance of Russia's ruling class on the INF Treaty betrays the acrimony that persists from that time, as well as the tendency to dismiss disarmament treaties as a means of maintaining national security.

Paradoxical as it may seem, it is not considerations of common security and reducing the threat of war through disarmament agreements, but the logic of confrontation with the United States and NATO that presently buttresses the INF Treaty most. To be precise, it is the fear of the latter gaining military advantage if the Treaty is denounced.

## **The military and political fall-out**

Although the INF Treaty is extensively criticized, in the current geopolitical realities it is much more important for Russia's security than it was thirty years ago. Proposals to denounce the INF Treaty and acquire intermediate-range missiles aimed against the United States and NATO are founded on the belief that their intentions threaten Russia. Yet such strategic logic implies that Russia should expect a response on their part. Responding to the deployment of Russian missiles currently prohibited by the Treaty, the United States would renew the deployment of its intermediate-range missiles, and instead of placing them in the Western Europe would do so in Poland, the Baltic States and Romania from where they could reach beyond the Ural Mountains. The US could resume Pershing II and ground-launched cruise missiles (GLCM) or develop advanced intermediate-range systems and deploy them in Europe, much to the glee of certain NATO newcomers.

That would make Moscow enhance the survivability of its nuclear forces and their command information systems at enormous cost. The completion of this task would be complicated due to the poor state of

Russia's economy: economic stagnation, reduction of the federal budget, including the expenses on national defense. Thirty years ago the USSR was ranked the second world economic power, in terms of GDP, despite the particulars of the Soviet economy; now, however, Russia's GDP rating is teetering somewhere between the first and second ten listings for the top economies on the planet.

Russia's withdrawal from the INF Treaty would unify NATO again, including on issues of increasing military expenses and coordinating the development of their offensive and defensive arms, including the considerable expansion of the missiles defense system.

In addition, the United States, the force behind deployment of the BMD system and thousands of cruise missiles, would remain on the other side of the ocean, outside of the range of the Russian IRMs, while the Germany, France and Italy, along with China, Japan, and other countries with which Russia aspires to have good relations, would find themselves in the potentially "punishing" line of fire. As "asymmetrical" responses go, that would be distinctly over the top.

Moscow's withdrawal from the INF Treaty would shift the blame on it, such that Russia would be branded as the chief opponent of nuclear disarmament, a popular cause throughout the world and all fora: e.g., the UN General Assembly, G-7 and G-20 summits, Russia-NATO and Russia-Europe meetings, the Shanghai Cooperation Organization, and BRICs, among others. CIS and CSTO allies are scarcely likely to follow Moscow any more this time than they did in 2007 or 2015, when Russia suspended its commitments under the CFE Treaty.

Those setbacks could never be compensated by investments to improve Russia's public image across the world. Indeed, the international community remembers and perceives the 1987 INF Treaty as a landmark and a token of the conclusive stage of the Cold War and transition to real nuclear disarmament. Hence, its renunciation would be understood as the revival of confrontation and arms race between the two great powers.

This would further undermine the Treaty on the Non-Proliferation of Nuclear Weapons (the NPT), as such step would be considered direct

breach of obligations on nuclear disarmament under its Article VI. The way the participants in the forthcoming 2020 NPT Review Conference would react to this development is easy to imagine.

The third nuclear-weapon states are most likely to regard such step of Russia's as a threat to their security and target part of their nuclear missiles at Russia in the context of expanding multilateral arms race. They would more strenuously oppose Russia's proposals to join nuclear disarmament process.

## **Ways to revive the Treaty**

Rather than exchanging fruitless accusations, the parties should develop additional verification measures in order to eliminate mutual suspicions. Obviously, this could be done only if Russia recognizes that the Treaty is essential for its security and gives up all ideologically-motivated and improvident visions of this instrument.

Moscow accuses Washington of using Hera ballistic missiles analogous to intermediate-range ballistic missiles for the testing of missile defense systems. Russia also considers as breach of the Treaty the United States' Predator and Reaper combat unmanned aerial vehicles (UAVs) with a range capability in excess of 500 km.

Yet what concerns Russia most, is the United States' missile defense bases deployed in Romania in 2016 and to be deployed in Poland in 2017 and allegedly equipped with the Mk-41 launchers installed on the US ships and capable of launching both Standard 3 interceptors and Tomahawk cruise missiles with a range of up to 2500 km. Russia cannot ensure, judging by outward appearance, that such launchers cannot be used for launching Tomahawk missiles and that such missiles cannot be secretly placed in the launchers instead of the Standard 3 interceptors which would turn sea-launched cruise missiles to ground-launched cruise missiles (GLCMs) prohibited under the Treaty. Indeed, the INF Treaty bans long-range cruise missile launchers, as well as the missiles themselves (Article IV, para. 1; Article V, para. 1; and Article VI, para. 2). This was the "grave violation" on the

part of the United States that Russia referred to in its official statement in 2017.<sup>23</sup>

The United States, in their turn, level accusations at Russia for testing and allegedly deploying the R-500 (SS-X-8 according to the NATO classification) and a new type of ground-launched cruise missile on mobile Iskander-M launchers with an alleged range in excess of 500 km, which is prohibited under the INF Treaty. Before that, it had raised the issue of the Rubezh ICBM (SS-27 Mod 3) that had been tested and deployed as intermediate-range missiles, according to the United States.

With good will of the parties this compliance issues could be resolved relatively easily through the establishment of task force of experts that would elaborate additional verification procedures. This option would also imply partial restoration of the Special Verification Commission initially designed precisely for that purpose; this Commission would adapt the verification mechanism established by the Treaty to the rapid development of military technologies that could not be anticipated thirty years ago.

As for Russia's concerns, the Treaty does allow the parties to use intermediate-range missiles as targets during the testing of missile defense systems (Article VII, para. 3, 11-13). To alleviate these concerns, relevant provisions should merely be specified as applied to the missiles that both parties use as targets while testing their defense systems, and quotas could be established for the quantity of such missiles and the number of their launches.

The definition of GLCMs contained in the Treaty can indeed be applied to long-range UAVs: "an unmanned, self-propelled vehicle that sustains flight through the use of aerodynamic lift over most of its flight path... that is a weapon-delivery vehicle" (Article II, para. 2). It is clear, however, that UAVs are controlled from the ground and return to the base; in this respect they are analogous to combat aircraft, rather than to cruise missiles — autonomously guided expendable weapon.

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23 Comment by the MFA of Russia on the US Department of State's Annual Report on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments...



Such systems are actively developed by the United States, Russia, and other countries, and can hardly be prohibited. In this case one should rather opt for amending the relevant article of the INF Treaty in order to eliminate the conflict between the legal norm and the new advanced equipment that the states will by no means forgo.

The issue of missile defense bases in Romania and Poland is more complicated, yet there are still ways of resolving it. For one, the parties could agree on externally observable technical differences of launchers that would make the placement of the Tomahawk cruise missiles in them impossible (as they are different from the Standard 3 interceptors in weight and size). As another possibility, the parties could agree on the right of Russia to conduct certain number of short-notice on-site inspections in order to ascertain that the launchers contain interceptors, and not GLCMs. Apparently this would require the consent of the missiles defense basing countries, which could hardly be attained without active pressure of Washington, since such inspection would give Moscow certain control over the European missile defense.

The United States' accusations levelled at Russia are also a major, yet surmountable obstacle. Whatever the real range variations of the Rubezh ICBM, there are no formal grounds for objecting to such missiles. They are intercontinental ballistic missiles and are counted and limited under the New START, rather than under the INF Treaty which defines the range capability of a missile as "the maximum range to which it has been tested" (Article VII.4).

Furthermore, similarly to inspections of missile defense bases in Romania and Poland, the parties could agree on equivalent verification procedures for the bases of Iskander missile launchers. Long-range cruise missiles have larger fuel tanks as compared to the missiles with a range below 500 km, and that could be controlled in order to confirm Russia's declarations related to the range of these weapons. Should this prove impossible for technical reasons, the experts could agree on other options.

Obviously, the controversies related to compliance with the INF Treaty are not merely technical issues. The major obstacles are of a political nature, including the current confrontational relations between the two states, domestic belligerence and specific problems related to the mentioned issues.

Almost nobody in the United States acknowledges that the deployment by the US of the missile defense in Eastern Europe breaches the Treaty. They only see it as Russia trying to grab at anything to fend off accusations against itself, accusations which are taken as gospel in the US (especially what with Russia's publicly skeptical stance on the INF Treaty). People of influence have no desire to reconcile differences with Moscow in any mutually acceptable way; rather they seek to exploit matters in a political campaign to discredit President Putin's leadership. The degree to which the new US administration is interested in the nuclear arms control as a whole and the INF Treaty in particular, has at best been uncertain so far.

In Russia, the proposed options would be fiercely resisted by the opponents of the INF Treaty and of the nuclear arms control in general. Instead of reviving the Treaty those would prefer to get rid of it by the hands of the United States or by decision of Moscow. They would be even more opposed to an INF Treaty that could somehow "legalize" the US missile defense system in Eastern Europe through procedures to verify that interceptor missiles and not GLCMs are deployed (as if that BMD would otherwise be eliminated).

An even fiercer opposition will be offered to any options involving either the inspections of or any technical limitations on Iskander missile launchers. The view from military authorities and their industrial subcontractors and political allies is clearly that Russia's security is better served through the extensive deployment of the Iskander system in variously modified form than by preserving the INF Treaty. The deployment of missile defense bases in Romania and Poland would be used as much as possible to undermine the INF Treaty arguing that even if the Treaty is formally preserved the United States would be able to secretly deploy

the prohibited offensive weapons (nuclear-armed) on the missile defense bases, while Russia will have no right to openly "adequately respond". A campaign to this end is already gaining momentum.<sup>24</sup>

## The lessons of history

Disarmament treaties are extremely hard to achieve and easy to break. However, if the current leaders of the two nuclear superpowers look at historical experience, they would see that withdrawing from treaties in this sphere has never strengthened the security of any state, but has always undermined it.

The collapse of the INF Treaty and subsequently of the whole nuclear arms control system would cause chaos to the detriment of the security of both superpowers and the world at large.

Take the US, when they claimed the nuclear threat from "rogue states", and pulled out of the ABM Treaty in 2002. Eighteen years later, in 2020, instead of the 100 interceptor missiles the Treaty would have permitted in North Dakota – which with current technology could have covered the entire north of the continent – they will get mere 44 ground-based interceptors in Alaska and California. Even if the Republican administration were to approve the deployment of a third missile defense site in the American northeast, the overall number of strategic interceptors would hardly exceed the ABM Treaty's ceiling. As to the ground- and sea-based SM-3s, the Parties would probably have been able to come to some agreement without contravening the ABM Treaty on the basis of the 1997 principles of agreement between Russia and the US for limitations on strategic and tactical BMDs (which, incidentally, the US rejected).<sup>25</sup>

<sup>24</sup> US Missile Defense System disbalances deterrent forces...

<sup>25</sup> Under this agreement, tactical BMDs (consistent with the ABM Treaty) have been tested against missile targets whose speed did not exceed 5 km/sec within a 3500 km range. Parties committed themselves to refrain in future from developing ground- and air-launched interceptor missiles with a speed exceeding 5.5 km/sec. or sea-launched interceptors with a speed over 4.5 km/sec. Indirectly then that could be considered the criterion for limiting tactical and strategic BMDs. See: SIPRI Yearbook 1998: Armaments, Disarmament and International Security. Oxford: Oxford University Press, 1998. Pp. 420-423.

On the whole, the sort of threats Washington cited in 2002 have only worsened over succeeding years. In 2003 North Korea withdrew from the NPT, and then in 2006 created its own nuclear weapons and has been testing long-range ballistic missiles. Iran consented to wind down its atomic energy program, not because of US missile defense systems, but for other reasons, though it continues to develop its missile capability. The world has seen an accelerated proliferation of nuclear materials and technology as well as missile systems. Following the New START Treaty in 2010, further strategic weapons talks with Russia hit an impasse, and Russia went on to implement a vast program to upgrade their nuclear missile arsenal. China is doing likewise.

That lesson demonstrates the futility of seeking strategic gains or demonstrating political assertiveness at the cost of wrecking international disarmament agreements. The collapse of the INF Treaty — which would be followed by that of the entire nuclear arms control system — threatens to bring chaos, which can only harm the two superpowers' security and that of the whole world.

After the change of government in Washington, only Russia — should it take the lead — will be able to ensure that the situation around the INF Treaty develops in a constructive way. This Treaty is pivotal both in itself and as a key component of the nuclear arms control system, and hence should be moved to the top of the bilateral US-Russian relations agenda and placed above the issues of Ukraine, Syria and other matters, however important those might be.

This is especially relevant taking in consideration that these issues would necessitate a lengthy and difficult dialogue, while saving the INF Treaty could be achieved relatively quickly if the two powers' leaders have the necessary political will. Such positive breakthrough would also facilitate advances in other spheres of preventing a new Cold War and next cycles of arms race.

## 5. A NEW START TREATY – AN ALTERNATIVE TO A NUCLEAR ARMS RACE

*Vladimir Dvorkin*<sup>1</sup>

The current crisis and stagnation in the field of nuclear arms control are unprecedented in their duration, especially if one considers that for almost half a century, from the 1960s onwards, business-like negotiations on limiting strategic weapons had continued apace, virtually uninterrupted. And the longer the crisis persists, the more often senior officials of leading countries use nuclear-laced rhetoric in their public statements.

In this context, it is quite possible that the Prague START Treaty, which entered into force in 2011, may become the last in the history of bilateral Soviet- and Russian-American relations.

According to this Treaty, in seven years after its ratification by the parties, the strategic nuclear weapons of Russia and the US should not exceed the threshold of 1550 warheads on deployed delivery vehicles, of which there cannot be more than 700. The aggregate number of deployed and non-deployed delivery vehicles on both sides may not exceed 800 units.

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However, preserving the principles of strategic stability in its original understanding is ensured first and foremost through strategic nuclear weapons treaty relations between the Russia and the US. They allow for a sustainable nuclear balance at an acceptable cost to national budgets as well as for receiving exhaustive information about the state and near-term prospects for modernization of the composition and principal specifications of strategic offensive arms (SOAs). This is accomplished by dozens of annual inspections on the ground and exchange of a considerable number of verifiable notifications about the state, transit movements, introduction of new and withdrawal of obsolete types of weaponry, as well as an exchange of telemetric data from missile launches.

Thus, for example, every year the parties to the Prague Treaty exchange 18 inspections with detailed examination and verification of silo and mobile launch facilities, submarine missile-carriers, long-range bombers and detailed notifications.

Past experience tells us that the absence of such information leads inevitably and logically to an exaggerated assessment of the opponent's forces and capabilities and that the consequence of this is an increase in the quantity and quality of one's own weaponry at a considerable additional expense. In management theory, this is linked to systems with positive feedback but where there is an inevitable loss of system stability. In other words, it spells a nuclear arms race.

In the absence of treaty-based information, a certain, albeit insignificant, amount of information may be gained by using national space intelligence sources, but this is really insufficient. For example, it is impossible to determine the real number of warheads on an ICBM or an SLBM, how many they have been designed and tested for. According to the current Treaty, four warheads may be installed on a Trident-II SLBM, but it is also possible to equip it, without monitoring, with eight enhanced capacity warheads or twelve low-powered warheads. All Minutemen-3 ICBMs can be fitted with three warheads each. This would have the effect of a twofold increase of the nuclear potential.



Similar measures can also be taken by the Russian Strategic Nuclear Forces (SNF).

It is believed that the main reason for the current predicament is the nadir that the Russian-US relations have reached since the end of the Cold War as a result of the situation in Ukraine, differences over how to settle the Syrian issue, sanctions and counter-sanctions and a number of other reasons.

The Russian leadership thinks that among the obstacles to new negotiations are the absence of multilateral treaty relations with all nuclear states to reduce their nuclear arms; the destabilizing influence of global and European BMD defense; the disarming potential of strategic non-nuclear high-precision weaponry, including Prompt Global Strike (PGS); the lack of a ban on space, ground, air, and sea-based weapon-systems for destroying objects in space and from space, and third-country nuclear weapons.

Significant negative impact on the prospects for new talks is exerted by reciprocal recriminations as to the fulfillment of conditions contained in the open-ended Intermediate-Range Nuclear Forces Treaty (INF).

## **The possibility of concluding multilateral agreements to limit nuclear weapons**

In 2012, then still a presidential candidate, Vladimir Putin stated: "As for further steps to consider in the field of nuclear weapons, these further steps must now be comprehensive in nature and all nuclear powers must be involved in this process. We cannot keep disarming in the context of other nuclear powers arming".<sup>2</sup>

One of Washington's proposals for further strategic offensive arms' reductions was made in January 2016, a stimulus for which may well have been, inter alia, a statement signed by world-famous political figures and

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2 Prime Minister Vladimir Putin Meets With Experts in Sarov to Discuss Global Threats to National Security, Strengthening Russia's Defenses and Enhancing the Combat Readiness of Its Armed Forces. Archive of the official website of the 2008-2012 Prime Minister of the Russian Federation Vladimir Putin. February 24, 2012. Available at: <http://archive.premier.gov.ru/eng/events/news/18248/> (accessed on 14 June 2017).

scientists, adopted at the joint conference of the International Luxembourg Forum on Preventing Nuclear Catastrophe and the US-based Nuclear Threat Initiative (NTI) in Washington in early December 2015.

In response to the proposal to reduce the SOAs of both the US and Russia by one third of the level set by the Prague Treaty, Moscow stated that once the conditions of the treaty had been complied with, opportunities for bilateral reductions of the nuclear arsenals of Russia and the US would be exhausted. Thus, the Russian leadership believes that other countries with nuclear capabilities should also join this disarmament process.

The traditional position of official representatives and experts from other nuclear states is based on the idea that multilateral nuclear arms agreements will be possible only once the arms' stockpiles in both Russia and the US become comparable with those of other nuclear powers as a result of further reductions. Moreover, the real numbers of Russian and US warheads on heavy bombers and non-strategic nuclear weapons must also be taken into account.

Such conditions will hardly be achieved in the foreseeable future: even if Russia and the US manage to start new talks on further reductions of their nuclear arsenals and overcome existing obstacles and differences, their maximum achievement would be limiting SOAs to a level of approximately 1000 warheads each. In addition, the prospects for limitations and monitoring of non-strategic nuclear weapons of both states would remain quite uncertain. But even if levelling-up of Russian and US nuclear weapons ceilings with those of other nuclear states were theoretically conceivable, the road to multilateral agreements would still be strewn with insurmountable difficulties in achieving verifiable limitations for the entirety of non-strategic and strategic arms, since the accumulated experience of strategic arms control is completely unsuitable for non-strategic nuclear arms.

If we disregard the INF Treaty, Russia/USSR and the US have always held negotiations on strategic arms and have never even started talks on limiting non-strategic nuclear arms because of the incredibly

complicated issue of how to verify compliance. The reason for this is that non-strategic arms delivery vehicles are dual-purpose, have a different profile and are based in a great number of different regions.

Moreover, all other nuclear states except the UK have in service both strategic and non-strategic nuclear weapons, so agreeing and implementing a reciprocal verification system is virtually impossible.

One only needs to know how the system works for the Prague START Treaty, under which the parties conduct up to 18 reciprocal inspections a year, to recognize that it would be impossible to reach agreement on such reciprocal verification. These inspections are divided into two types. The first one includes inspections to confirm data provided as to the quantity and types of deployed and non-deployed arms and the number of warheads on deployed ICBMs and SLBMs, as well as weapons on deployed heavy bombers. The second type of inspections are those carried out to verify data about the quantity, types and technical specifications of non-deployed arms, and factual evidence about re-equipping and disposal of arms. They also confirm that previously reported units or facilities are not being used for purposes which violate the Treaty provisions.

In addition, there are 42 types of reciprocal notifications relating to current original data as to the condition of strategic arms, their movements, inspection activities, as well as the exchange of telemetric information received from missile launches.

All this confirms the conclusion that holding verifiable multilateral talks on nuclear arms reduction are hardly possible. What does seem possible, however, is a step-by-step movement towards consultations on measures to limit nuclear armaments and provide for transparency.

As a first step along this road, the UK and France might use a limited part of the transparency system, similar to the one that Russia and the US set up under the START Treaty. These transparency measures can be accepted either unilaterally by each of these states or bilaterally. These could include notifications about the composition, numbers and types of nuclear weapons, planned changes to the composition and

numbers of deployed nuclear weapons, the location of nuclear arms production facilities, the commencement and completion of nuclear arms production, and other notifications previously used in agreements between Russia and the US. Such measures in no way affect the national security of the two nuclear states, whose nuclear policy and nuclear arms are fairly transparent.

We should not rule out that at a subsequent stage China – the most secretive of the five official members of the nuclear club when it comes to the status of its nuclear arms and development program – might possibly join in such arrangements. It would be advisable to hold consultations on such measures within the framework of the P-5 conference,<sup>3</sup> which has been in existence since 2009.

The above measures appear to be the maximum of what can be potentially achieved in the sphere of multilateral nuclear arms control, provided both Russia and the US undertake active efforts in this area.

## Missile defense

The perceptions of real capabilities and role of anti-ballistic missile defense (BMD) in the standoff between the two nuclear superpowers have undergone significant changes since the 1960s up to the present time due to local technological achievements, as well as unrealized hopes as to the inexhaustible capabilities of defense systems.

Without delving into the interesting and edifying history of the development of BMD programs and assessments of their capabilities, including the positive experience of cooperation between Russia and the US, it should be stressed that specialists and experts capable of carrying out the relevant calculations now have at their disposal fairly objective data as to these programs' real capability. The most general and concise conclusion is that a fairly robust BMD system is capable of intercepting single or group (i.e. several units) ballistic missile launches

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3 Consultations between the nuclear powers (P-5 states) commenced in 2007 with a discussion of whether it would be possible to secure their agreement on nuclear transparency and confidence building measures. In 2009, these consultations were upgraded to annual P-5 conferences.

equipped with the simplest means of overcoming ballistic missile defense, but it is completely incapable of diminishing the potential of the nuclear deterrence capability of either Russia or the US.

The documentation contained in the monograph entitled *Missile Defense: Confrontation or Cooperation?* covers fifty years of development and testing of various BMD systems in the USSR and the US, including the Strategic Defense Initiative (SDI). It convincingly demonstrates the impossibility of creating a missile defense of any density that would be capable of defending a country from a retaliatory strike by hundreds of warheads.<sup>4</sup> As of today, any specialist able to carry out the relevant calculations would concur with this conclusion.

Speaking at the Army Forum in September 2015, Vladimir Putin stated that: "This year we will supply more than 40 new intercontinental ballistic missiles to our nuclear force. They will be capable of overcoming any most technically advanced anti-missile defense systems."<sup>5</sup> It is important to note at this juncture that these 40 missiles are new only inasmuch as they are standard off-the-shelf lots of the Yars, Bulava and other similar missiles, which are already in service with the Strategic Nuclear Forces (SNF). In addition, as specialists well know, the other missiles which the SNF are equipped with – Sineva, Voyevoda, and Topol-M – possess effective strike capability against much more numerous and rigorous missile defense systems than the one that the US is planning to deploy.

Requirements for strategic arms included strict requirements for the systems able to override missile defenses. Their implementation is verified and confirmed in the course of testing conducted by the government. At present, the views about the prospective US BMD differ from those developed for the SDI program. But the technological advances already made in developing BMD counter-systems provide the

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4 See: *Missile Defense: Confrontation or Cooperation?*, ed. by A. Arbatov, V. Dvorkin. Moscow: ROSSPEN, 2012.

5 Speech at the ceremony opening ARMY-2015 International Military-Technical Forum. Official website of the President of Russia. June 16, 2015. Available at: <http://en.kremlin.ru/events/president/transcripts/49712> (accessed on 14 June 2017).

most cogent argument for excluding BMD from the list of destabilizing factors to the strategic balance between Russia and the US.

Nevertheless, the BMD issue might well be a long-term obstacle on the road to further SOA reductions by Russia and the US, and not only because of the current confrontational relations, but by virtue of the US tactics of unilateral actions. Despite the 2002 US-Russia Joint Declaration on New Strategic Relations and Partnership, which has a special section on BMD, the US undertook unilateral steps to deploy anti-missile facilities in Europe. As Vladimir Putin said, "We have repeatedly expressed our concerns, offered cooperation, proposed working with our American partners – but everything has, in fact, been rejected. What they are suggesting is not joint work, but talks on a given topic. No specific proposals; everything is done unilaterally, without taking into account our concerns. This is unfortunate".<sup>6</sup>

## **The possibility of disarming non-nuclear strategic strikes**

In a speech at the Valdai Forum Vladimir Putin said: "The concept of a so-called disarming first-strike has already emerged, including the use of high-precision long-range non-nuclear means, which are comparable to nuclear weapons in their effect".<sup>7</sup> A year earlier, he essentially said the same in the context of the prospects for reducing nuclear weapons: "We insist on continuing talks, we are not just in favor of talks, we insist on continuing negotiations on reducing nuclear arsenals... Currently, in terms of their capability, many types of high-precision weaponry already approximate weapons of mass destruction, and if we abandon, completely abandon, nuclear capability or accept a critical reduction of its size, then the countries spearheading the development and production of high-precision systems will obtain an obvious military advantage".<sup>8</sup>

6 Meeting on defense industry development. Official website of the President of Russia. May 13, 2016. Available at: <http://en.kremlin.ru/events/president/news/51911> (accessed on 14 June 2017).

7 Meeting of the Valdai International Discussion Club. October 22, 2015. Available at: <http://www.kremlin.ru/events/president/news/50548> (accessed on 14 June 2017).

8 Putin, RF insists on negotiations to reduce nuclear arsenals. RIA Novosti. October 24, 2014. Available



The threat of a disarming strike by high-precision non-nuclear strategic systems is occasionally discussed by Russian and American experts and government officials. For example, an article by Russian military scholars which appeared in *The Military-Industrial Courier* [Voyenno-promyshlennyy kur'yer],<sup>9</sup> gave detailed calculations demonstrating the impossibility of a simultaneous strike by high-precision cruise missiles even at a single specific Russian Strategic Nuclear Forces' positioning area in the European Russia, given the target size and geometry, as well as an assessment of the number of cruise missiles required to reliably wipe out a single highly-protected facility – a launcher silo or a command post – depending on the precision of where they strike.

The authors confirm the impossibility of first-strike elimination of a part of the Russian Strategic Nuclear Forces by high-precision means without recourse to nuclear weapons, since the killing capacity of nuclear and non-nuclear weapons in a strike against highly-protected single-point facilities is incomparable, thus such a strike would necessitate the use of an exceptionally large number of non-nuclear weapons. In reality, the requirements for more fire power increases because of the existing capabilities to counter high-precision targeting systems.

Planning a simultaneous strike of this nature on several hundred targets located throughout the vast Russian territory is extraordinarily complex; the operation would require a lengthy period of preparations and the formation of an adequate force grouping. It would be impossible to conceal such preparations, and Russia would have enough time to place its nuclear forces on high alert.

For these reasons, it would be mistaken to presume that the Pentagon would plan not only an absolutely useless non-nuclear disarming strike on Russia's Strategic Nuclear Forces, but also risk the catastrophic consequences of a retaliatory nuclear strike. The same is true of speculations that the US could use costly hypersonic means (at

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at: <http://ria.ru/world/20141024/1029925195.html> (accessed on 14 June 2017).

9 Akhmerov D., Akhmerov E., Valeyev M. A quick fix will not work // *Voyenno-promyshlennyy kur'yer*. 2015. 21 October.

present under development), which will be procured only in limited quantities, to launch a disarming strike. For all intents and purposes, hypersonic weapons will be set aside for rapid strikes on individual, particularly dangerous targets that can be quickly relocated.<sup>10</sup> For this type of a mission, there is no need for mass deployment of such weapons.

## **Weaponization of outer space**

A ban on a militarization of space has been discussed for many years now. However, concluding a verifiable agreement in this sphere with dozens of different countries is extremely complicated. Russia and China's draft agreement to this effect was not endorsed in the UN. Equally unsuccessful was the attempt to agree on a Code of Conduct for States in Outer Space. Perhaps, firstly, the issue is not perceived as being sufficiently urgent, inasmuch as the leading countries have no current plans to place arms in space. Secondly, it is not enough to simply ban deployment of weapons in outer space. What is needed is a ban on testing and deploying ground, air and sea weapons which are capable of destroying outer space facilities, as well as a ban on destroying facilities on the ground, in the air and at sea by weapons based in outer space.

However, the already existing BMD systems and the systems being developed at the moment are already capable of destroying objects at low orbits in outer space. Therefore, we need special mutually agreed protocols allowing for the destruction of objects in outer space which might represent a real threat were they to fall to Earth.

It is rather complicated to draft and agree on such arrangements, but it is equally ill-advised to refuse to address the problem.

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Thus, independent specialists believe that the factors seen as impediments to beginning new negotiations between Russia and the US

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<sup>10</sup> Ibid.

on further reductions of strategic nuclear weapons – the nuclear arms of other countries; the European and global American BMD; the hypothetical possibility of a disarming strike using strategic non-nuclear arms – cannot be seen as destabilizing or as capable of impacting the stable nuclear balance between the two countries, i.e. the strategic stability.

Furthermore, the reduction of SOAs by Russia and the US under the new treaty to approximately 1,000 warheads and 500 deployed delivery vehicles each allows for preserving a stable nuclear balance with significant cost savings if compared to the expense of maintaining the arms levels as defined in the Prague Treaty. It is advisable in the present confrontational environment to restore trust between Moscow and Washington in the interests of strengthening strategic stability and nuclear non-proliferation regime.

## 6. CAN THE UNITED STATES AND RUSSIA REACH A JOINT UNDERSTANDING OF THE COMPONENTS, PROSPECTS AND POSSIBILITIES OF STRATEGIC STABILITY?<sup>1</sup>

*Linton Brooks*<sup>2</sup>

In only slightly more time than it will take to read this essay, the United States and the Russian Federation can destroy each other as functioning societies no matter who attacks first. This condition of Mutual Assured Destruction makes deliberate nuclear war irrational. Because neither side can be certain of controlling escalation (especially once the nuclear threshold is crossed), conventional war between nuclear states is also too risky to contemplate.

For over four decades Mutual Assured Destruction played a major role in preventing war between the United States and the Soviet Union. Despite this, it remains a frightening and unsatisfactory concept. As a result, especially since the Cold War ended, experts have sought a way to move beyond basing their security on the ability to destroy one

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1 While this paper is based on my experience both within government and in unofficial dialogue, these are personal views and do not necessarily reflect the official position of the US government or any organization with which I am affiliated. The conceptual portions of this paper draw heavily on "US Perceptions of Sino-American Strategic Stability," a background paper prepared for a May 2017 workshop US-China Strategic Stability and Japan sponsored by the Carnegie Endowment for International Peace. See also "Arms Control, Strategic Stability and the Future," presented to the Luxembourg Forum in January 2016. I am grateful to Elbridge (Bridge) Colby, John Harvey, Micah Lowenthal, Mira Rapp-Hooper, James Schoff, Brad Roberts and Heather Williams for comments on those earlier papers and, in the case of Brad Roberts, for allowing me to participate in a series of workshops on stability which have helped shape my thinking. I alone am responsible for the use I have made of their insights.

2 Linton Brooks — Member of the International Advisory Committee of the International Luxembourg Forum on Preventing Nuclear Catastrophe; Non-resident Senior Adviser at the Center for Strategic and International Studies; Ambassador (USA).

another. They have not found one. There have been good ideas to reduce tensions, but no way to overcome the underlying reality. That is because Mutual Assured Destruction is not a policy to be embraced or rejected but a fact to be accepted and managed.

In managing a relationship characterized by the reciprocal ability to inflict devastation, both Russia and the United States have found the concept of strategic stability to be central to preventing war. Strategic stability implies creating a world where there is no structural incentive to be the first to use force or the first to use nuclear weapons and where building more or different weapons cannot change the situation. Both Russia and the United States accept the concept of strategic stability but their understanding of the details is not totally consistent. This essay presents an American view of the differing perspectives between the two states, of the objective challenges to improved strategic stability and of the prospects for narrowing those differences, thus reducing the prospects of war and enhancing the security of both countries.

## **The evolution of the concept of strategic stability**

US concepts of strategic stability were developed throughout the Cold War. Soviet acceptance of those concepts took longer and the two sides never fully understood each other's thinking. Still, by the end of the Cold War, analysts in both the Soviet Union and the United States had a similar, clear understanding of the basic premises of strategic stability and of the importance of those principles in avoiding catastrophe. They understood that the concept was primarily bilateral and was primarily about preventing nuclear war. To foster such stability, the two superpowers sought policies, forces, and postures that met three criteria:

- In time of great crisis, there is no incentive to be the first to use military force of any type, nuclear or otherwise ("crisis stability").
- In crisis or conventional conflict, there is no incentive to be the first to use nuclear weapons ("first strike stability").
- Neither side believes it can improve its relative position by building more weapons ("arms race stability").

Because the goal of strategic stability is the prevention of war, especially nuclear war, it is important to recognize that any criteria are irrelevant unless there is at least some possibility of conflict between two states. Such states need not be enemies or even adversaries, but there must be some plausible path to war. Thus, it makes little sense to speak of strategic stability between the United States and the United Kingdom or between Russia and India. Strategic stability exists when war is possible but made significantly less likely by the policies, forces, and postures the two sides adopt.<sup>3</sup> It is also important to remember that strategic stability is a two-player game; no single state can ensure stability.

Cold War strategic stability between the United States and the Soviet Union rested upon the back of mutual assured destruction. Because each side maintained forces that could survive a first strike and inflict damage in retaliation that the attacker would find unacceptable, nuclear war became irrational. Each side worried about how many forces must survive and how much damage surviving forces needed to be able to inflict, but the basic notion that stability depended on the mutual ability to inflict unacceptable damage in retaliation became the operating premise of both states.<sup>4</sup> Since a major conventional war in Europe could have — and very probably would have — resulted in nuclear escalation, both sides also avoided direct conventional war.

Since the end of the Cold War, many analysts have broadened the term “strategic stability” to a significant degree. This broadening is useful, but in relations between nuclear states most US analysts assume that the Cold War definition of stability is still a central component of stability, although not necessarily sufficient.<sup>5</sup> At a minimum, ballistic missile

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3 Although strategic stability is best analyzed on a bilateral basis, because survivable second strike strategic forces are usually considered a requirement for strategic stability, the existence of such forces can simultaneously foster strategic stability with multiple potential adversaries.

4 The 1983 Strategic Defense Initiative of the Reagan administration (popularly referred to as “Star Wars”) sought to change the basis of stability through deploying highly effective national missile defense that would deny the attacker confidence of the effectiveness of an attack. This effort proved technically and financially difficult (some would say infeasible) and was abandoned when the Cold War ended.

5 For a discussion of the multiple options often considered within the US analytic community, see *Strategic Stability: Contending Interpretations*, ed. by E.A. Colby, M.S. Gerson. US Army



defenses play a different role than they did throughout most of the Cold War when stability was based, in part, on restricting such defenses under the ABM Treaty. With legal restraints on deployment removed, defenses must be regarded differently in assessing modern strategic stability.

In addition, most analysts assume that developments in space and, especially, cyberspace must be taken into account even under a narrow, Cold War-like definition of strategic stability. For example, cyber capabilities to interfere with nuclear command and control would obviously be hugely destabilizing, especially if the origin of such interference was uncertain. Similarly, interfering with space assets could be particularly destabilizing if it sought to interrupt command and control or to degrade early warning, increasing the risk that the aggressor might believe a disarming first strike could succeed. As major powers make increasing use of space, both space control and counter-space capabilities will take on increasing importance and there is also the possibility of a destabilizing arms race in space capabilities.

What has been described thus far is regarded by most American analysts and practitioners as a narrow definition of stability. While some find such a narrow definition adequate (and all find it useful in specific cases), many would expand it to place greater emphasis on conventional military operations and capabilities, especially as they relate to the nuclear balance. The logic is simple. Nuclear war will not happen in a vacuum but will almost certainly result from escalation of a conventional conflict. Stability therefor requires reducing the chance of such conflict. This leads to the broader definition that will be used in this paper, one adapted from Tom Fingar: "Strategic stability means a situation in which war of any kind between major powers (especially nuclear war) is unlikely and rule-based behavior is the norm."<sup>6</sup>

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War College. February 2013. Available at: <http://ssi.armywarcollege.edu/pdffiles/pub1144.pdf> (accessed 19 June 2017).

6 This paper omits discussion of rule-based behavior because US thinking (or at least the thinking of the present author) on this aspect of stability remains rudimentary. An example of a threat to stability from lack of rule-based behavior might be violation of arms control agreements. An example where stability is threatened by failure to agree on the rules might be the differing US and Russian views of when (or if) military force can legitimately be used without explicit United Nations Security Council authorization.

Both broad and narrow concepts have utility. The logic of expanding the concept of strategic stability to take greater account of conventional military operations is clear. Unfortunately, in practice such expansion can be conceptually difficult, because there is no obvious threshold below which conventional military operations need not be considered. This tends to weaken the coherence of the concept, and therefore makes agreement between two states and the implementation of agreed measures more challenging. Whatever definition is chosen, it is important to be clear about how the term is being used in any specific discussion. Otherwise it can lose all meaning and become simply a synonym for overall foreign and military policy.

A few analysts would further expand the concept to broader geopolitical issues. This may be particularly appropriate in the case of enduring suspicions that one country seeks to threaten another's existence or to bring about regime change. For example, one analysis conducted for the US Department of State concluded:

. . . . While acknowledging Russia's nuclear potential, until the Ukrainian crisis, almost no one in the US national security community viewed Russia as a significant military threat. In contrast, many Russians increasingly see US military and diplomatic actions as aimed at them. They believe US ballistic missile defense in Europe is designed to degrade Russian strategic retaliatory potential, that US precision strike capabilities are designed to allow a non-nuclear first strike on Russia, and, most recently, that the so-called "color revolutions" that brought democracy to Ukraine and Georgia were US inspired destabilizations. The clear implication is that these actions are a model for taking similar steps against Russia.<sup>7</sup>

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<sup>7</sup> Report on US-Russia Relations. US Department of State, International Security Advisory Board. December 9, 2014. Available at: <https://www.state.gov/documents/organization/235118.pdf> (accessed 19 June 2017). For examples, see speeches by Defense Minister Sergey Shoigu and Foreign Minister Sergey Lavrov at the Moscow Conference on International Security (May 23-24, 2014), sponsored by Russia's Defense Ministry. These speeches argue that color revolutions are a new form of warfare invented by Western governments seeking to remove independently minded national governments in favor of ones that are controlled by the West.

## Is strategic stability bilateral or multilateral?

Thus far, this essay has spoken of strategic stability in exclusively bilateral terms. It is common in the United States to call for developing a concept of "multilateral strategic stability." Despite frequent calls for such a generalized approach, no such approach has emerged and none is likely. As one recent government-sponsored report put it:

... standing alone, the phrase "multi-national strategic stability" is of limited value. The phrase implies that the stability of the international system can be described in an abstract and generalized manner independent of the specific context at issue. We disagree. In our view, multi-national strategic stability is largely the sum of stability between many pairs of nuclear weapons states.<sup>8</sup>

There is one important exception to this conclusion with respect to Russian-American strategic stability. US deployments of ballistic missile defense against threats to the US homeland from third countries present Russia with what has been called a security "trilemma" in which actions taken against one state (North Korea or Iran) are perceived as directed against a third state (Russia).<sup>9</sup> The implications of this "trilemma" are discussed below. In principle, regional defenses, such as the US Theater High Altitude Air Defense system (THAAD) or the Russian S-300 or S-400 systems should not pose a similar trilemma because they are not capable of dealing with strategic-range missiles.

Given the lack of an agreed definition, many analysts and government officials simply use the term "strategic stability" without definition based on an assumption that "we will know it when we see it." The Obama administration, for example, used the term extensively and made force structure decisions related to Russia based on a description of strategic stability

8 Report on the Nature of Multilateral Strategic Stability. US Department of State, International Security Advisory Board. April 27, 2016. Available at: <https://www.state.gov/documents/organization/257667.pdf> (accessed 19 June 2017).

9 The term and the concept come from Mira Rapp-Hooper. See Brooks L., Rapp-Hooper M. Extended Deterrence, Assurance, and Reassurance in the Pacific during the Second Nuclear Age. In *Strategic Asia 2013-14: Asia in the Second Nuclear Age*, ed. by A.J. Tellis, A.M. Denmark, T. Tanner. National Bureau of Asian Research. October 2013. Available at: [http://www.nbr.org/publications/element.aspx?id=706#.UnQUt\\_leZ8F](http://www.nbr.org/publications/element.aspx?id=706#.UnQUt_leZ8F) (accessed 19 June 2017).

as identical to an assured second-strike capability, but never formally defined or described the term as it applied to China.<sup>10</sup> A potentially attractive variant of the “we will know it when we see it” approach (although one which has gained few adherents) is to list characteristics that contribute to stability and use those characteristics as a guide to stable relations without necessarily seeking to define stability itself.<sup>11</sup>

## Arms control and strategic stability

Bilateral arms control can enhance strategic stability in at least three ways. First, the existence of formal arms control agreements demonstrates that each side takes the other seriously and recognizes that the strategic nuclear relationship between them is important. Such agreements also explicitly codify the equality of the two sides, providing clear and public acknowledgement that neither side seeks superiority over the other. They thus help avoid arms races.

Second, arms control treaties can encourage stabilizing force structures. New START,<sup>12</sup> for example, treats bombers (which are unsuitable for a first strike) more leniently than ballistic missiles. Earlier treaties have sought to shift forces away from fixed ICBMs carrying multiple warheads and toward sea-based, mobile or single-warhead missiles. Virtually all US analysts believe that in a crisis fixed ICBMs carrying multiple warheads are subject to pressures to “use or lose” and thus are particularly destabilizing.

Finally, formal treaties with their data exchanges and confirming inspections provide exceptional transparency. Transparency leads to predictability and predictability in turn enhances stability. For many American analysts, including the present writer, this enhanced predictability is the most important benefit of the New START Treaty.

10 Nuclear Posture Review Report. US Department of Defense. April 2010. P. 20. Available at: [https://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](https://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf) (accessed 19 June 2017).

11 For an example (in which the present author participated) see Report on the Nature of Multilateral Strategic Stability...

12 Formally the Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms. April 8, 2010. US Department of State. Available at: <https://www.state.gov/documents/organization/140035.pdf> (accessed 19 June 2017).

## Russian strategic stability perspectives as seen through American eyes

Like their American counterparts, Russian analysts and officials routinely speak of strategic stability. In many cases, however, they appear to define the term more broadly than American experts do. A striking example was a June 2016 joint statement issued jointly by Russian President Putin and Chinese President Xi Jinping during the former's visit to Beijing. After specifically criticizing ballistic missile defense and "long distance precision attack weapons," the joint statement provided the following expansive discussion of stability:

"Strategic stability" has been a military concept in nuclear weapon[s]... this conception is outdated and the international community should regard "strategic stability" from a wider angle.

In political field... all countries and groups of countries [should] abide by the principle on use of force and coercive measures stipulated by the UN Charter and international law, respect the legitimate rights and interests of all countries and... oppose interference in other countries' political affairs.

In military field, all countries should keep its military capability at the lowest level necessary to maintain its national security, refrain from moves that may be seen by other countries as threat to their national security and force them to take counter measures....

All countries should solve disputes through positive and constructive dialogue and promote mutual trust and cooperation....<sup>13</sup>

While not always as expansive as this political declaration, Russian experts always consider ballistic missile defense as a core element of strategic stability and almost always include discussion of long-range conventional precision strike (especially with cruise missiles), the potential for so called "space strike" weapons (a concern dating back to 1980s proposals for space-based ballistic missile defenses), NATO

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<sup>13</sup> China, Russia sign joint statement on strengthening global strategic stability // Xinhuanet. 2016. 25 June. Available at: [http://news.xinhuanet.com/english/2016-06/26/c\\_135466187.htm](http://news.xinhuanet.com/english/2016-06/26/c_135466187.htm) (accessed 19 June 2017).

expansion and Russian conventional inferiority. They sometimes also include as complicating factors hypersonic glide vehicles, anti-submarine warfare directed against ballistic missile submarines, the nuclear forces of the United Kingdom and France and nuclear terrorism. Unfortunately, on several of these issues, most notably precision conventional strike, there has been little detailed thinking within the US expert community. As a result, the two sides are largely talking past one another.

Despite significant disagreement on details, Russian and American experts at a minimum adhere to the principles of an agreed statement on strategic stability issued by the United States and the Soviet Union in 1990 and now largely forgotten in the United States. It reads:

The objectives... will be to reduce further the risk of outbreak of war, particularly nuclear war, and to ensure strategic stability, transparency and predictability.... by seeking agreements that improve survivability, remove incentives for a nuclear first strike and implement an appropriate relationship between strategic offenses and defenses.<sup>14</sup>

## **Alternate approaches to stability**

Strategic stability between Russia and the United States continues to rest on the foundation of mutual assured destruction. Because this appears inconsistent with the partnership that both sides sought to forge in the past (and that many still hope for, despite present political tensions), there have been efforts in both countries to find an alternate model for the nuclear relationship. In the United States, the concept of "mutual assured stability" was put forward as a possible model. A report by the State Department's International Security Advisory Board described the concept this way:

A relationship among nations... in which nuclear weapons are no longer a central feature for their security, deterrence based on nuclear

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<sup>14</sup> Soviet-United States Joint Statement on Future Negotiations on Nuclear and Space Arms and Further Enhancing Strategic Stability. June 1, 1990. Available at: <http://www.presidency.ucsb.edu/ws/?pid=18541> (accessed 19 June 2017).



destruction is no longer necessary, and the likelihood of nuclear war is treated as remote because their relationship is free of major, core security issues such as ideological, territorial, or natural resource competition issues, and the benefits from peaceful integration in economic, political, and diplomatic spheres provide a counterbalance to the perceived advantages of nuclear conflict.<sup>15</sup>

The Russian effort to find an alternate model that has received the greatest visibility in the West was proposed by Academician Alexey Arbatov and retired General-Major Vladimir Dvorkin in their 2006 book *Beyond Nuclear Deterrence: Transforming the US-Russian Equation*, where they call for moving beyond mutual assured destruction as a basis for the US-Russia relationship. Their plan is based on a three-step approach:

The first of the three avenues toward the end of nuclear deterrence is to "de-alert" and further reduce the Russian and American nuclear forces. The second is to develop and deploy a joint ballistic missile early warning system... The third is to develop and deploy joint [ballistic missile defense] systems. Initially, the second and third avenues would be limited to nuclear and missile proliferation threats, but eventually — in parallel with transformation of the nuclear forces of both sides — they would embrace a growing part of the strategic assets of the two powers... and would transform their present mutual nuclear deterrence into a qualitatively new type of strategic relationship.<sup>16</sup>

Neither the Russian nor the American approach has captured the imagination of governments and thus there has been no progress in transforming the relationship between the two states beyond one based in part on mutual assured destruction. This result was probably inevitable; as noted earlier mutual assured destruction is not a policy but a fact.

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15 Report on Mutual Assured Stability: Essential Components and Near Term Actions. US Department of State, International Security Advisory Board. August 14, 2012. Available at: <https://www.state.gov/documents/organization/196789.pdf> (accessed 19 June 2017).

16 Arbatov A., Dvorkin V. *Beyond Nuclear Deterrence: Transforming the US-Russian Equation*. Carnegie Endowment for International Peace. Washington DC, 2006.

## Challenges to Russian-American strategic stability

No matter how strategic stability is defined, it faces significant challenges, challenges that become greater in both numbers and importance the more one expands the meaning of strategic stability. Five are particularly worth discussing.

*Misunderstanding of each other's plans, intentions and actions.* In principle, the knowledge that both sides could be devastated by a nuclear exchange should be sufficient to ensure stability. It is not. That is because escalation can spin out of control as each side takes steps that are misinterpreted by the other. As a result, there is no concept of bilateral strategic stability that will be attainable if the two sides fundamentally misunderstand each other. Stability requires above all an understanding of how the United States and Russia each view the military dimension of their relations. It is widely believed among US experts that transparency must involve more than force structure. True strategic stability requires mutual understanding of doctrine, long-range plans and — above all — the approach to managing crises and controlling escalation. Current government-to-government discussions are not conducted in sufficient depth to lead to such understanding, especially with the curtailment of routine military-to-military contacts following the annexation of Crimea by the Russian Federation. In principle, Track 1.5 or Track 2 discussions could serve as a partial surrogate, but no suitable discussions are now in progress. As a result, should a crisis occur, each side may take steps it intends as demonstrating restraint and resolve but which the other side interprets as escalatory.

*National ballistic missile defense.* The United States has concluded that its security requires the ability to defend its homeland against ballistic missile attack from North Korea or Iran. It believes that effective defense against the relatively crude, first generation missiles of these two states is technically feasible and that US limited understanding of decision-making processes of these two governments makes it imprudent to depend entirely on threats of retaliation to counter threats to the US homeland.

In furtherance of this goal, the George W. Bush withdrew from the Anti-Ballistic Missile Treaty of 1972 (ABM Treaty) to deploy a national ballistic missile defense based in California and Alaska. The small size of the defenses (initially 30 interceptors but subsequently increased to 44) would have been consistent with the ABM Treaty but the national coverage would not. The Bush administration also planned a third national defense site in Poland. The Obama administration cancelled the planned European national ballistic missile defense site and instead established a plan to deploy less capable defenses in Europe to counter a potential Iranian nuclear missile threat to America's NATO allies. This new system was based on the US Navy's SM-3 system and was considered by the United States to be effective against intermediate range missiles only.

Russians interpret this deployment as aimed at them. Although the United States asserts such defenses will have no real capability against Russian strategic forces, Russian analysts and officials fear that such defenses threaten (and may be intended to threaten) its strategic deterrent. The 2010 *Nuclear Posture Review Report* and *Ballistic Missile Defense Review Report* were intended to make it clear that this was not the case. For example, page 13 of the *Ballistic Missile Defense Review Report* states:

...the homeland missile defense capabilities are focused on regional actors such as Iran and North Korea. While the [ground based missile defense] system would be employed to defend the United States against limited missile launches from any source, it does not have the capacity to cope with large scale Russian or Chinese missile attacks, and is not intended to affect the strategic balance with those countries.

These attempts at reassuring Russia have been spectacularly unsuccessful, as indicated by the 2015 comments of the president of the Russian Federation:

Recently the United States conducted the first test of the anti-missile defense system in Europe. What does this mean? It means we were right when we argued with our American partners. They were simply

trying yet again to mislead us.... To put it plainly, they were lying. It was not about the hypothetical Iranian threat, which never existed. It was about an attempt to destroy the strategic balance, to change the balance of forces in their favor not only to dominate, but to have the opportunity to dictate their will to all: to their geopolitical competition....<sup>17</sup>

National ballistic missile defense is likely to become more contentious because of recent changes to the Ballistic Missile Defense Act of 1999. Until recently, that act established that it "is the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against **limited ballistic missile attack** [emphasis added]...." In December 2016, Congress used the annual defense authorization law to revise the policy to read "to maintain and improve an effective, robust layered missile defense system capable of defending the territory of the United States, allies, deployed forces, and capabilities against the developing and increasingly complex ballistic missile threat...."<sup>18</sup> In the US system, annual authorization acts provide policy aspirations, not actual funding so it is uncertain how big a difference this action will actually make, but it is virtually certain to increase Russian concerns.

*Cybersecurity considerations.* During a crisis or low-level conflict both parties will seek information on what the other is planning, including by using cyber techniques to gather information. It will be important that these efforts not appear to be precursors to attempts to disable military command and control systems. Such actions would imply an imminent attack and could lead the other side to act preemptively. Especially destabilizing would be any indication that one side was seeking to interfere with nuclear command and control systems.

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17 Meeting of the Valdai International Discussion Club. October 22, 2015. Official website of the President of Russia. Available at: <http://en.kremlin.ru/events/president/news/50548> (accessed 19 June 2017).

18 National Defense Authorization Act for Fiscal Year 2017. Section 1681 amending Section 2 of the National Missile Defense Act of 1999 (Public Law 106-38). S. 2943-624. Available at: <https://www.congress.gov/114/bills/s2943/BILLS-114s2943enr.pdf> (accessed 19 June 2017).

Dealing with the strategic stability implications of cyber capabilities is hampered by at least three factors: the lack of a commonly accepted set of concepts — either within the United States or internationally — for thinking about the issue, the lack of accepted norms for conducting cyber operations (including how they relate to international law on armed conflict) and the absence of any sustained, detailed dialogue on these issues between the United States and Russia.<sup>19</sup>

*Space forces.* If Russian fears of US deployment of space-based weapons capable of striking strategic targets were to come to pass, the threat to strategic stability would be enormous. There is, however, no evidence that either side is pursuing such a capability. Unfortunately, that does not mean that there are no space-related challenges. As major states become more dependent on space assets there will be a rise in space control capabilities, including offensive counter-space capabilities. In some circumstances, there could be incentives for first use of such capabilities, leading to crisis instability. The situation is made more difficult by the lack of a well-developed theory of strategic stability in space and by the complete lack of dialogue on the subject between the United States and the Russian Federation.<sup>20</sup>

*Geopolitical issues.* Finally, in the coming decades, geo-political concerns could pose major challenges to strategic stability. As noted earlier, there appears to be a belief in Russia, including among some senior leaders, that the United States seeks a first strike capability in order to coerce Russia and is also actively seeking to change the current Russian government. US denials do not help because Russians do not believe them. Some US experts have concluded that the Russian government simply cannot be reassured. If these beliefs remain, nothing approaching stability, let alone partnership, will be sustainable over

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19 See McClintock B. Russian Cyber Operations: Four Realities, Two that Can Change. A paper prepared for the Aspen Congressional Affairs program and forthcoming at <https://www.aspeninstitute.org/programs/congressional-program/congressional-program-conference-papers/> (accessed 19 June 2017).

20 For some useful analysis on this issue (aimed at China but relevant to Russia as well) see MacDonald B.W., et al. Crisis Stability in Space: China and Other Challenges. Foreign Policy Institute. Washington DC, 2016.

the long-term. The consequences of this are unclear, but unlikely to be pleasant.

## **Prospects for the future and some possible actions**

It is important to distinguish between strategic stability as an internal analytic tool and strategic stability as a useful organizing principle for international communications. For the United States, strategic stability remains a vital principle for internal analysis. In conducting the 2010 Nuclear Posture Review, the lens of strategic stability was used extensively. It was cited as the basis for force posture decisions from retaining the strategic Triad (ICBMs, submarine-launched missiles and heavy bombers) to deploying all ICBMs with only a single warhead. The crisis component of strategic stability was used in rejecting suggestions for de-alerting, despite the president's pre-election interest in the concept. Such stability was an important — perhaps the most important — concept dominating the review. Strategic stability will almost certainly continue to be useful to both states in their internal analyses. Each will tailor the concept to suit their own needs and the lack of agreement on the meaning of strategic stability will be largely irrelevant.

In contrast to its utility as an analytic tool, using strategic stability as a structure for organizing discussion requires at least some agreement between the United States and Russia on a common understanding of what is included in the concept. In May 2017, US Secretary of State Tillerson and Russian Foreign Minister Lavrov agreed “to continue discussions to resolve other issues of bilateral concern, including strategic stability.”<sup>21</sup> Such discussions are welcome, but they need to be sustained and involve experts from both governments. Topics should not simply include the current concerns of both sides (although that is essential) but also long-term stability implications of space, cyber, precision strike, escalation and crisis management as well as the other challenges mentioned above.

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<sup>21</sup> Secretary Tillerson's Meeting With Russian Foreign Minister Sergey Lavrov. US Department of State. May 10, 2017. Available at: <https://www.state.gov/r/pa/prs/ps/2017/05/270780.htm> (accessed 19 June 2017).



Government to government (including military to military) discussions are essential but may not be enough. Current officials, especially senior ones, are often constrained from exploring viewpoints and approaches inconsistent with the current policies of their respective governments. Thus, official discussions should be supplemented by Track 1.5/Track 2 discussions between experts, including retired senior military officers. Because there is a strong probability that New START will expire in 2021 without replacement or extension, these discussions should include how to maintain transparency and predictability in the absence of formal arms control.

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There is not full agreement within the United States nor between US and Russian experts on a common definition of strategic stability. Yet there is clearly an objective reality buried in the definitional confusion. Analysts and officials from both countries should continue to work to understand stability even though no definition can fully capture the complexities of the continuously evolving relationship. Such discussions may help the United States and the Russian Federation both to understand one another's perspectives and to deal more effectively with conflict and crises should they occur. If so, it will be effort well spent.

## 7. THE BRITTLE NUCLEAR ORDER

*George Perkovich*<sup>1</sup>

There is something that we call a “nuclear order.” It has evolved since 1945 to shape and regulate how sensitive nuclear materials and technologies are managed, and how states and their leaders are expected to behave. Experts from different countries or political perspectives will inevitably and reasonably (?) argue about particular elements of this order and the relationships and dependencies among them. Which principles and obligations are more or less important than others? What factors best explain how the order has evolved? But the basic logic of the order runs something like this:

- Nuclear weapons are uniquely destructive.
- International well-being — economic development, security, peace — depends on preventing the spread and use of nuclear weapons.
- This requires avoidance of major conflict that could stimulate use of nuclear weapons.
- To the extent that deterrence is an important means of avoiding conflict, it must be carefully managed (which is easier to do with fewer nuclear-armed actors).

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<sup>1</sup> George Perkovich — Member of the International Advisory Committee of the International Luxembourg Forum on Preventing Nuclear Catastrophe; Vice President for Studies at the Carnegie Endowment for International Peace; Ph.D. (USA).

- The materials and activities that can produce nuclear weapons must be managed and controlled with extraordinary care.
- Proliferation of nuclear weapons can be exceptionally dangerous, especially if it occurs quickly and outpaces political processes to adapt to it.
- Civilian applications of nuclear capabilities — for energy, agriculture, medicine — can be invaluable for development.
- Thus, international security requires a nonproliferation regime to prevent or at least slow the potential spread of nuclear weapons, and to provide incentives for states and industrial enterprises to manage dual-use (civilian and military) capabilities transparently and according to rules.
- A rule-based system for managing nuclear capabilities will augment beneficial civilian applications because it will allay concerns about weapons proliferation.
- Over time, to maintain the motivation of nearly 200 states to preserve this order, the few that possess nuclear weapons must demonstrate a willingness to respect a global desire for equity and eliminate these weapons.

Again, each of these propositions and their relationships to each other can be debated in various ways. But, something like this logic has informed international politics and the construction of nuclear order since 1945. As William Walker has aptly summarized, "restraint" is the fundamental requirement of this order: "Restraint in states' resort to war and in the usage and spread of nuclear weapons."<sup>2</sup>

To motivate the wide variety of states to pursue or accept restraint, bargains are necessary. The two nuclear superpowers had to bargain with each other and the rest of the world to build the nuclear nonproliferation regime and to stabilize nuclear competition. The Nuclear Nonproliferation Treaty of 1968 reflects most or all of the propositions listed above and frames them as a set of implicit or explicit bargains. All but the five states

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2 Walker W. *A Perpetual Menace*. New York, 2012. P. 175.

that tested nuclear weapons before January 1, 1967 are to forego acquisition of nuclear weapons. In return, the most technically capable states are to facilitate peaceful nuclear cooperation with states that agree not to acquire nuclear weapons. States that are legally permitted to possess nuclear weapons agree not to threaten others with use of nuclear weapons, and to come to their assistance if they are so threatened. All states are to work in "good faith" toward the elimination of nuclear weapons. (The last of these propositions is most contested, of course).

Today's multi-polar (or non-polar) world requires more bargaining than the bi-polar world did. Regional dynamics define the main challenges facing the nuclear order unlike thirty and fifty years ago. For these and other reasons, many observers today worry that this order has become embrittled and that neither the leaders of the old powers nor of the emerging powers are willing and able to restore or reinvent an effective nuclear order. The NPT-based order was predicated on the existence of five recognized nuclear-weapon states. Now, nine states are known to be nuclear-armed, with the addition of Israel, India, Pakistan and North Korea outside of the NPT. The additions complicate the security dynamics of the international system and are difficult to fit within the institutions and rules of the NPT-based nonproliferation regime. Meanwhile, the attractiveness and economics of nuclear energy production appear less compelling to all but a few countries than was the case in 1950 or even in 2010. The industrial enterprises and governments that established the norms and rules of nuclear energy development and safeguards from the 1950s through the 1990s are being supplanted by new players, as discussed below.

Similarly, the characteristics of security threats and major power confrontations have changed significantly from 1968 when the NPT was negotiated, and 1995 when it was extended indefinitely. In 2001 terrorism emerged as a global threat. In 2003 the US invaded Iraq to remove a regime that it said was threatening to use "WMD", but did so on mistaken intelligence (in more than one sense). The subsequent violence and shifting balance of power and advantage amongst Sunni and Shia

groups in Iraq and other Gulf countries continues to be destabilizing. In 2006 North Korea detonated its first nuclear weapon, becoming the only state (so far) that has joined the NPT and then violated it and acquired nuclear weapons. As discussed below, major powers are involved in confrontations and territorial disputes along the periphery of Russia and China that alarm many observers in unprecedented ways. The relevance and management of nuclear deterrence are not the same today as they were two or ten or thirty years ago. Rather than a central nuclear stand-off between two superpowers, today's challenges feature regional confrontations involving multiple players with asymmetric interests, capabilities, and modus operandi. With regard to nuclear disarmament, the five recognized nuclear-weapon states are losing control of the agenda. No one can force them to reduce or relinquish their nuclear weapons, but a large number of non-nuclear weapon states are now mobilizing to morally and politically isolate and shame them. The movement to negotiate a treaty to prohibit nuclear weapons reflects this phenomenon.

This paper sketches some of the developments that may be weakening the longstanding nuclear order and analyzes whether and how they may require serious, sustained efforts by key governments to refurbish it. The paper then suggests steps that governments and independent experts could pursue to restore confidence in international society's capability to continue deriving benefits from nuclear technology while minimizing risks that it may pose. All of this will necessarily be brief and simplistic. The aim is to encourage further work and debate.

## **The growing sense of insecurity**

If restraint is the central motif of the nuclear order, cooperation amongst major powers is a necessary condition for the preservation and improvement of this order.<sup>3</sup> Major powers — i.e., the US, Russia, China, the U.K., France, (NATO as a collective), India, Pakistan, and Iran — are most able and sometimes willing to project power against

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<sup>3</sup> Ibid. P. 187.

each other and into other states' territories. Thus, their policies and actions most directly shape the possibilities of nuclear conflict and the potential attractiveness and roles of nuclear weapons. These dynamics in turn affect other actors' motivations to acquire nuclear weapons, to cooperate in strengthening barriers to proliferation, and to pursue nuclear disarmament.

Cooperation amongst major powers has become increasingly problematic in recent years, as discussed immediately below. Moreover, the world now experiences the emergence of violent non-state actors whose scope and scale are quite significant, and the use by states of non-conventional means to project power outside their borders. Al-Qaeda and ISIS are the most dramatic examples of new violent actors with international influence. Irregular or hybrid warfare involving militias and proxies with difficult-to-attribute relationships to states exemplify challenging new modes of power projection and confrontation. These new actors and modes of action — including cyber power projections — do not directly implicate nuclear weapons or justify changes in the roles and postures of nuclear forces, but they do create an environment that complicates pursuit of major power cooperation on which nuclear order depends.

The following examples of recent threats to international security are particularly salient in affecting the perceived value of and threats posed by nuclear weapons. These threats affect the politics of strengthening the nuclear order, including the possible devaluation and reduction of nuclear weapons.

*ISIS.* The so-called Islamic State spreads large-scale violence through Iraq, Syria, Libya, Afghanistan, and, by terrorist attacks, Europe. These conflicts also stimulate massive refugee movements into Europe that alarms societies and destabilizes politics there. The violent chaos in the Middle East then draws outside powers — Russia, Iran, the US — into direct or indirect conflict. These conflicts also exacerbate broader, often violent, confrontation between Sunni and Shia communities and the states that back one group or the other. These



trends affect the nuclear order by exacerbating US-Russian tensions, by creating opportunities for crises that could impede implementation of the nuclear deal with Iran (the JCPOA), and relatedly by increasing perceptions that one or more Sunni Arab states and Turkey may hedge their commitments to nuclear nonproliferation.

*Ukraine.* When protests against the Ukrainian government erupted in late 2013 and led to the ouster of the Viktor Yanukovych government in February 2014, Russia perceived these events as Western-backed coup in Russia's sphere of influence. Russia subsequently annexed Crimea and facilitated armed conflict in Eastern Ukraine. Many Ukrainians, and all European governments and the US saw Russia's actions as "illegal and illegitimate."<sup>4</sup> The role of cyber operations – information warfare – in the Ukraine contest added to international alarm over the nature and drift of contestation between Russia and the West. Paired with Russia's alleged violation of the INF Treaty, and Russia's allegations regarding the implications and legality of US-NATO missile defense deployments, the events in Ukraine raised alarms in Europe and Russia over the prospect of military crises. If such crises were to escalate, they could assume nuclear dimensions. At the very least, this set of developments has severely complicated the prospects of nuclear arms control and restraint in the modernization of nuclear forces and the deployment non-nuclear weapons that could affect nuclear requirements and doctrines.

*DPRK.* North Korea's ongoing development and testing of nuclear weapons and missile-delivery systems pose direct threats to South Korea, Japan, and the United States. This in turn alarms China and complicates China's relations with the US, South Korea and Japan. (These relationships are further challenged by the arrival of Donald Trump as president of the United States, who is perceived to be erratic and uninformed). Russia has direct interests in the Korean Peninsula

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4 Statement by the NATO Secretary General following a meeting of the NATO-Russia Council. North Atlantic Treaty Organization. December 19, 2016. Available at: [http://www.nato.int/cps/en/natohq/opinions\\_139569.htm](http://www.nato.int/cps/en/natohq/opinions_139569.htm) (accessed 24 June 2017).

and in efforts to manage the North Korean problem. US responses to threatening developments in the DPRK — especially deployments of new ballistic missile defense systems, and military exercises with the ROK — alarm China directly and probably Russia. In total, then, DPRK actions and other states' responses to them increase the numbers of nuclear weapons in the world, heighten risks of military conflict that could escalate, increase the challenges of maintaining South Korea and Japan as non-nuclear-weapon states, and exacerbate concerns over offense-defense arms racing. None of this strengthens motivations of the involved states to pursue further nuclear reductions and to diminish the role of nuclear weapons for deterrence.

*South and East China Seas.* The disputed status of numerous small islands and outcroppings in the South China and East China Seas, combined with China's growing capabilities to project power, unsettles relations among China, Japan, ASEAN states, and the United States. These relatively new dynamics add to the longstanding challenge of avoiding conflict between China and Taiwan, where the US also plays a deterrent role. As China's power projection and assertiveness grow, US military and civilian officials and those of countries that depend on US security assurances are inclined not to diminish perceptions that these countries have the capability and resolve to prevent China from unilaterally taking disputed territories. Deterrence is certainly preferred over armed conflict. All wish to avoid steps that could lead to escalatory warfare. This situation makes reductions in the salience of nuclear deterrence and force postures increasingly difficult for politicians to pursue. If anything, pressure is felt in the opposite direction.

*South Asia.* Relations between India and Pakistan continue to be conflictual. Diplomatic efforts to reduce tensions remain halfhearted and frequently frustrated by new outbreaks of cross-border terrorism, artillery shelling across the Line of Control in Kashmir, and violent unrest in Jammu and Kashmir. Afghanistan is the locus of proxy violence by actors affiliated with Pakistan, India and others. India and Pakistan steadily increase their nuclear weapon and delivery capabilities. India

searches for ways to effectively punish Pakistan in the event of future terrorist attacks in the Indian heartland. Pakistan seeks to demonstrate the capability and resolve to use nuclear weapons first if Indian forces intervene in Pakistan in ways that the Pakistani military cannot defeat by conventional means. Moreover, advances in US military capabilities of all kinds, including missile defenses and cyber, help drive increases in countervailing Chinese capabilities. This in turn affects India's perceived strategic requirements. India also sees China's longstanding military support of Pakistan, including in the nuclear and missile spheres, as a threat. For their part, Pakistan and China see the United States' increasing military and technological cooperation with India as a threat. All of this increases the salience and growth of nuclear forces and concern over the possibility of conflict that could escalate to the use of nuclear weapons. None of this enhances prospects of Pakistani and Indian cooperation in ending the production of fissile materials for nuclear weapons, joining the Comprehensive Test Ban Treaty, or undertaking nuclear arms control.

Taken together, the developments summarized above preoccupy leaders of major powers and their most informed citizens. It is very difficult to argue plausibly that more nuclear weapons and more threatening nuclear doctrines offer solutions to these challenging developments. As Todd Sechser and Matthew Fuhrmann have demonstrated in their new study, *Nuclear Weapons and Coercive Diplomacy*, nuclear weapons historically have not enabled states to compel others to heed their demands.<sup>5</sup> Rather, the value of nuclear weapons has been to help deter major overt military aggression. States and non-state actors seem to have adapted to these realities by pursuing other forms of coercion — rapid, limited territorial expansion, proxy conflict, terrorism, hybrid operations, cyber interference and sabotage. Nuclear weapons are ill-suited to deter such actions or to compel their reversal. Nevertheless, these developments create a political-security environment that is

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5 Sescher T.S., Fuhrmann M. *Nuclear Weapons and Coercive Diplomacy*. Cambridge University Press, 2017.

inhospitable to efforts to reduce nuclear forces and diminish reliance on them in national and alliance policies. In calmer and more stable times, it was easier for political leaders (and their domestic competitors) to display restraint, which is central to strengthening the nuclear order. In unsettled times like these, with new forms of confrontation and conflict that existing doctrines and instruments are ill-suited to deter or defeat, restraint does not appear to be the most important attribute to display.

These tendencies are reflected in the nuclear modernization activities underway in Russia, China, the US, the UK (perhaps), India, Pakistan, and North Korea. They are reflected in the absence of progress in beginning negotiations on a fissile material production cut-off and the entry into force of the CTBT. The prospects of further nuclear force reductions by the US and Russia and, subsequently, through multilateral negotiations with other nuclear-armed states appear distant. This is due also to the increasing inter-relations among nuclear forces, potential new hypersonic strategic conventional weaponry, ballistic missile defenses, and offensive cyber capabilities. Competing states will seek to balance overall military capabilities. Limiting or reducing nuclear weapons alone will not redress insecurities that these other military capabilities may pose. Yet, no one has even conceptualized how to weigh trade-offs among these various categories of weaponry, let alone how to negotiate limits on them that could be verified satisfactorily. In this sense, the challenge of updating the systemic restraint that was central to the old nuclear order is much more difficult than the challenge of creating the original order was.

## **Proliferation**

All is not discouraging. The threat of nuclear weapons proliferation could be much more manageable now than it appeared to be five or fifteen years ago. In 2002, proliferation appeared to be a grave threat from North Korea, Iraq, Iran, and Libya, with additional concerns that Saudi Arabia, Egypt, and perhaps Turkey could become sources of

acute worry. Five years ago, only Iraq and Libya had been removed from this list. Today, aside from North Korea, the proliferation threat picture is much more positive.

Much depends on the successful implementation of the JCPOA in and with Iran. This paper is not the place to analyze the future of the JCPOA. Many developments could jeopardize it. Yet, the situation created by the agreement is much more positive than many analysts would have predicted five years ago. If the JCPOA holds, it is quite possible to motivate and prevent Egypt, Saudi Arabia, the United Arab Emirates, and Turkey from seeking and acquiring nuclear weapons. And if that is the case, then the other potential locales of state proliferation would most likely be South Korea and/or Japan. Here, too, there is reason to believe that these two countries and the US and China — the two most influential outside powers — can develop and pursue policies to demonstrate that South Korea's and Japan's interests will be better served by eschewing acquisition of nuclear weapons. Part of this process of reassuring South Korea and Japan will require reaffirming the extended deterrence that the US provides to them. While this complicates (somewhat) all three countries' relations with China, Beijing no doubt prefers something like the status quo over the prospect that South Korea or Japan would themselves become nuclear-armed. If reaffirmation of extended deterrence impedes for now further reduction of the number and role of nuclear weapons in the world, this is a perhaps unfortunate trade off that overall international stability may require.

While the scenario described here is uncertain, the state-proliferation picture is more positive than it has ever been. If additional states can be prevented from acquiring nuclear weapons, the challenges of preventing terrorists from acquiring fissile materials and nuclear weapons also become more manageable. The international community, led in many ways by the Obama administration with the cooperation of the other nuclear-armed states (except North Korea), has agreed upon and largely pursued actions necessary to account for and secure fissile materials and strengthen export controls. Intelligence agencies

cooperate in identifying and disrupting the most dangerous terrorist groups' efforts to acquire nuclear materials. More always can be done, and what is being done can always be done better. But, major powers can continue to cooperate in preventing nuclear terrorism even in otherwise discordant times.

The importance of progress that has been made in the nuclear non-proliferation regime should not be lost. This is a fundamental element of the nuclear order — some would say *the* fundamental element. The frustrations and inadequacies of the NPT Review Process, and the understandable complaints of non-nuclear-weapon states that now are negotiating a treaty to prohibit nuclear weapons, should not diminish appreciation for how much has been accomplished in preventing proliferation. Much needs to be done to preserve and improve upon this success, but, again, the major powers generally continue to share interests in doing so.

## **The uncertain future of nuclear energy**

Nonproliferation has always been intimately related to the expansion of peaceful uses of nuclear technology, particularly for electricity production. A central bargain of the NPT was eschewal of nuclear weapons in return for facilitation of peaceful uses of nuclear technology. Special care was required to control and monitor the spread of fuel-cycle capabilities which could be used both to power reactors for peaceful purposes and to produce fissile materials for weapons. The proliferation challenges arising from the expansion of nuclear programs within countries and their spread to new countries are particularly acute. The larger and more comprehensive a state's nuclear program is, the more human and technical and material resources that state might possess to divert for weapons purposes. The larger the program, the easier it is to hide weapons-related activities under the cover of peaceful ones. The more states that undertake nuclear programs, the wider the challenge of monitoring the total global activity in the nuclear domain. Each state that newly pursues nuclear energy programs

may have neighbors that fear that this activity could portend efforts to acquire nuclear weapons. These neighbors then may develop an interest to hedge their risks by beginning nuclear programs, too. Thus, there has always been a tension between the spread of nuclear energy programs for peaceful purposes and the perceived risk of proliferation. The nonproliferation regime and particularly the IAEA safeguards system (and its Argentina-Brazil analogue) were designed to manage this tension.

Ten years ago the world was abuzz with talk about a "nuclear renaissance." More and more countries, particularly in Asia, were planning to get into the nuclear energy business. This was welcome in many ways to the major powers and others that had long produced nuclear energy. Nuclear power plant vendors in the US, France, Japan, Russia, Canada, China, and South Korea saw an exciting future of high-value exports to new nuclear players. Concerns also grew that some of the new or reinvigorated seekers of nuclear energy could be interested, at least latently, in gaining hedging capabilities to someday acquire nuclear weapons. Brazil, Saudi Arabia, Turkey, Egypt, and Vietnam appeared on lists of potential proliferators. Several of these states were at the same time particularly vocal in resisting efforts to strengthen safeguards through the IAEA Additional Protocol and to tighten Nuclear Suppliers Group export controls. In short, the nuclear renaissance looked likely to increase and complicate the nonproliferation challenge.

The situation is much different today. The discovery and exploitation of fracking and other techniques to extract natural gas dramatically reduced the cost of producing electricity. Meanwhile, several projects to build new nuclear power plants — particularly in Finland and France — experienced large cost overruns and delays. The lower cost of electricity from natural gas and the high costs and construction uncertainties of building safe new nuclear plants combined to make nuclear much less attractive. Then, in 2011, came the Fukushima accident in Japan. Once again, as after the Three Mile Island accident in the US in 1979 and Chernobyl in 1986, questions arose whether nuclear



power is safe enough to withstand the combination of unexpected man-made or natural disasters and human error.

Today, outside of China, South Korea, and perhaps Russia, the nuclear power industry is in dire financial condition. Westinghouse in the United States recently declared bankruptcy. The other major American vendor, GE, has not built a new power plant in a decade and does not have a licensed design for a new reactor. GE's fortunes are linked with industrial partners in Japan whose nuclear futures were suddenly made precarious by Fukushima. Areva, the French nuclear giant, lost EUR 17.4 billion from 2014 through 2016. Canada's nuclear vendor industry is likewise struggling; its last nuclear power plant order in Canada was three decades ago, its last foreign order two decades ago. In June 2017, the new government of South Korea announced that no new nuclear power reactors would be built in the country.

India in May 2017 announced plans to build ten indigenously designed pressurized heavy water reactors (PHWR). However, the Indian nuclear establishment has announced such plans ritualistically every decade, only to fall dramatically short of realizing them. When the Nuclear Suppliers Group in 2008 exempted India from restrictions on importing foreign nuclear technology, vendors from the US, France, and Russia joined Indian officials in proclaiming that at least eight new power reactors would be built cooperatively. Nearly ten years later, none of these reactors is under construction and a number of impediments remain to international cooperation. The Indian establishment would prefer to build its own reactors, as reflected in the May announcement. But the Indian government sought the NSG exemption in 2008 precisely because it had little confidence that the indigenous program would deliver on its promises. India's May announcement included no construction timetables. While nuclear energy production will continue to incrementally grow in India, whether through indigenous or imported means, the pace and extent of this growth will be modest at best.

Russia's nuclear vendors claim to have export orders for 34 plants in 13 countries, on paper worth more than \$300 billion. These deals are

driven significantly by Russia's offer to finance, build, own and operate power plants. But the likelihood of many of these projects actually being completed is dubious for many reasons. There is tension between the business side of Russian vendor company Rosatom that wants to make money, and the political side in the Kremlin that wants to make nuclear deals for foreign policy reasons. The Russian nuclear client list includes countries short of money, infrastructure, and oversight. Russia's flagship foreign project, in Turkey, has been beset by uncertainties and delays.

China is the one country where significant new construction of nuclear power plants is likely to occur.<sup>6</sup> It connected eight new reactors to the grid in 2015, and five in 2016. More than 20 additional reactors are under construction.<sup>7</sup> Building on this domestic success, China seeks to enter the export market by bundling its state-owned companies to overwhelm competitors with cheap financing and reactors, beginning in Pakistan and Argentina.

The decline and uncertain future of nuclear energy outside of China has numerous implications for the overall nuclear order, although such implications cannot be specified precisely. For example, in the West it is already difficult to attract the most talented scientists, engineers, business managers, and specialized construction craftsmen to nuclear industry and to related governmental bodies. The most talented and ambitious engineers and managers want to be involved in new, cutting-edge technologies and businesses which are both more exciting and lucrative. Yet, 440 nuclear power reactors are still being operated around the world, and numerous waste repository and treatment facilities must be designed and proficiently managed for hundreds of years to come. Will companies, taxpayers and governments remain determined and able to commit the necessary financial and human resources to safely manage nuclear industry if it is stagnant or declining? (Similarly, if nuclear

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6 For an outstanding description and analysis of China's nuclear energy program, see Hibbs M. [title forthcoming].

7 Plans for New Reactors Worldwide. World Nuclear Association. February 2017. Available at: <http://www.world-nuclear.org/information-library/current-and-future-generation/plans-for-new-reactors-worldwide.aspx> (accessed 24 June 2017).

disarmament is revived and involves more than the four countries that have substantially reduced and dismantled nuclear weapons – the US, Russia, the UK and France – will the world's nuclear establishments retain sufficiently excellent cadres to ensure that disarmament is done safely, securely, and with satisfactorily precise verification?)

Another potential implication of nuclear energy's decline may be posed as a question too: if hopes of developing significant nuclear energy programs motivated non-nuclear-weapon states to accept and support the safeguards and export controls of the nonproliferation regime, will diminished interest in nuclear energy leave such countries less willing to support and strengthen this regime? The risks of proliferation may diminish if few states newly undertake nuclear energy programs. Yet, the challenge of gathering intelligence on and blocking transnational nuclear proliferation networks requires cooperation from all states, not only those with significant nuclear programs. Many states could be trans-shipment points for illicit nuclear commerce or hosts of terrorist cells interested in acquiring nuclear material and technologies. If nuclear energy is not widely attractive, what will motivate the international community to dedicate governmental resources to perform the myriad functions required for a strong non-proliferation regime? The problem is not that non-nuclear states will welcome weapons proliferation; there is no reason to think this. Rather, the problem is that such states naturally will have higher indigenous priorities and will be inclined to see nonproliferation as something that nuclear-armed states and major producers of nuclear energy should take care of. There is little evidence today that the world's leading nuclear powers – military and/or civilian – are thinking creatively about the kinds of incentives that could be needed to motivate non-nuclear states to invest government attention and resources to maintaining or strengthening the global nonproliferation regime.

China's growing prominence in the nuclear energy field also has implications for the nuclear order.<sup>8</sup> The US and other Western countries

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8 For a superb treatment of China's nuclear energy future and its implications, see Hibbs M. [title

(and Japan) were willing and able to exert leadership in shaping the nuclear order because they developed and deployed the technologies that others relied upon. As leaders in the market they naturally could shape the rules or norms under which the nuclear field operated. Yet, as the traditional suppliers of nuclear technology and makers of rules lose relative importance and China becomes a bigger and most dynamic player, Chinese authorities will naturally seek greater say in shaping the terms of nuclear commerce and rule-making. What this means for the future of the nuclear order is impossible to say now. Few people around the world are even thinking about it.

Lastly (for this discussion), beyond the nine states that now possess nuclear weapons there are another twelve that have dedicated significant resources and personnel to develop nuclear energy programs. Japan, South Korea, Taiwan, Argentina, Brazil, Canada, Sweden (?), Iran, the United Arab Emirates, Turkey, and perhaps Egypt are the most salient among such countries. If the future of nuclear energy production becomes less promising the nuclear establishments in some number of these countries could be tempted to look for other applications of their knowledge and capabilities in order to retain funding, jobs, and status. Is it possible that in a few of these cases nuclear establishment leaders could be inclined to find government patrons that would support development of nuclear weapon options? This is a delicate question to raise. As noted above, if the JCPOA can be fully implemented in Iran and North Korea can be managed, incentives to proliferate should be manageable. Still, if the prospects of nuclear energy's global distribution decline, the maintenance and strengthening of the nuclear order will require more attention to be paid to these questions.

## Disarmament

Many regard the NPT as the foundation stone of the nuclear order. Yet, the NPT contains a fissure — in text and politics. The treaty legally allows for the possession of nuclear weapons by the five states that

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forthcoming].

had tested a nuclear explosive before January 1, 1967, while obligating all other signatories not to acquire nuclear weapons. At the same time, Article VI of the treaty obligates each party "to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."<sup>9</sup> This reflected the political and moral need to link the vast majority of states' eschewal of nuclear weapons to the small minority's willingness to eventually eliminate their nuclear weapons. The proposed prohibition treaty makes this link more explicit than it ever has been.

Of course, Article VI has long been a contentious issue — a fissure. Some states and experts have argued that the NPT only obligates "good faith" pursuit of negotiations on nuclear disarmament, but cannot and does not require a particular outcome — that is, an agreement. Moreover, Article VI envisions such negotiations in the context of "a treaty on general and complete disarmament."<sup>10</sup> These perceived disarmament requirements are much less precise than the treaty's clauses related to nonproliferation, which, the argument goes, affirms that the treaty's central operative purpose is nonproliferation.<sup>11</sup>

Yet, while lawyers may endlessly debate the legal meaning and implications of Article VI, the matter was settled politically in 1995 when the treaty was due to expire unless the parties decided to extend it at a Review and Extension Conference. At the conference, the nuclear-weapon states persuaded the parties to extend the NPT indefinitely. The resolution extending the treaty also included an agreement entitled "Principles and Objectives for Nuclear Non-Proliferation and

9 The Treaty on the Non-Proliferation of Nuclear Weapons (NPT). UN Department of Disarmament Affairs. Available at: <http://www.un.org/en/conf/npt/2005/npttreaty.html> (accessed 24 June 2017).

10 Ibid.

11 For outstanding examples of these arguments, see Ford Ch.A. Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons. *Nonproliferation Review* 14, No. 3. November 2007. Available at: <https://www.nonproliferation.org/wp-content/uploads/npr/143ford.pdf> (accessed 24 June 2017); and Ford Ch.A. Misinterpreting the NPT. *New Paradigms Forum*. September 30, 2011, published October 24, 2011. Available at: <http://www.newparadigmsforum.com/NPFtestsite/?p=1100> (accessed 24 June 2017).

Disarmament." In this document, "nuclear-weapon States reaffirm their commitment, as stated in article VI, to pursue in good faith negotiations on effective measures relating to nuclear disarmament." The document also declared that fulfillment of Article VI required "the determined pursuit by the nuclear-weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goal of eliminating those weapons, and by all States of general and complete disarmament under strict and effective international control."<sup>12</sup>

The political obligation to pursue nuclear disarmament was affirmed and detailed in Review Conferences in 2000 and 2010. At the 2000 conference, thirteen steps related to nuclear disarmament were specifically called for. An action plan was agreed upon at the 2010 conference, enumerating twenty-two actions to be taken under the heading of disarmament.<sup>13</sup> Since the 2010 New Strategic Arms Reduction Treaty (START) — itself a modest achievement in disarmament terms — no new agreements have been reached to reduce nuclear arms, curtail nuclear arsenal modernization, or end production of fissile materials for nuclear weapons. Various countries and organizations have produced scorecards to evaluate fulfillment of the disarmament-related measures called for in the 1995, 2000, and 2010 NPT Review Conferences. According to a well-researched assessment by the nongovernment organization Reaching Critical Will, as of 2015, clear "forward movement" has been made on only five of the twenty-two actions called for in 2010, while "limited progress" has been made on six others.<sup>14</sup>

<sup>12</sup> Decisions and Resolution Adopted at the 1995 NPT Review and Extension Conference. Center for Nonproliferation Studies, 2002. Available at: [http://www.nti.org/media/pdfs/npt95rc.pdf?\\_ = 1316545320](http://www.nti.org/media/pdfs/npt95rc.pdf?_ = 1316545320) (accessed 24 June 2017).

<sup>13</sup> 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons Final Document Volume I. United Nations, 2010. Available at: [http://www.un.org/ga/search/view\\_doc.asp?symbol=NPT/CONF.2010/50%20\(VOL.I\)](http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50%20(VOL.I)) (accessed 24 June 2017).

<sup>14</sup> Acheson R. It's Time to Draw Conclusions. In *The NPT Action Plan Monitoring Report March 2015*, ed. R. Acheson. Geneva, 2015. Available at: [http://www.reachingcriticalwill.org/images/documents/Publications/2010-Action-Plan/NPTAP\\_2015\\_Analysis.pdf](http://www.reachingcriticalwill.org/images/documents/Publications/2010-Action-Plan/NPTAP_2015_Analysis.pdf) (accessed 24 June 2017). This report details the organization's basis for evaluating fulfillment of each of the 2010 Review Conference's sixty-four recommended actions in the domains of disarmament, nonproliferation, and nuclear energy. See also, Philipp E., Davenport K. *Assessing Progress on Nuclear Nonproliferation*

Worse, arguably, Russia violated the Intermediate-Range Nuclear Forces Treaty of 1987, which remains the most far-reaching nuclear arms reduction treaty ever negotiated. Meanwhile, all of the nuclear-armed states have undertaken programs to modernize, and in some cases — China, India, North Korea, and Pakistan — expand, their nuclear arsenals.

Against this background, in March 2017 negotiations began on a legally binding convention to prohibit nuclear weapons, “leading to their total elimination.” Proponents of a prospective prohibition treaty argue that dramatic action is needed to speed up achievement of the ultimate goal of global nuclear disarmament. They argue that “there has been little perceptible progress on the multilateral nuclear disarmament pillar under the NPT,”<sup>15</sup> and that “outlawing nuclear weapons is a moral and humanitarian imperative.”<sup>16</sup> Further, they posit a legal requirement for nuclear disarmament based on their reading of Article VI of the Nuclear Non-Proliferation Treaty (NPT) and the 1996 International Court of Justice advisory opinion on the “Legality of the Threat or Use of Nuclear Weapons.” Proponents believe that a prohibition treaty ultimately will engender international pressure that will compel nuclear-armed states and others that rely on nuclear deterrence to “conform to the new global norm.”<sup>17</sup>

Yet opponents and skeptics fear that the dynamics surrounding the prohibition treaty will distract attention and effort from the nonproliferation regime that has helped prevent nuclear war since 1945, and that has prevented — beyond early expectations — the proliferation of

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and Disarmament: Updated Report Card 2013-2016. Arms Control Association. July 2016. Available at: [https://www.armscontrol.org/files/2016\\_ReportCard\\_reduced.pdf](https://www.armscontrol.org/files/2016_ReportCard_reduced.pdf) (accessed 24 June 2017)

15 Statement by Ambassador Patricia O’Brien, Permanent Representative of Ireland to the United Nations and other international organizations at Geneva, at the United Nations Conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading toward their total elimination. New York, March 27-31, 2017. Available at: [http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/nuclear-weapon-ban/statements/27March\\_Ireland.pdf](http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/nuclear-weapon-ban/statements/27March_Ireland.pdf) (accessed 24 June 2017).

16 Beenes M. Institutional Arrangements. ICAN statements to the negotiating conference. New York, March 31, 2017. Available at: <http://www.icanw.org/campaign-news/ican-statements-to-the-negotiating-conference/> (accessed 24 June 2017).

17 Ibid.



nuclear weapons to more states and to terrorist organizations. In boycotting the negotiations, the French, United Kingdom (UK), and US governments noted that the “proposed ban fails to take into account the requisite security considerations and . . . will not eliminate nuclear weapons.”<sup>18</sup> Japan worries that “efforts to make such a treaty without the involvement of nuclear-weapon states will only deepen the schism and division not only between nuclear-weapon states and non-nuclear-weapon states, but also among non-nuclear-weapon states.”<sup>19</sup>

The effort to negotiate a prohibition treaty represents a political-legal reaction to the nuclear-weapon states' failure to fulfill these political commitments to genuinely seek nuclear disarmament. If the vagueness of Article VI's language reflects the preferences of the two disproportionately powerful states that drove the negotiation of the NPT – the United States and the Soviet Union – then the prohibition treaty reflects the preferences of a majority of states in the nonpolar or multipolar twenty-first century. These states know they cannot force the nuclear-armed states to give up their nuclear arsenals, but they can create political and moral pressures to delegitimize these weapons. More materially, the majority can frustrate the nuclear-armed states' desires and interests in strengthening the global nonproliferation regime. If the nuclear-weapon states persist in denying or obfuscating a legal obligation to pursue disarmament, the others can politically undermine the enhancement of legal obligations to make proliferation more difficult.

Proponents of a prohibition treaty have sought to refocus attention to the humanitarian consequences of nuclear war. The humanitarian argument highlights studies that suggest that even what might be

18 On behalf of France, the UK, and the United States, France delivered an explanation of their vote against UN Resolution L.41. See France, United Kingdom & United States, Explanation of vote. New York, October 27, 2016. Available at: <http://www.icanw.org/wp-content/uploads/2016/10/France-UK-and-US-EOV.pdf> (accessed 24 June 2017).

19 Statement by H.E. Mr. Nobushige Takamizawa, Ambassador Extraordinary and Plenipotentiary, Permanent Representative of Japan to the Conference on Disarmament at the High-level Segment of the United Nations conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination. New York, March 27, 2017. Available at: <http://statements.unmeetings.org/media2/14683256/japan.pdf> (accessed 24 June 2017).

termed a limited exchange of nuclear weapons, involving one hundred fission devices, would or could alter climatic conditions sufficiently to cause a global famine affecting more than 1 billion people. Such use of nuclear weapons – let alone larger attacks involving more destructive devices – would harm people and the environment in ways that, depending on the circumstances, could violate the basic principles of international humanitarian law. These principles require discrimination of military from civilian targets, proportionality, and avoidance of unnecessary suffering.

Of course, it can be argued plausibly that not all uses of nuclear weapons would cause a humanitarian disaster. For example, a state in a conflict could for demonstration purposes detonate a nuclear weapon underground or at sea, or against a naval convoy or a desert air base far removed from civilians. It is not impossible that such use would succeed and de-escalate a conflict without a series of nuclear exchanges. Nevertheless, the focus on humanitarian consequences has put the burden on defenders of nuclear weapons to demonstrate whether and how any use of nuclear weapons would stay limited and would not escalate. The nuclear-armed states have not engaged in such discussions or debate.

Apart from humanitarian grounds, concerns about fairness or equity also bolster arguments for prohibition. In terms of political and moral equity, the distinction between one nuclear weapon and zero is all that matters. States that have one are in a fundamentally different position – for good or ill – than those that have zero. It is fine and correct for the United States and Russia to say that they collectively used to deploy 10,000 strategic nuclear weapons, and now they only deploy approximately 3,200. But for most of the world's states, this is not a winning argument. It is a bit like a slaveholder saying that he used to have one hundred slaves, but now only has thirty-two. If slavery is bad, any number greater than zero is wrong. The same goes for nuclear weapons in the thinking of much of the world.

The perceived character of leaders such as North Korea's Kim

Jong-un, Russia's Vladimir Putin, and the United States' Donald Trump (among others) add urgency to the campaign to prohibit and eliminate nuclear weapons. Many citizens and states find it unacceptable that these men have their fingers on the nuclear button and hold the fate of the world in their minds and hands. Only nuclear weapons give a few leaders of a few countries the capacity to immediately destroy the lives of so many innocent people and states and cause lasting environmental damage. Because other states cannot determine the judgment of such individuals and cannot control the extent and effects of a nuclear war these men might conduct, the only way to escape being hostage to them is to ban and, hopefully, abolish nuclear weapons.

Prohibition — and more broadly, elimination — of nuclear weapons also gains urgency from the basic sense that these weapons cannot be retained forever without being used someday. As the distinguished British strategist Lawrence Freedman wrote eight years ago, "The case for abolition . . . is that it is hard to believe that the past 60 years of self-restraint can continue for the next 60 years."<sup>20</sup> Deterrence optimists — those who believe in the effectiveness of the nuclear taboo — could retort that, as the period of nonuse of nuclear weapons lengthens, the probability of nuclear war in the future declines. Yet most analysts agree that if and as the number of actors possessing nuclear weapons grows, and the combinations of states in confrontational relationships increase, the risk of deterrence failure does too. A strong nonproliferation regime, among other things, is necessary to contain this risk. Yet, non-nuclear-weapon states are now reluctant to further strengthen the nonproliferation regime unless their demands for nuclear disarmament are met.

In short, there are understandable, often excellent reasons to seek the elimination of nuclear weapons. The dismissive, disrespectful attitudes and behaviors of the nuclear-armed states toward proponents of

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<sup>20</sup> Freedman L. Nuclear Disarmament: From a Popular Movement to an Elite Project, and Back Again? In *Abolishing Nuclear Weapons: A Debate*, ed. by G. Perkovich, J. M. Acton. Carnegie Endowment for International Peace, 2009. P. 145. Available at: [http://carnegieendowment.org/files/abolishing\\_nuclear\\_weapons\\_debate.pdf](http://carnegieendowment.org/files/abolishing_nuclear_weapons_debate.pdf) (accessed 24 June 2017).

nuclear disarmament add fuel and passion to the prohibition cause.

Unfortunately, the good rationales and understandable motives that animate the prohibition movement do not necessarily add up to sound or effective action. However laudable the intentions behind the prohibition movement, the treaty it appears likely to produce will be inadequate to accomplish important objectives and may even undermine the prospects of nuclear disarmament. Proponents acknowledge that the prohibition treaty will not cause a single weapon to be dismantled. "A nuclear-weapons prohibition will not magically make nuclear-armed and nuclear-alliance states give up the bomb — but it will make it a less attractive weapon to maintain or pursue, and provide states with more incentives for elimination."<sup>21</sup>

Proponents hope that the weight of more than 120 states' demand for prohibition will morally and politically inhibit anyone from using nuclear weapons. North Korea was the only nuclear-armed state that voted in favor of negotiating a prohibition treaty. Yet, as most advocates of prohibition would acknowledge, it is extremely difficult to imagine that Kim Jong-un, faced with the loss of his regime and perhaps control over his country, would decide not to use nuclear weapons because there is a treaty prohibiting them. So, too, if in response to Russian aggression in, say, Estonia, North Atlantic Treaty Organization (NATO) conventional forces were to bomb air force and army installations in Russia and drive Russian forces back, President Putin might or might not use tactical nuclear weapons to de-escalate the conflict, so to speak. Either way, it is difficult to imagine that a prohibition treaty that Russia and other nuclear-armed states did not sign would figure significantly in his decision. Similarly, if Indian armored forces moved into Pakistan following a major terrorist attack on an Indian city, and were inflicting severe damage and humiliation on the Pakistan Army, Rawalpindi's leadership has said it would use nuclear weapons to stop the Indian

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21 Fihn B. The Logic of Banning Nuclear Weapons. *Survival* 59, No. 1. January 21, 2017. Pp. 43-50. Available at: <http://www.tandfonline.com/doi/full/10.1080/00396338.2017.1282671?scroll=top&needAccess=true> (accessed 24 June 2017).

advance. This might or might not be what the Pakistan Army would actually do, but it is difficult to say how a prohibition treaty would really affect the decision.

Nevertheless, it could be argued that a prohibition treaty would do no harm — with one possible exception. If genuine democracies felt more obliged to uphold the treaty than nondemocratic governments, then the balance of resolve in crisis or conflict could tilt to the states less sensitive to norms. It is difficult now to assess this possibility across a range of potential regional or global confrontations. Still, the Western nuclear-weapon states and their allies in Europe and Asia worry that a prohibition treaty could cause or inflame political dissent within their states and between them. This weakening of solidarity among democratic allies, ironically and dangerously, could in turn embolden less affected adversaries such as China, North Korea, and Russia.

This concern can be seen from another angle: the prohibition movement has not engaged intensively with the nuclear-armed states that are most resistant to this agenda and that prohibit or tightly control public debate over nuclear issues. Much of the argumentation regarding humanitarian consequences of nuclear weapons and prohibition seems directed at the United States, the United Kingdom (UK), and their allies, where civil society organizations are free and officials have been more or less willing to engage with them. China, Israel, North Korea, Pakistan, Russia, and to some extent France have walled themselves off from these debates internationally and nationally. Yet these states are more determined to retain nuclear weapons and are more resistant to joining in nuclear-weapon reduction processes than the United States and the UK have been. (France has undertaken significant nuclear force reductions and eliminated its nuclear-weapon testing facilities, even as its resistance to complete nuclear disarmament is clear.)

Whether or not a prohibition treaty will weaken the defensive resolve of democracies, it will not remove the most ominous threats that trouble the nations currently relying on nuclear deterrence (including

via alliances). Few knowledgeable people believe that nuclear-armed adversaries would launch nuclear weapons out of the blue. Rather, the primary concern is that some form of non-nuclear aggression could be initiated, particularly against a weaker state, and that for the defenders nuclear weapons could, in extreme circumstances, be the only way to defeat such aggression. The existence of a prohibition treaty could undermine the credibility of nuclear deterrence of such aggression. (Of course, the threat to use nuclear weapons in defense raises the risks of escalation to all-out nuclear war, which would leave everyone worse off and likely cause humanitarian disaster. This is the horrible paradox of nuclear deterrence.)

Prohibiting the possession and use of nuclear weapons without redressing the circumstances that make states retain these weapons could be emblematic of two things. First, as proponents intend, it could symbolize rejection of the potentially murderous hostage relationship that the few nuclear-armed states impose on a large number of others. Second, it could affirm the realist view that treaties are not worth the paper they are written on if adequate power is not available and determined to verify and enforce them.

To put the second point a different way, states and experts who believe that nuclear weapons help deter major acts of aggression and inspire states not to escalate conflicts argue with some reason that prohibition puts the cart before the horse. If use of nuclear weapons is likely to *precede* such aggression involving conventional forces or a biological attack, then it would make sense to focus first on nuclear prohibition. But if nuclear weapons would most likely be used after an act of major aggression is under way and there is no other viable means to stop it, then it makes more sense to focus first on finding alternative ways to deter or defeat such aggression.

If circumstances can be envisioned wherein a state or alliance cannot defeat an act of aggression by non-nuclear means, then do proponents of nuclear prohibition essentially require states in such circumstances to accept defeat, possibly tantamount to suicide? Is this legally

and politically plausible (insofar as states that choose not to join such a treaty are not bound by it)? One could counter that the international community collectively ought to be willing and able to rally to a threatened state's defense and thereby defeat an instance of major aggression. Yet the current international system's dependence on the UN Security Council to authorize such action is highly problematic. Most of the states capable of mounting overwhelming conventional aggression retain the power to veto Security Council resolutions.

Insofar as a prohibition treaty is meant to lead to the elimination of all nuclear weapons, the treaty's proponents have failed to give any guidance regarding how such disarmament would actually be defined, conducted, verified and enforced. Yes, all nuclear weapons would have to be dismantled. But what would then be done with the fissile materials taken from them? Warhead disassembly has never been verified (aside from the unique case of South Africa). Inherent uncertainties surround inventories of fissile materials. Given these uncertainties, by what means would the world be reassured that a state was not secretly retaining weapons-usable stockpiles? Would states be allowed to retain ballistic missiles? If so, under what conditions? What would be done with nuclear-weapon research and development facilities, capabilities, and trained personnel? Would researchers and facilities adept at nuclear-weapon design and experimentation be monitored – including in universities – and if so, how? How would the management and safeguarding of civilian fuel-cycle facilities and activities need to be revised in order to bolster confidence that no one would cheat on a global disarmament regime?

Without offering guidance on these genuine challenges in designing and effecting nuclear disarmament, authors of a prohibition treaty may actually cloud the prospects of future disarmament. What would happen if and when nuclear-armed states seriously took up the challenge and developed what they judged to be a viable disarmament regime, but this regime required much more extensive and intrusive global monitoring of nuclear-related facilities and personnel than exists today? Would the hundred-plus supporters of the prohibition treaty



subscribe to these requirements and share in the costs? What if viable disarmament required centralization of all civilian nuclear fuel-cycle activities under the control of a handful of formerly nuclear-armed states? Would today's non-nuclear-armed states with civilian nuclear aspirations accept this? Without some sense of how major disputes over the design of a world without nuclear weapons would be resolved, many states will be reluctant to pursue this agenda. Unfortunately, these kinds of issues have not been addressed in negotiations of the prohibition treaty.

## **What could be done?**

The foregoing description and analysis of the nuclear order that has evolved over the past seventy years will no doubt invite some debate. This is welcome. If this analysis survives debate at least largely intact, it will lead us to explore what should be done? How should the challenges suggested here be addressed by officials, experts, and civil societies of the states whose cooperation will be needed to preserve and improve the global nuclear order?

Space here allows only brief and rather general suggestions whose purpose is to invite further consideration and debate by others.

Stability and improvement of the nuclear order require first and foremost enhanced cooperation among the US, Russia and China. This is necessary in order to diminish risks of escalatory conflict along the periphery of Russia and China, to reverse the recent increased salience of nuclear weapons in major power relations, and to reopen possibilities of arms control (nuclear and other). U.S-Russian relations also influence events in the Middle East. US-China relations heavily affect dynamics on the Korean Peninsula, the South and East China Seas, and in South Asia.

This is not the place to rehearse various steps that Washington, Moscow and Beijing could take in order to identify and create shared interests in cooperating to stabilize and enhance regional dynamics. Policy-makers and analysts in these governments, and think tanks in

these and other countries, regularly offer suggestions regarding how governments should or could seek to improve outcomes in the regions that concern them. It is necessary here only to clarify and emphasize that the risks of the current drift in US-Russian and US-Chinese relations extend to the global nuclear order. This is often overlooked. Reminding officials and media commentators that the stakes in the confrontations around Ukraine, Syria, and the periphery of China extend beyond the local issues is important. Perhaps greater awareness that the future of the global nuclear order will be affected by the major powers' capacity to stabilize these regions could enhance their leaders' willingness to cooperate in doing so. Sometimes it is helpful to broaden a problem in order to solve it.

The DPRK's continued qualitative and quantitative enhancement of its nuclear weapon and missile capabilities threatens regional security and the global nuclear order, as summarized above. There is no reason to think that the DPRK leadership will eliminate its nuclear weapon capabilities, which it sees as a vital deterrent. Denuclearization must remain a stated goal for regional political reasons, but, for the practical future, de-escalation of crisis must be the priority. This requires the DPRK to be motivated to pause its threatening nuclear weapons-related activities — fissile material production, weapons research, development and testing, delivery-system testing, and military induction and operation of nuclear forces.

To motivate the DPRK to undertake such a pause, the US and China must agree on and cooperate in combining positive inducements and pressure. The Trump administration seems to think it has a "strategy" to do this. It aims to persuade and push China to increase pressure on the DPRK to alter its behavior, with the promise of negotiations if and when the DPRK demonstrates restraint. At the same time, Washington emphasizes that Pyongyang's acquisition and testing of an ICBM is unacceptable, with the implication that the US is willing to use force to prevent this. Unfortunately, this "strategy" may be less coherent and more problematic than its authors recognize. China welcomes the notion that the US would be prepared to negotiate with the DPRK, but Beijing wants to

know what the US is realistically prepared to accept in such negotiations. If Washington insists on DPRK agreement to denuclearize, then Beijing will find this unrealistic and is not likely to press the DPRK on this basis. Yet, US officials have not discussed with Chinese counterparts what Washington is prepared to accept in a negotiation — for example, whether the US is willing first to negotiate a freeze on certain DPRK activities in the nuclear and missile domains. Furthermore, the timeline for pressuring the DPRK and undertaking negotiations with it may be longer than the timeline of the DPRK's program to develop and test an ICBM. If the DPRK appears to cross the US red line before the pressure-and-negotiate scheme is realized, the US could be confronted with a decision to use force before negotiations have been tried. This could put Washington in a very awkward place in relations to China, Russia, and much of world opinion.

Before events lead to this dire scenario, if Beijing and Washington were aligned, the two governments could then seek to build cooperation with South Korea, Japan, and Russia in a shared approach to Pyongyang. Again, all of this is easier said than done. The point is merely to clarify the broad requirements and stakes in major power cooperation here.

More broadly, establishing a minimally sufficient level of cooperation between the US and Russia and the US and China requires some way of easing the fundamental (and perennial) tension between Beijing's and Moscow's perceptions that the US seeks to undermine their governments and foster democratization, on the one hand, and the United States' traditional concerns about state repression of political and human rights. Russia's interference in the US, French, and German election campaigns — related to Moscow's perceptions of US interference in Russian affairs — further exacerbates these longstanding tensions. The question arises, as it did in the 1970s, whether leaders in the three countries will be willing and able to relax their political confrontations enough to pursue cooperation in preserving or strengthening the nuclear order.

The ongoing confrontation between India and Pakistan produces the world's most acute nuclear arms race and perhaps the greatest risk

of violent conflict that could escalate to nuclear war. Again, plenty has been written on all of this, including my recent book with Toby Dalton, *Not War, Not Peace?* The US and China are implicated directly and indirectly in the nuclear dimensions of the South Asian confrontation. And the nuclear competition between Russia and the US, and relatedly the US and China produce strategic forces that India then takes into account in determining what types and numbers of nuclear systems it needs. This in turn affects Pakistan's perceived requirements. Thus, while India and Pakistan alone can stabilize their relations and reduce risks of escalatory conflict, Russia, the US, and China will need to limit and reverse their competition in strategic weaponry if the two South Asian antagonists are to stop and eventually reverse their nuclear arms race.

## **Arms control/disarmament**

It is reasonable to expect that the states negotiating a convention to prohibit nuclear weapons will agree and a convention will be created. Nuclear-weapon states — particularly, Russia, France and the US — will be tempted to express their displeasure. One way they may do this is to say, "if this is how non-nuclear-weapon states want to treat the disarmament issues, that is their prerogative. But then we have little more to say or do regarding disarmament, since our approach has been rejected." In other words, rather than reaching out magnanimously after the negotiation of an unwanted prohibition treaty, leading nuclear-weapon states could act petulantly.

Petulance regarding further nuclear disarmament could be a mistake, much as it is in polarized periods of domestic politics. It inflames hostility and confrontation and further polarizes. This would be especially challenging to democratic middle powers in Europe and East Asia. Russia and China might welcome such development, but whatever near-term gains could result could be offset by longer-term implications. For, the global nuclear order has helped prevent countries such as Germany, Japan and South Korea from acquiring their own nuclear weapons. If these states perceive their security environment to be weakening and

the nuclear order crumbling, some elements within them may increase calls for revisiting their own nuclear policies. Indeed, this is already happening in Germany, Japan and South Korea.

The most obvious thing that nuclear-armed states and others who continue to rely on extended nuclear deterrence could do to heal the rifts created by the prohibition treaty would be to devote more serious thought and action to nuclear disarmament. The 2000 and 2010 NPT Review Conferences specified well-known incremental steps that would manifest progress toward nuclear disarmament. States know how to take these steps, whether the number is thirteen or twenty-two; what they have lacked is political will.

Russia and the United States face an immediate challenge in this area. Each now alleges that the other has violated the INF Treaty. If that important treaty cannot be saved and fulfilled then further incremental nuclear arms reductions will not be possible.

Beyond the taking of well-marked incremental steps, nuclear-armed states will not credibly meet their disarmament obligations unless and until they seriously define what a feasible, comprehensive, verifiable, and enforceable nuclear disarmament regime would entail. Chris Ford, now a senior official in the Trump administration, has made the most trenchant conservative arguments that the legal requirement for disarmament is quite narrow. Yet he acknowledges that there is a requirement to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race . . . and to nuclear disarmament."<sup>22</sup> It is difficult to see how the nuclear-weapon states, individually or collectively, have met or could meet this requirement if they have not developed models of what nuclear disarmament should entail.

Designing a model nuclear disarmament regime does not require promises in advance to accede to and implement it. States commonly design futuristic weapons systems without deciding in advance to actually develop, procure, and deploy them. Why cannot they do the same

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22 Ford Ch.A. Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons...

regarding nuclear disarmament? States could do this individually, bilaterally, and/or multilaterally. They could do it at classified levels and in the open, solely with officials or in collaboration with nongovernmental experts. (Indeed, the Carnegie Endowment has done this in a project to model a “firewall” that distinguishes purely peaceful nuclear programs from military ones, and provides insights on how to manage and monitor dual-use activities.<sup>23</sup>) The core questions to be answered are: How should nuclear disarmament be defined? What capabilities, facilities, materials, and activities should it prohibit and allow? How could potentially dual-use capabilities, facilities, materials, and activities be verified and monitored? Finally, how would such a regime be enforced? It seems illegitimate for states to argue that they are even intending to pursue negotiations toward nuclear disarmament in good faith if they are not seriously addressing such questions.

To date, no nuclear-armed state has publicly undertaken such a project.<sup>24</sup> This betrays these states’ lack of seriousness about nuclear disarmament. It is difficult to see how these states will gain credibility in the wider world if they refuse even to offer blueprints for a nuclear disarmament regime that others can then discuss and debate. These states cannot be forced to sign and implement a prohibition treaty, and they certainly cannot be forced to implement a hypothetical disarmament regime. But reluctance to even take up the design challenge can only be seen as evidence of bad faith.

Whether or not they design prototype disarmament regimes, states that say nuclear deterrence remains necessary for security reasons should more explicitly articulate whether and how their policies and actions to redress security challenges can open the way for progress toward nuclear disarmament. Many governments are trying to resolve or prevent conflicts

23 See Dalton T. et al. *Toward a Nuclear Firewall: Bridging the NPT's Three Pillars*. Carnegie Endowment for International Peace. March 20, 2017. Available at: <http://carnegieendowment.org/2017/03/20/toward-nuclear-firewall-bridging-npt-s-three-pillars-pub-68300> (accessed 24 June 2017).

24 For a nongovernmental example of such an undertaking, see Perkovich G., Acton J.M. *Abolishing Nuclear Weapons*. Adelphi Paper no. 396. International Institute for Strategic Studies, 2008. Available at: <http://www.iiss.org/en/publications/adelphi/by%20year/2008-e03b/abolishing-nuclear-weapons-12ca> (accessed 24 June 2017).

on the European periphery, in the Middle East, on the Korean Peninsula, in Northeast Asia, and in South Asia. Yet, with few exceptions, leaders do not articulate how the immediate actions they are taking can and should create conditions for reducing reliance on nuclear weapons and reducing their numbers toward zero. It is quite possible that the actions and outcomes one side seeks will not make adversaries feel they can reduce reliance on nuclear weapons. But clarifying this aspect of relations can still be useful in educating the rest of the world about the challenges of actually achieving the aspirations reflected in the ban treaty.

Special attention should be drawn to the problems of enforcing international norms and laws today and in the future. The proposed prohibition treaty will not have enforcement provisions. But the nuclear disarmament treaty that the prohibition treaty will call for must be enforceable or else nuclear-armed states will not agree to it. It is difficult to imagine how a body other than the UN Security Council would be entrusted with enforcing nuclear disarmament. Yet, each of the five recognized nuclear-weapon states retains veto power in the Security Council. If one (or more) were to violate, or be accused of violating, a disarmament treaty, they could veto enforcement measures. This is clearly problematic for many reasons. One such reason is that India, Israel and Pakistan presumably would want the same veto rights in return for agreeing to their own nuclear disarmament in parallel with the five NPT nuclear-weapon states. This problem could be surmounted by designing a disarmament enforcement regime that excluded the veto. Yet, it is nearly impossible to imagine all five of the current veto-wielding nuclear-weapon states agreeing to this. Would it be harmful to explore even academically how this problem might be addressed?

Finally, a realistic design of a nuclear disarmament regime will need to address how states could redress concerns over non-nuclear military technologies that they feel require nuclear weapons to counter. These include hypersonic conventionally armed delivery systems, ballistic missile defenses, cyber weapons, and perhaps increasingly in the future synthetic bioweapons. No one has yet persuasively modelled how such



asymmetric arms control could be designed, negotiated, and verified sufficiently to inspire confidence that violations would be detectable and therefore deterrable. Official and unofficial experts in the most advanced military states should be encouraged and funded to address these challenges seriously. This should and could be done at national and multinational levels. Indeed, such work will be increasingly important whether or not it is related to modeling overall nuclear disarmament.

## **Nonproliferation**

The nuclear prohibition treaty and the general malaise of the NPT Review Process highlight the need to reinvigorate non-nuclear-weapon states' interests in upholding and, hopefully, strengthening the nonproliferation regime. The steps urged upon nuclear-armed states in the previous section could help. More will probably need to be done if the prospect of cooperation in developing peaceful nuclear energy will be less attractive than it was before 2011. Some other positive incentives will be necessary. Might it be worthwhile and effective to explore a 21<sup>st</sup> century variant of "atoms for peace," this time offering "climate-friendly energy for peace"? (Nuclear energy may be climate-friendly, but if it is comparatively unattractive for other reasons, then less capital-intensive, safer, and more politically welcome energy technologies may be needed). China, the US, and Germany would be vital in developing and implementing a new "energy for peace" model, as they are leaders in renewable technology and have capital available to facilitate its deployment in developing countries. (Russia could resist this approach for these same reasons). Here, again, the idea is to urge more ambitious thinking and diplomacy, analogous to what was done in shaping the nuclear order in the 1950s and 60s.

Creative diplomacy also will be necessary to deal with the challenge of integrating the three non-NPT states — India, Pakistan, and Israel — into the Nuclear Suppliers Group. The NSG is an important "institution" of the nonproliferation regime. The US, Russia and France worked hard between 2005 and 2008 to persuade NSG members to exempt India from restrictions on nuclear trade. India has sought to gain membership in

the NSG, too, and the US has led efforts to make this happen. However, China – encouraged by Pakistan – has resisted, as have other members and many non-nuclear-weapon states. Opponents argue that moves to favor India undermine the NPT. Some, including China, Pakistan, and Israel, argue that membership in the NSG should be based on criteria, rather than on a one-country exemption. The dispute over NSG membership reflects broader tensions in the nonproliferation regime. If this regime is to be sustained, it seems that the US, Russia, France and perhaps others driven by commercial nuclear interests and bilateral considerations should think harder about how the evolution of the NSG should be managed to serve broader nonproliferation objectives.

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The nuclear order has served international security remarkably well. Major powers have not engaged in warfare directly against each other since 1945. They have engaged in proxy conflicts that killed large numbers of people in Vietnam, Cambodia, Afghanistan, Angola, Central America and elsewhere, but these conflicts did not escalate horizontally. It is impossible to prove whether and how nuclear deterrence explains this history, but the fact is that nuclear weapons have not been detonated in conflict since 1945. The nonproliferation regime has worked better than most observers imagined it would in the 1960s. Only one country – North Korea – has signed the NPT, cheated, and acquired nuclear weapons. Many others have abandoned nuclear weapons or nascent nuclear weapon programs. Fissile materials have not been transferred to non-nuclear-weapon states or terrorist groups.

These achievements were built through cooperation between the two superpowers in a bi-polar structure, and after 1990 through wider cooperation. This required bargaining at many levels. In 1995 the NPT was extended indefinitely, with new political commitments regarding nuclear cooperation and disarmament. The diplomatic resolution of the Iran challenge, culminating in the 2015 Joint Comprehensive Plan

of Action, also reflected remarkable international cooperation.

It is not obvious whether and how the nuclear order will be sustained in the new environment visible today. No single country or pair of countries has the power to impose nuclear order. Instead power and influence are becoming more diffuse. Regional disputes involving declining and rising powers in various combinations now embroil the Middle East, the Russian periphery, South Asia, and East Asia. Meanwhile, the non-nuclear majority of states are increasingly frustrated that the original promises of the nuclear order – peaceful nuclear cooperation and disarmament – are not being realized. New technologies and forms of competition and conflict challenge strategists and policy makers around the world. The future of nuclear weapons and proliferation may or may not be affected directly by new forms of competition, but these dynamics affect the environment in which nuclear policies will be made.

The broad conclusion that these observations suggest is that sustaining the nuclear order requires more cooperation among the United States, China, and Russia than exists today. These states' cooperation may not be sufficient to redress all of the challenges discussed here. But it is necessary.

## 8. MEETING NORTH KOREA'S NUCLEAR CHALLENGE

*Mark Fitzpatrick*<sup>1</sup>

In turning over the keys to the White House, outgoing US President Barack Obama told president-elect Donald Trump that North Korea would represent his greatest national security challenge. Indeed, Pyongyang's growing nuclear capability had already become the most worrisome problem for the US and its northeast Asian allies. The Obama Administration was too short on time and attention, however, to do much about it other than to string out a policy of "strategic patience" that demonstrably was not working.

Taking up the challenge, the Trump Administration pretentiously declared that the era of strategic patience was over. Time is not on the side of those states concerned about North Korea; it was time to take action. What action, though? A policy review was hastily convened before many key positions were filled. All feasible options were reportedly considered, including high-risk tactics such as preventive military strikes and redeployment of tactical nuclear weapons in South Korea. Upon reflection, these counter-productive policies were wisely set aside, in favor of cautious policy tools that in fact bear close

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resemblance to Obama's policy. The pages below describe the challenge and the possible paths toward the denuclearization goal to which all parties, with the critical exception of the Democratic Republic of Korea (DPRK), aspire.

## The challenge

The five-and-a-half year tenure of DPRK's young leader Kim Jong-un has been marked by a sharp acceleration of the country's strategic weapons programs. During the 14 years of his father Kim Jong-il's reign (1997-2011), North Korea conducted two nuclear tests and 16 missile test launches. The latter averaged about one a year and were mostly carried out for political purposes in just two years: 2006 and 2009. As IISS missile expert Michael Elleman puts it: "The grouping of missile firings, with, for example, seven taking place on one day in July 2006, suggests that Kim Jong-il was more interested in conveying a political message than extracting technical data from the missiles launched. One does not conduct multiple launches if the goal is to collect technical and performance data on the subject missiles."<sup>2</sup>

Under Kim Jong-un, from 2012 through late June 2017, North Korea has conducted three nuclear tests and about 80 missile launches, averaging almost 15 a year. No longer primarily for political show or diplomatic leveraging, the tests represent a fast-paced development program to acquire various capabilities to strike the nation's foes with nuclear weapons.<sup>3</sup> But the tests go beyond mere development. Multiple tests of missile systems that are already proven, including *Scuds* and *Nodongs*, are for operational purposes to train firing crews. Experts at the Center for Nonproliferation Studies in Monterey, California conclude that such launches are "consistent with the regime's probable intent to deploy nuclear weapons to missile units throughout the country."<sup>4</sup>

2 Elleman M. Briefing to Congressional staffers. May 31, 2017. Unpublished notes used with permission.

3 Ibid.

4 Cotton Sh. Understanding North Korea's Missile Tests. Nuclear Threat Initiative. April 24, 2017. Available at: <http://www.nti.org/analysis/articles/understanding-north-koreas-missile-tests/> (accessed 30 June 2017).

From 2016, the acceleration has gone into overdrive. Two dozen missiles were launched that year, and two nuclear devices were exploded at an underground testing site. North Korea succeeded in testing a mobile intermediate-range ballistic missile (IRBM), a solid-fueled submarine-launched ballistic missile (SLBM), a warhead heat-shield to simulated successful atmospheric re-entry, and a new propulsion system for an intercontinental ballistic missile (ICBM). The first half of 2017 continued the rapid pace, with the test of a new IRBM that used that new engine. Other developments included the introduction of a land-based version of the solid-fueled SLBM, with tread-tracked launch vehicles that provide off-road mobility, plus a terminally guided short-range ballistic missile (SRBM).

Yet to be seen, as of late June, is a flight test of an ICBM or a full test of vehicle re-entry with a simulated warhead. Both could be on track for later this year. It is even possible, although improbable, that North Korea could conduct a live test of a nuclear-armed missile, for explosion in the ocean.

Given the quantitative and qualitative change, it seems unlikely that North Korea is developing nuclear weapons for bargaining purposes, as once was often presumed by many analysts. Foreign Minister Ri Su-yong said in September 2014: "The nuclear deterrent of the DPRK is not ... a bargaining chip to be exchanged for something else."<sup>5</sup> To the point of adding the nuclear status to their Constitution, North Korean officials now insist that they be treated as being nuclear-armed. They point to how Saddam Hussein was killed after being deprived of his nuclear systems and how Muammar Gaddafi was rudely executed after he gave up his nuclear weapons program.<sup>6</sup> They insist the DPRK will not give up nuclear weapons until it no longer faces a nuclear threat,

5 Norman L. North Korea Says Nuclear Program Isn't 'Bargaining Chip' // The Wall Street Journal. 2014. 27 September. Available at: <https://www.wsj.com/articles/north-korea-says-nuclear-program-isnt-bargaining-chip-1411858575> (accessed 30 June 2017).

6 North Korea cites Muammar Gaddafi's 'destruction' in nuclear test defense // The Telegraph. 2016. 9 January. Available at: <http://www.telegraph.co.uk/news/worldnews/asia/northkorea/12090658/North-Korea-cites-Muammar-Gaddafis-destruction-in-nuclear-test-defence.html> (accessed 30 June 2017).

sometimes adding that this means not only withdrawal of US nuclear weapons from the northeast Asia region but also complete US nuclear disarmament. In the meantime, ICBMs are needed to deter the "hostile" United States.

There is a logic to this deterrence rationale, although it rests on a skewed threat perception that the US is itching to invade or otherwise to topple the Kim regime. This belief is false. As stated in the 19 September 2005 Joint Statement of the Six Party Talks and repeated several other times, the US recognizes DPRK sovereignty and has no intention to attack or invade the state.<sup>7</sup> Since hostilities in the Korean War ceased in 1953, the US has never launched an attack on North Korea, despite many provocations. Inclinations to respond with force to provocations such as the 1969 seizure of the *USS Pueblo* and the 11-month incarceration and torturing of its crew were outweighed by the desire not to start another Korean War. North Korea does not need nuclear weapons to deter enemies as long as it has thousands of conventional artillery within range of the South Korean capital Seoul, the metropolitan area of which encompasses over 25 million residents. To the extent that Americans and South Koreans talk about regime change in North Korea, it is precisely because of the magnified threat posed by the North's nuclear program. Rather than deterring attack, it invites talk of pre-emption.<sup>8</sup>

The illogic of North Korea's nuclear deterrence rationale supports an argument that its purpose is not purely defensive. The DPRK seeks the ability to strike the continental United States with nuclear-armed missiles in order to deter the US from coming to South Korea's aid in the event of resumed armed conflict on the Korean Peninsula. If another conflict were to occur, it is more likely to be started by North Korea, inadvertently or on purpose. The spark could be a small-scale

<sup>7</sup> Joint Statement of the Fourth Round of the Six-Party Talks. Beijing, September 19, 2005. Available at: <https://www.state.gov/p/eap/regional/c15455.htm> (accessed 30 June 2017).

<sup>8</sup> Although discussions of strike options typically use the word "pre-emption," unless it is under circumstances where a North Korean attack is imminent, the accurate term for attempting to remove an adversary's capabilities is "prevention."



provocation such as the two lethal attacks in the Western Sea in 2010: the torpedoing of the *Cheonan* corvette and the shelling of Yeonpyeong island. Conceivably, war might also be started by North Korea for the express purpose of reunifying the peninsula by force. Unlikely though this scenario might seem, it is regarded by White House officials as one possible motivation for the ICBM program.<sup>9</sup>

North Korean nuclear use might also occur because of a fatal misreading of American intentions. Hearing the loose talk in the US about all options being on the table, including military strikes to prevent ICBM development, and knowing that the US and South Korean militaries have been practicing "decapitation attacks" against them.<sup>10</sup> DPRK leaders may well be on hair-trigger alert to launch nuclear weapons at the first sign of an attack in line with their own logic of pre-emption.<sup>11</sup>

## **Nuclear**

Having conducted five nuclear tests (on 9 October 2006, 25 May 2009, 12 February 2013, 6 January 2016 and 9 September 2016), North Korea should be considered to be nuclear armed.<sup>12</sup> Although some governments are reluctant to use this term for political reasons, let us not insist that North Korea prove its capability with a live-launch of a nuclear-armed missile before it is accorded this status. Most Western analysts assume that North Korea can produce nuclear weapons of the kind that Kim Jong-un purportedly was shown inspecting in early March 2016. Dubbed the "disco ball" by Western wits, the 60 cm-diameter bomb displayed in North Korean state media could fit inside the

9 Pennington M. US: North Korea's nukes may be a tactic for taking over South Korea. *Military Times*. May 2, 2017. Available at: <http://www.militarytimes.com/articles/us-north-koreas-nukes-may-be-a-tactic-for-taking-over-south-korea> (accessed 30 June 2017).

10 S. Korea unveils plan to raze Pyongyang in case of signs of nuclear attack. *Yonhap News Agency*. September 11, 2016. Available at: <http://english.yonhapnews.co.kr/news/2016/09/11/0200000000AEN20160911000500315.html> (accessed 30 June 2017).

11 Jackson V. Why Mattis versus Kim Jong-Un will end badly for us all. *War on the Rocks*. April 20, 2017. Available at: <https://warontherocks.com/2017/04/why-mattis-versus-kim-jong-un-will-end-badly-for-us-all/> (accessed 30 June 2017).

12 Note, however, that North Korea is not a "nuclear-weapons state," a term that the Nuclear Non-Proliferation Treaty (NPT) reserves for the five states that tested nuclear weapons prior to 1967.

nosecone of its medium- and intermediate-range missiles.<sup>13</sup> Russian analysts, on the other hand, tend to be skeptical of North Korean capabilities until they are confirmed. Anton Khlopkov, for example, suggested in February 2017 that North Korea "has not yet reached sufficient progress in the area of miniaturization to fit a nuclear warhead on its existing missile delivery systems."<sup>14</sup>

The first test used plutonium, as proven by the xenon and krypton isotopes detected in the atmosphere afterwards. Since then, North Korea has learned to contain the gases from its tests, so it is not known if they used plutonium or highly enriched uranium (HEU) or even a composite. Leader Kim boasted that the January 2016 test was of a hydrogen bomb, a doubtful claim given that the approximate 10 kt yield was two magnitudes smaller than that of a true hydrogen bomb. The test may have employed a hydrogen isotope, however, and there is no doubt that the DPRK is working on a hydrogen, or thermonuclear, weapon, probably using a plutonium pit and HEU for the secondary stage.<sup>15</sup> Additional tests would enable the DPRK to increase the explosive power of its nuclear devices and make them more compact, lighter and durable. Judging from satellite image of North Korea's test site, it probably could carry out a sixth test at short notice.<sup>16</sup>

North Korea's estimated stockpile of plutonium is sufficient for 6-8 weapons, with reprocessing since 2016 probably adding to this.<sup>17</sup> Most

13 Fisher M., Patel J.K. What One Photo Tells Us About North Korea's Nuclear Program // New York Times. 2017. 24 February. Available at: <https://www.nytimes.com/interactive/2017/02/24/world/asia/north-korea-propaganda-photo.html> (accessed 30 June 2017).

14 Khlopkov A. Nuclear Issues on the Korean Peninsula: A Russian View of Prospects and Possibilities. Asia Pacific Leadership Network for Nuclear Non-Proliferation and Disarmament. Policy Brief No. 32. February 2017. Available at: [http://www.a-pln.org/\\_mobile/briefings/briefings\\_view.html?seq=883&ckattempt=1](http://www.a-pln.org/_mobile/briefings/briefings_view.html?seq=883&ckattempt=1) (accessed 30 June 2017).

15 One piece of evidence was North Korea's online advertisement to sell 10 kg of highly pure lithium-6 every month, presumably from production excess to its weapons needs. See Sanger D.E., Broad W.J. North Korea's Nuclear Strength, Encapsulated in an Online Ad for Lithium // New York Times. 2017. 3 April. Available at: <https://www.nytimes.com/2017/04/03/us/politics/north-korea-nuclear-trump-china.html> (accessed 30 June 2017).

16 Pabian F., Bermudez J.S., Liu J. Spring Has Sprung at Punggye-ri, but a Sixth Nuclear Test Likely Still on Stand-by. 38 North. May 22, 2017. Available at: <http://www.38north.org/2017/05/punggye052217/> (accessed 30 June 2017).

17 Plutonium stockpile estimates range from 24-50 kg. The warhead count assumes 2-5 kg per weapon and a 70% utilization rate of plutonium. See Braun Ch., Hecker S. et al. North Korean Nuclear Facilities

analysts double or even triple the total weapons estimate, based on an assumption that the uranium enrichment facility that North Korea displayed to Stanford University scholars in November 2010 and which doubled in size in recent years has been producing HEU and may be replicated by an undisclosed facility.<sup>18</sup> Siegfried Hecker, who led that 2010 Stanford visit to Yongbyon (and several other earlier visits), now estimates that the DPRK has sufficient plutonium and HEU for 20-25 weapons.<sup>19</sup> This number may be growing by three to five a year.<sup>20</sup>

## Missiles

If the only targets were in South Korea, North Korea presumably could deliver nuclear weapons by various means, including via aircraft and suicidal submarines. For its perceived deterrence needs, however, the DPRK's targets are more distant. As in the case of all nuclear-armed states, ballistic missiles are its preferred delivery vehicle. But rather than producing a handful of missile systems that might seem appropriate for a nation of its small-sized economy, North Korea has displayed 13 different missile types, plus two kinds of satellite launchers.<sup>21</sup> For adversaries, the achievements to date are highly disturbing.

The missile program started in the 1980s with the import of *Scud-B* and *Scud-C* (SS-1) short-range systems (300 km and 500 km range,

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After the Agreed Framework. Center for International Security and Cooperation, Stanford University. May 27, 2016. Available at: [http://cisac.fsi.stanford.edu/sites/default/files/khucisacfinalreport\\_compressed.pdf](http://cisac.fsi.stanford.edu/sites/default/files/khucisacfinalreport_compressed.pdf) (accessed 30 June 2017); Albright D. North Korea's Nuclear Capabilities: A Fresh Look. Institute for Science and International Security. April 28, 2017. Available at: <http://isis-online.org/isis-reports/detail/north-koreas-nuclear-capabilities-a-fresh-look> (accessed 30 June 2017); 2016 Defense White Paper. ROK Ministry of National Defense. May 2017. P. 32. Available at: [http://www.mnd.go.kr/user/mndEN/upload/pblictN/PBLICTNEBO"OK\\_201705180357180050.pdf](http://www.mnd.go.kr/user/mndEN/upload/pblictN/PBLICTNEBO) (accessed 30 June 2017).

18 CISAC estimated 75-300 kg of HEU in 2015, depending on the number of enrichment facilities. The International Panel on Fissile Material is more cautious, noting that "There is as yet no firm evidence that North Korea has produced HEU." See IPFM web page on North Korea dated 5 August 2016. Available at: [http://fissilematerials.org/countries/north\\_korea.html](http://fissilematerials.org/countries/north_korea.html) (accessed 30 June 2017).

19 Eaves E. North Korean nuclear program can't be stopped with weapons, says Siegfried Hecker. Bulletin of the Atomic Scientists. May 15, 2017. Available at: <http://thebulletin.org/north-korean-nuclear-program-cant-be-stopped-weapons-says-siegfried-hecker10769> (accessed 25 June 2017).

20 Albright D. North Korea's Nuclear Capabilities: A Fresh Look...

21 Rubin U. North Korea's missile program: How far it has come, how far it needs to go. NK News. May 29, 2017. Available at: <https://www.nknews.org/pro/north-koreas-missile-program-how-far-it-has-come-how-far-it-needs-to-go/> (accessed 24 June 2017).

respectively) from Egypt then the USSR itself. Introduction of the *Nodong* in the late 1990s gave North Korea a capability to reach targets in Japan, although probably not Tokyo, given that armed with a 1,000 kg warhead, the *Nodong's* range limit is 900 km, 200 km short of Japan's capital. At some time in the 1990s, North Korea also obtained 700 km range missile, generally labeled *Scud-D*, which it sold to Syria. A later modification brought the range to 1000 km, for a missile dubbed *Scud-ER* (extended range), which was tested on 5 September 2016.<sup>22</sup> Yet another modified *Scud* missile, outfitted with a terminal guidance system and flying 400 km, was tested on 29 May 2017. Making the re-entry vehicle maneuverable improves missile accuracy, although not yet to the extent that it can be used as an anti-ship missile without a target tracking capability.<sup>23</sup> The terminal guidance also may allow the *KN-17* to challenge the Patriot endo-atmospheric missile defenses system (although not all other missile defense systems).<sup>24</sup>

Beginning in 1998 with the *Taepodong*, North Korea began to test space launch vehicles, which the US and its partner countries widely saw as being ICBM precursors, given the shared technology between these systems. Rejecting this claim, North Korea conducted a satellite launch test in April 2012 even though senior officials had to know that doing so would rupture the nascent Leap Day deal with the US and thereafter cast a pall on any inclination by the Obama administration to again venture to strike a deal with Kim.<sup>25</sup> That said, it is worth examining the degree to which space launch vehicles can contribute to an ICBM. The DPRK's current space rocket, the *Unha-4*, in January 2016

22 Schiller M., Schmucker R.H. Flashback to the Past: North Korea's "New" Extended-Range Scud. 38 North. November 8, 2016. Available at: [http://38north.org/wp-content/uploads/2016/11/Scud-ER-110816\\_Schiller\\_Schmucker.pdf](http://38north.org/wp-content/uploads/2016/11/Scud-ER-110816_Schiller_Schmucker.pdf) (accessed 30 June 2017).

23 Johnson J. North Korea hails test of 'precision-guided' missile as success, vows bigger 'gift package' for US // Japan Times. 2017. 30 May. Available at: <http://www.japantimes.co.jp/news/2017/05/30/asia-pacific/north-korea-hails-test-precision-guided-missile-success-vows-bigger-gift-package-u-s/#.WVaeasZ7ETQ> (accessed 30 June 2017).

24 Elleman M. Briefing to Congressional staffers...

25 The fact that the deal did not specify in writing that space launches fell under the moratorium is sometimes cited as an excuse for Kim's action. But this debating point is irrelevant to the context that US negotiators made clear to their North Korean counterparts that a space launch would be a deal-breaker.

successfully delivered into orbit a 200 kg satellite, twice the weight of the previous satellite launched in December 2012. Nevertheless, the *Unha* does not have the power necessary to propel a nuclear payload to ICBM altitude and distances. There are sound technical and logistical reasons why no nation has ever converted space-launch vehicles to ballistic missiles.<sup>26</sup> Among other drawbacks, a large missile that needs to be fueled on a fixed launch pad would be vulnerable to pre-emption.

After the turn of the century, North Korea paraded, and reportedly even fielded, various road-mobile systems of intermediate- and intercontinental-range. Until very recently, foreign concerns centered on the medium-range *Musudan* missile, referred to as BM-25 and, by North Korea as *Hwasong-10*. Based on the Soviet R-27 submarine-launched ballistic missile (SLBM), the *Musudan* was tested eight times in 2016, only one of which, on June 22, appears to have been successful. On that occasion, the missile flew 400 km on a lofted path with a claimed apogee of 1,413 km. On a minimum-energy trajectory, this is equivalent to 3,200 km, or 200 km short of Guam. Exaggerated assessments that it could hit the large US base in Guam are based on the 4,000 km range of the R-27.

The Scud-family systems are liquid-propelled, making the missiles susceptible to pre-emption during the fueling period. To overcome this deficiency, North Korea in 2016 introduced a solid-fueled 1,200 km-range missile it calls *Pukguksong* (North Star). Curiously, North Korea first developed a sea-launch version, testing it several times from various platforms beginning in late 2014 before succeeding with a full-range SLBM test in August 2016. Called KN-11 by the US, the *Pukguksong-1* SLBM is presumably intended as a second-strike capability. A sea-launched missile system that can attack from various directions would also complicate South Korean defenses, which today need only be aimed northward. An SLBM is a complicated system, however, that will require several years before it can be fully developed.<sup>27</sup>

<sup>26</sup> Elleman M. Briefing to Congressional staffers...

<sup>27</sup> Chi-dong L. N. Korea still years away from developing submarine missiles: US Pacific Fleet chief. Yonhap News Agency. April 4, 2017. Available at: <http://english.yonhapnews.co.kr/national/2017/04/04/0301000000AEN20170404012400315.html> (accessed 30 June 2017).

In 2017, North Korea twice, on 11 February and 21 May, successfully tested a mobile land-based version of the solid-fueled system, which it called *Pukguksong-2*, labelled KN-15 by the US. Although the range adds little in terms of new targets, the system added to North Korea's capabilities in other ways. The missile was carried on a tread-tacked vehicle that allows for an off-road capability. Given North Korea's limited number of paved roads, many of which are presumably under surveillance, this type of transporter adds significantly to an ability to evade detection. Like the *Nodong* two decades earlier, after only two effective flights tests, North Korea declared it ready for serial production and operational deployment, perhaps as a replacement for the poor-performance *Musudan*. However, the 10 km difference in peak altitude achieved by the two tests indicates that the missile is not reliably ready for combat duty.<sup>28</sup>

A new liquid-fueled missile was also introduced in 2017. After three failed launches in April 2017, on 14 May, North Korea tested a new missile that unquestionably brings Guam into range. The *Hwasong-12*, as designated by the DPRK (KN-17 in US nomenclature), flew 787 km on a trajectory that it said peaked at 2,111 km altitude. The shorter distance also made it easier to do telemetry diagnostics. On a flat flight path this is equivalent to range of 4,500 km.

DPRK state media declared *Hwasong-12* the "perfect weapon system... capable of carrying a "large-size heavy nuclear warhead."<sup>29</sup> This time, North Korea appears not to have exaggerated too much. In addition to achieving the longest range any DPRK missile has flown to date, the *Hwasong-12* was troubling in two respects. Firstly, it used a new high-thrust liquid-propulsion engine which can probably be further improved upon to provide for ICBM use. Secondly, the *Hwasong-12* is an appropriate stepping stone to an ICBM. The new engine and structural design

28 Elleman M. The Pukguksong-2: Lowering the Bar on Combat Readiness? 38 North. May 25, 2017. Available at: [http://www.38north.org/2017/05/pukguksong2\\_052517/](http://www.38north.org/2017/05/pukguksong2_052517/) (accessed 30 June 2017).

29 Panda A. North Korea's New Intermediate-Range Ballistic Missile, the Hwasong-12: First Takeaways. The Diplomat. May 15, 2017. Available at: <http://thediplomat.com/2017/05/north-koreas-new-intermediate-range-ballistic-missile-the-hwasong-12-first-takeaways/> (accessed 30 June 2017).

represent a significant technology advancement that can probably be scaled up and, with additional stages, become a legitimate ICBM.<sup>30</sup> The two- and three-stage mobile ICBMs (*Hwasong-14/KN-14* and *Hwasong-13/KN-08*) that have appeared at various military parades since 2012 will likely use the *Hwasong-12*'s engine when they are further developed.

The *Hwasong-12* may have been on Kim Jong-un's mind when he proclaimed in his 2017 New Year's speech that technicians had entered "the final stage of preparation for the test launch" of an ICBM.<sup>31</sup> The statement prompted a much-reported response from president-elect Trump via Twitter that "it will not happen."<sup>32</sup>

Many Western analysts predict that at the current pace, North Korea will achieve a reliable ICBM by 2020. A quick and dirty version that has not been fully tested, as is North Korea's proclivity, could come earlier, as soon as a year or two, according to former US Defense Secretary Bill Perry.<sup>33</sup> When North Korea will first try to test an ICBM is the question every North Korea watcher is now asking. In US Senate testimony on 7 June, Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy Robert Soofer said the DPRK was preparing for a test within the year.<sup>34</sup> While it is within North Korea's technical capabilities, however, it would be a political and strategic gamble for North Korea to defy both the US and China to this extent.

Western threat perceptions should not lead to a conclusion that North Korean development of an ICBM would dramatically change

30 Schilling J. North Korea's New Hwasong-12 Missile. 38 North. May 24, 2017. Available at: <http://www.38north.org/2017/05/jschilling052417-2/> (accessed 30 June 2017).

31 Kim Jong Un's 2017 New Year's Address. The National Committee on North Korea. January 1, 2017. Available at: [http://www.ncnk.org/resources/publications/kju\\_2017\\_new\\_years\\_address.pdf/file\\_view](http://www.ncnk.org/resources/publications/kju_2017_new_years_address.pdf/file_view) (accessed 30 June 2017).

32 Haberman M., Sanger D.E. 'It Won't Happen,' Donald Trump Says of North Korean Missile Test // New York Times. 2017. 2 January. Available at: <https://www.nytimes.com/2017/01/02/world/asia/trump-twitter-north-korea-missiles-china.html> (accessed 30 June 2017).

33 Perry W.J. Verbatim Transcript of a 38 North Press Briefing. 38 North. January 9, 2017. Available at: <http://38north.org/wp-content/uploads/2017/01/2017-0109-38-North-Press-Briefing-Transcript.pdf> (accessed 30 June 2017).

34 N. Korea poised to test 1st ICBM within 2017: Pentagon official. Kyodo News. June 11, 2017. Available at: <https://english.kyodonews.net/news/2017/06/4495538a07c0-n-korea-poised-to-test-1st-icbm-within-2017-pentagon-official.html?phrase=north%20korea&words=> (accessed 30 June 2017).



the strategic equation. Contrary to Kim's desire, it should not lead to decoupling of the US from the ROK, any more than Soviet ICBM's aimed at the American heartland in the Cold War led to the US to walk away from commitments to European defense. The far fewer missiles that North Korea may be able to point at the US and the potential of American missile defenses to knock them down, a capability totally absent in the Cold War, makes the decoupling question even less pertinent for the North Korean case. In any case, *Nodong*, *Scud-ER* and *Hwasong-12* missiles can already hit American bases in South Korea and Japan, which has not caused Washington to walk away from its extended deterrence commitments to its Asian allies.

### **Other security challenges**

Preceding its nuclear program, North Korea developed chemical and possibly biological weapons. As if to prove its CW capability, North Korea on 13 February 2017 assassinated leader Kim's older half-brother Kim Jong-nam at the Kuala Lumpur International Airport with a VX nerve agent. The CW arsenal is estimated to be between 2,500 and 5,000 metric tons, making it probably the world's largest active stockpile. Chemical weapons are reported to be deployed in forward units near the demilitarized zone.<sup>35</sup> Defector claims about biological weapons have not been confirmed, although the state is widely assessed to have at least the capability to produce anthrax, smallpox and other virulent substances.

More recently, North Korea has developed sophisticated offensive cyberwar capabilities, which it has frequently used to harass South Korean institutions. On 24 November 2014 the DPRK carried out a hacking attack on Sony Pictures in retaliation for the studio's planned release of a satirical comedy portraying an assignation of the North Korean leader. North Korea was also allegedly behind an \$81 million cyber theft from the Bangladesh central bank and the May 2017 WannaCry ransomware attacks.<sup>36</sup>

<sup>35</sup> North Korea: Chemical. NTI website. December 2016. Available at: <http://www.nti.org/learn/countries/north-korea/chemical/> (accessed 30 June 2017).

<sup>36</sup> Finkle J. Cyber security firm: more evidence North Korea linked to Bangladesh heist. Reuters. April 3, 2017. Available at: <http://www.reuters.com/article/us-cyber-heist-bangladesh-northkorea->

North Korea's conventional arms are no match for South Korea's sophisticated military technology backed by its economic and industrial strength. Yet several of North Korea's niche capabilities, particularly in the field of asymmetric warfare, present additional concerns. These include its 88,000 Special Purpose Forces, its mini-submarines, capable of inserting commandos, and its long-range artillery targeting Seoul. Most recently, on 8 June North Korea tested new anti-ship cruise missiles with a 160 km range. The timing of the launches, coming just after the US aircraft carriers *USS Carl Vinson* and *USS Ronald Reagan* participated in joint exercises with the South Korean navy in the same waters to the east of the Korean Peninsula demonstrated a heightened potential for conflict.

Kim Jong-un also presents a security challenge to his own people,<sup>37</sup> including many of those in senior ranks close to him. Through 2016, he is alleged to have executed 140 generals and other senior officials, most famously his uncle, Jang Song-taek, and some 200 other North Korean citizens.<sup>38</sup> Such brutality adds to foreign concerns about how he might use his strategic weapons.

## Policy Options

The denuclearization of North Korea, in a complete, verifiable and irreversible manner, remains the goal of all concerned parties,<sup>39</sup>

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idUSKBN175214 (accessed 30 June 2017); Riley Ch., Burke S. Intelligence agencies link WannaCry cyberattack to North Korea. CNN. June 16, 2017. Available at: <http://money.cnn.com/2017/06/16/technology/wannacry-north-korea-intelligence-link/> (accessed 30 June 2017).

37 Report of the Commission of Inquiry on Human Rights in the Democratic People's Republic of Korea, A/HRC/25/CRP.1. Human Rights Council. February 7, 2014. Available at: <http://www.ohchr.org/EN/HRBodies/HRC/CoIDPRK/Pages/ReportoftheCommissionofInquiryDPRK.aspx> (accessed 30 June 2017).

38 Kwon K.J., Westcott B. Kim Jong-un has executed over 300 people since coming to power. CNN. December 29, 2016. Available at: <http://www.cnn.com/2016/12/29/asia/kim-jong-un-executions/index.html> (accessed 30 June 2017).

39 In a form of diplomatic obfuscation, the stated goal of the Six Party Talks that started in 2003 was "denuclearization of the Korean Peninsula." All parties certainly know, however, that a nuclear weapons program only exists in the North, ever since the US removed tactical nuclear weapons from South Korea in 1991. One other reason for continuing to use the term "denuclearization" is that it leaves ambiguous whether North Korea actually possesses deliverable nuclear weapons, rather than merely nuclear devices that were exploded in underground tests. In remarks to the press after meeting with Chinese State Councilor Yang Jiechi, and PLA Chief of Joint Staff Fang Fenghui on 21 June, US Secretary of State Rex Tillerson said: "We both call for complete, verifiable and irreversible denuclearization of the Korean Peninsula, and we call on the DPRK to halt its illegal

save North Korea itself, which refuses to repeat the denuclearization purpose of the Six Party Talks that have been in abeyance since 2007. There are no easy answers to the North Korean conundrum, which is rightly described as the "problem from hell."<sup>40</sup> While some problems can be managed until opportunities for resolution present themselves, the North Korean case may not allow the luxury of waiting.

Over the years, nearly every policy option save military force has been employed to try to stop North Korea's nuclear advancement. Various forms of bilateral and multilateral diplomacy, engagement and assistance plus pressure in the form of sanctions and threats have repeatedly failed. Some options worked better than others, although only for a period of time. The 1994 Agreed Framework between the US and DPRK froze the plutonium program for nearly a decade, before it came to an end due to North Korea being caught pursuing an alternative uranium enrichment path to nuclear weapons. The 19 September 2005 Joint Statement reached by the Six Party Talks was a landmark deal that coupled denuclearization steps with diplomatic recognition by the US and Japan and a peace treaty. It soon ran aground, however, and the next year North Korea conducted its first nuclear test. The deal was revived in 2007 and some parts of the nuclear program were disabled but a dispute over verification derailed it again, this time apparently for good. The most recent diplomatic accord was the 2012 "Leap Day Deal," under which North Korea agreed to a moratorium covering nuclear tests, uranium enrichment at its Yongbyon complex, and "long-range missile launches." When just over two weeks later Kim announced plans for a satellite rocket launch that violated the oral terms of the agreement, it soured the Obama administration on any further diplomatic gambles with North Korea.

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nuclear weapons program and its ballistic missile test, as stipulated in the U.N. Security Council resolutions." See: Secretary of State Rex Tillerson and Secretary of Defense Jim Mattis at a Joint Press Availability. US Department of State. June 21, 2017. Available at: <https://www.state.gov/secretary/remarks/2017/06/272103.htm> (accessed 30 June 2017).

40 Manning R.A., Przystup J. How to Make the Korea Problem Worse. *The National Interest*. April 14, 2017. Available at: <http://nationalinterest.org/feature/how-make-the-korea-problem-worse-unification-20172> (accessed 30 June 2017).

In light of that poor track record, critics of engagement ask why North Korea could be expected to behave any differently today. The engagers pose the same question to those who argue that sanctions will sway North Korea, despite decades of ineffectual application of such pressure. The answer to both criticisms is that neither policy has been applied with sufficient consistency and intensity to produce results. If engagement is to work, it has to be sought whole-heartedly, and at the highest level, as Obama did in successful pursuit of a diplomatic solution with Iran. If sanctions are to work, they have to be applied in strong measure by all of North Korea's major trading partners, as also was the case with the Iran nuclear deal.

The Iran deal teaches one other lesson: that incentives and disincentives must be used in tandem. Iran came to the negotiating table in seriousness in 2013 in order to seek escape from choking economic sanctions, but it accepted limits on its nuclear program only when the Obama Administration made a significant compromise to allow limited uranium enrichment.

New US President Donald Trump is no fan of the Iran deal and sometimes talks as though he disfavors diplomacy altogether. Yet when the Trump team carried out a North Korea policy review in spring 2017, what emerged looked very similar to the Obama policy of strategic patience, giving priority to tougher sanctions, emphasizing the role of China, disavowing regime change if North Korea disarms, and keeping the door open to engagement once "maximum pressure" has persuaded Pyongyang to change its behavior. Military options remained on the table but not to be utilized for the time being.

### ***Sanctions and other forms of pressure***

Coercion via economic sanctions has been the default policy tool for attempting to stop North Korea's nuclear and missile programs. In light of the continued expansion of these programs, the policy has demonstrably failed. It should be noted, however, that crippling sanctions on the order of those imposed against Iran have only been in effect for

about a year. It took longer than that for tough sanctions to bring Iran to the negotiating table in 2013. Given North Korea's inherent isolation from the international financial system, the latest measures will likely take longer there to have a policy impact.

The United Nations Security Council (UNSC) began to apply sanctions on North Korea after its first nuclear test in 2006, but not until a decade later were they tightened to the degree of the Iran-focused sanctions (albeit not yet implemented as strictly as the Iran sanctions). UNSC Resolution 2270, adopted in March 2016, imposed mandatory inspections of cargo from North Korea and restricted DPRK export of coal, iron ore and rare earth metals, but allowed a significant exception for trade relating to "livelihood purposes." This loophole was tightened in Resolution 2321, adopted in November, more than 80 days after the September 2016 nuclear test. It capped coal exports to China, North Korea's only customer, at US\$400 m or 7.5 m tons, whichever was lower. After large front-end purchases, China announced in February that it would stop importing coal for the rest of the year. Evidence is mixed regarding the extent to which China is implementing that decision and the other Security Council restrictions. But China is not the only country that has been lax in carrying out UN sanctions, as documented by the UN Panel of Experts on North Korean sanctions. This is due both to lack of political will and to North Korea's sophistication in using a highly complex and multi-layered procurement network, using front companies, intermediaries and diplomatic personnel to sustain the flow of goods, cash and services.<sup>41</sup>

Following North Korea's fourth nuclear test in January 2016, the US significantly increased the pressure in 2016 by, inter alia, listing the entire state as a "primary money laundering concern" and designating Kim Jong-un himself as a human rights abuser. Under the North Korea Sanctions and Policy Enhancement Act, the US in November

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41 Report of the Panel of Experts established pursuant to resolution 1874 (2009), S/2017/150. January 30, 2017. Available at: [https://www.un.org/sc/suborg/en/sanctions/1718/panel\\_experts/reports](https://www.un.org/sc/suborg/en/sanctions/1718/panel_experts/reports) (accessed 30 June 2017).

2016 banned North Korean transactions denominated in US dollars. In accordance with several measures, the US Treasury to date has black-listed about 200 North Korean entities, subjecting them to a global asset freeze and travel ban. Following the nuclear test in September 2016, the US for the first time designated a Chinese firm, the Dandong Hongxiang Industrial Development Company, for knowingly helping a sanctioned North Korean bank launder money through US banks.<sup>42</sup> The blacklisting, which creates wide reputational damage even if the firm has no assets in the US subject to seizure, was apparently coordinated with Beijing, which launched a criminal investigation of the firm. No similar coordination appears to have taken place with Moscow when the US in June 2017 designated two Russian firms and a Russian citizen whose business ties with North Korea were said to support its weapons programs. Reacting angrily, the Russian government said it was preparing retaliatory measures.<sup>43</sup> At the very least, Russia is now less likely to cooperate with the US in addressing the North Korean issue.

The Trump Administration is considering going further in its use of secondary sanctions, in an effort to end North Korea's access to the international financial system and to sources of hard currency. Secondary sanctions have a downside, however, in that they could heighten tensions with China and reduce its willingness to cooperate with the US vis-à-vis North Korea. To minimize these risks, secondary sanctions should continue to be coordinated in advance and targeted against firms that violate Security Council resolutions.

It should not be too hard for Chinese authorities to learn which firms are involved in illicit trade with North Korea. In a study of the North Korean overseas financing and procurement system, C4ADS, an

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42 Four Chinese Nationals and China-Based Company Charged with Using Front Companies to Evade US Sanctions Targeting North Korea's Nuclear Weapons and Ballistic Missile Programs. Office of Public Affairs, US Department of Justice. September 26, 2016. Available at: <https://www.justice.gov/opa/pr/four-chinese-nationals-and-china-based-company-charged-using-front-companies-evade-us> (accessed 30 June 2017).

43 Torbati Y. US sanctions more, including Russians, over North Korea arms. Reuters. June 1, 2017. Available at: <http://www.reuters.com/article/us-usa-sanctions-northkorea-idUSKBN18S5N9> (accessed 30 June 2017).

American think tank, concluded that "this system is centralized, limited, and vulnerable, and that its disruption should greatly increase the pressure on the Kim regime to return to the negotiating table."<sup>44</sup> For large Chinese banks and other firms for which blacklisting may be seen as too draconian, fines could be levied instead, as was the case with several European banks that were engaged in shady transactions with Iran.<sup>45</sup> Whatever form the sanctions take, the scope should be widened considerably. Any firms engaging in illicit trade with North Korea are liable for sanctions, as well as third country banks, shipping agents, transport companies, port operators and cargo handlers that facilitate such trade.<sup>46</sup>

The mood in the United States is to go even farther and to seek to cut off all DPRK access to hard currency, especially if North Korea tests another nuclear device or flight-tests an ICBM. Whether through UN sanctions or unilateral US measures, there are calls for embargoing all oil supplies to the DPRK, banning its national airline Air Koryo, prohibiting the employment of contracted North Korean labor abroad, expanding efforts to seize Kim Jong-un's assets abroad and banning major North Korean commodity exports including coal, minerals, seafood and textiles. The idea is that a full embargo on trade is needed to persuade North Korea of the need to choose between nuclear weapons and a sustainable economy.<sup>47</sup> With exceptions for food, medicine and other humanitarian needs, all trade with North Korea might be targeted, by excluding from the US market any foreign firms doing business

44 Risky Business: A System-Level Analysis of the North Korean Proliferation Financing System. C4ADS. June 12, 2017. Available at: <https://static1.squarespace.com/static/566ef8b4d8af107232d5358a/t/59413c8bebbd1ac3194eafb1/1497447588968/Risky+Business-C4ADS.pdf> (accessed 30 June 2017).

45 O'Carroll Ch. Punishing China to pressure North Korea: Could secondary sanctions work? NK News. May 16, 2017. Available at: <https://www.nknews.org/2017/05/punishing-china-to-pressure-north-korea-could-secondary-sanctions-work/> (accessed 30 June 2017).

46 Stanton J., Lee S.-Y., Klingner B. Getting Tough on North Korea. Foreign Affairs. May/June 2017. Available at: <https://www.foreignaffairs.com/articles/north-korea/2017-04-17/getting-tough-north-korea> (accessed 30 June 2017).

47 Brunstrom D., Spetalnick M. Exclusive: North Korea oil imports, airline among possible US sanctions targets – sources. Reuters. April 13, 2017. Available at: <http://www.reuters.com/article/us-usa-northkorea-options-exclusive-idUSKBN17F030> (accessed 30 June 2017).



with the rogue regime.<sup>48</sup> The purpose is not punishment or sanctions for sanctions sake, but to force the regime to choose between nuclear weapons and its survival. This means that sanctions must be combined with credible offers of sanctions relief if North Korea takes significant steps toward disarmament.

Even with exceptions for humanitarian purposes, this kind of broad sanctions are blunt instruments that will afflict pain on the North Korean people as a whole. There is little evidence to suggest that the North Korean leadership cares about the impoverishment of the general population as long as the ruling family and the elites on whom it relies do not go hungry. Witness the 500,000 or more North Koreans who were allowed to starve to death in the mid-1990s.<sup>49</sup> The *Songun* "military first" policy is unlikely to change. In the short term, tougher sanctions may only reinforce the regime's authoritarianism. The other argument against sanctions is that they usually do not work. This is true both as a global historical fact<sup>50</sup> and in the particular case of North Korea. Through the use of front companies and intermediaries, North Korea is skillful at evading restrictions. If sanctions are not only ineffective but also counter-productive, then it is reasonable to question the policy. The answer that "sanctions do not work until they do" is not entirely satisfying.

Economic sanctions are not the only forms of pressure that North Korea will feel. The US has called for countries to suspend or downgrade diplomatic relations with the DPRK. New measures are likely to include re-listing North Korea as a state sponsor of terrorism and banning tourism to North Korea by US passport holders. The US and South Korea could offer greater rewards to entice North Korean defectors. Former

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48 Revere E.J.R. Dealing with a nuclear-armed North Korea. Brookings. October 4, 2016. Available at: <https://www.brookings.edu/research/dealing-with-a-nuclear-armed-north-korea/> (accessed 30 June 2017).

49 Goodkind D., West L., Johnson P. A Reassessment of Mortality in North Korea, 1993-2008. US Census Bureau, Population Division. March 28, 2011. Available at: <http://paa2011.princeton.edu/papers/111030> (accessed 30 June 2017).

50 Hufbauer G.C., Schott J. et al. Economic Sanctions Reconsidered. Washington: Peterson Institute for International Economics, 2007.

US senior diplomat Evans Revere from the Brookings Institution suggests that pressure be put on North Korea in every sphere, including by finding ways to get information to North Korean citizens through the 2 million-plus cell phones in use and other means, and by exploring overt and covert means to exploit vulnerabilities in the nation's communications, banking, and financial systems. Others have suggested an "active measures" intelligence campaign to undermine confidence in the DPRK leadership and sow confusion.<sup>51</sup>

Although air strikes against North Korean nuclear and missile sites have apparently been ruled out for now because of the risk of restarting the Korean War, increased pressure will likely have a military dimension. The already robust US military capacities in and around the Korean Peninsula will likely be improved, including with more frequent visits of nuclear-capable bombers (although not carrying nuclear weapons) and of aircraft carrier groups. The scope and tempo of military exercises might be increased and maritime interdictions and inspections of North Korean vessels and a naval quarantine may also be considered.

### ***The role of China***

Chinese cooperation is vital to the sanctions-based policy, for two reasons. As is frequently noted, China's market domination gives it unique leverage with North Korea. China accounts for 90% of North Korea's imported oil, and the bulk of its foreign trade and investment. China today is also the source or transit point for most of the foreign-origin goods and materials that contribute to North Korea's nuclear and missile programs, including missile-transport vehicles.<sup>52</sup> Whether because of bureaucratic inefficiency or lack of political will, the Chinese government appears to turn a blind eye to much of this trade.

51 Pavel B., Manning R.A. 7 Options For Taming Tyrannical North Korea. *The National Interest*. May 24, 2017. Available at: <http://nationalinterest.org/feature/7-options-taming-tyrannical-north-korea-20827> (accessed 30 June 2017).

52 Pearson J. China-Made Truck Used in North Korea Parade to Show Submarine-Launched Missile. *Reuters*. April 18, 2017. Available at: <https://www.usnews.com/news/world/articles/2017-04-18/china-made-truck-used-in-north-korea-parade-to-show-submarine-launched-missile> (accessed 30 June 2017).

North Korea was a central topic when Chinese President Xi Jinping met with Trump at his Mar-a-Lago Florida club on 5-6 April 2017. Persuading the US president of his seriousness, Xi reportedly won a 100-day grace period to deal with the North Korea problem before the US applied secondary sanctions on Chinese firms.<sup>53</sup> Among other signs of a crack-down, China made known that it had informally told some firms to stop hiring North Korean laborers, about 19,000 of whom are reportedly working in China, with the preponderance of their wages sent home as foreign exchange earnings.<sup>54</sup> On 12 April, a harsh editorial in the *Global Times*, a Chinese Communist Party-associated newspaper sometimes used to float unofficial views, threatened to restrict oil sales if North Korea conducted another nuclear test or tested an ICBM.<sup>55</sup> The editorial was one salvo in a growing war of words between the state media of the two countries. A 4 May *Global Times* commentary, for example, criticized the "irrational logic" of North Korea nuclear program and referred to the difficulty that China has in communicating with Pyongyang.<sup>56</sup> The previous month the DPRK had snubbed meeting requests from Chinese Foreign Minister Wang Yi and envoy to North Korea Wu Dawei.<sup>57</sup>

However angry China may be with its supposed ally, China-North Korea trade actually increased 37.4% in the first quarter of 2017 over the similar period in 2016. Chinese exports rose by 54.5% and imports from North Korea by 18.4%, according to China's General Administration of Customs.<sup>58</sup> None of North Korea's trading partners have been shut

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53 Xi asked Trump for '100 days' to deal with North Korea problem. The Asahi Shimbun. May 23, 2017. Available at: <http://www.asahi.com/ajw/articles/AJ201705230012.html> (accessed 30 June 2017).

54 Nagai O. China telling companies not to hire North Koreans. The Nikkei Asia Review. June 18, 2017. Available at: <http://asia.nikkei.com/Politics-Economy/International-Relations/China-telling-companies-not-to-hire-North-Koreans> (accessed 30 June 2017).

55 Is North Korea nuclear crisis reaching a showdown? The Global Times. April 12, 2017. Available at: <http://www.globaltimes.cn/content/1041998.shtml> (accessed 30 June 2017).

56 KCNA critique won't ease mounting nuke tension. The Global Times. May 4, 2017. Available at: <http://www.globaltimes.cn/content/1045325.shtml> (accessed 30 June 2017).

57 North Korea Snubbed Chinese Diplomats. Bloomberg. April 17, 2017. Available at: <https://www.bloomberg.com/news/articles/2017-04-17/north-korea-said-to-snub-chinese-diplomats-as-tensions-mounted> (accessed 30 June 2017).

58 Perlez J., Huang Y. China Says Its Trade With North Korea Has Increased // New York Times. 2017. 3 April. Available at: [https://www.nytimes.com/2017/04/13/world/asia/china-north-korea-trade-coal-nuclear.html?\\_r=0](https://www.nytimes.com/2017/04/13/world/asia/china-north-korea-trade-coal-nuclear.html?_r=0) (accessed 30 June 2017).

down or penalized and there are indications that the coal cut-off is not complete.<sup>59</sup> Meanwhile, as noted above, the pace of North Korean missile testing has increased. Beijing can point to the absence of any nuclear or ICBM tests the first half of 2017, but whether this is due to Chinese pressure or a DPRK technology timetable that runs on its own schedule is unclear.

Prior to the first meeting of the US-China Diplomatic and Security Dialogue on 21 June, Trump expressed frustration over this trend in a tweet that continued to give Xi the benefit of the doubt: "While I greatly appreciate the efforts of President Xi & China to help with North Korea, it has not worked out. At least I know China tried!"<sup>60</sup> At the meeting, the Chinese agreed their companies "should not do business" with sanctioned North Korean entities but they apparently made no further commitments.<sup>61</sup>

Beijing is reluctant to put more pressure on Pyongyang for fear of creating instability that would cause security problems for China itself. Stability on its borders takes far greater precedence than does non-proliferation. As troublesome as Kim Jong-un is for the Chinese, they are more troubled by the prospect of North Korean turmoil, an influx of refugees and the loss of a buffer state. Yet there is much that China could do to enforce existing sanctions without threatening collapse of the Kim regime. US Secretary of State Tillerson listed some of these measures when, at a press conference at the end of the dialogue, he called on China to crack down on illicit North Korean activities, choke off funding sources, and stop DPRK computer hacking.<sup>62</sup>

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59 Byrne L. Four N. Korean ships, three with troubled pasts, allowed into Chinese coal port. NK News. April 21, 2017. Available at: <https://www.nknews.org/2017/04/four-n-korean-ships-three-with-troubled-pasts-allowed-into-chinese-coal-port/> (accessed 30 June 2017).

60 Nakamura D. Trump: China's pressure on North Korea 'has not worked out' // Washington Post. 2017. 2 June. Available at: <https://www.washingtonpost.com/news/post-politics/wp/2017/06/20/trump-chinas-pressure-on-north-korea-has-not-worked-out/> (accessed 30 June 2017).

61 Brunnstrom D., Spetalnick M. In high-level talks, US asks China to do more to rein in North Korea. Reuters. June 22, 2017. Available at: <https://www.reuters.com/article/us-usa-china-talks-idUSKBN19C1R3> (accessed 30 June 2017).

62 Ibid.

## ***Freeze for Freeze***

China has made clear that greater cooperation over North Korea hinges on a sincere US effort to negotiate with Pyongyang. In a 28 April speech to the UN, for example, Foreign Minister Wang Yi noted that UN resolutions call both for carrying out sanctions and for resuming Six Party Talks.<sup>63</sup> The previous month Wang had proposed as a first step that the DPRK suspend its missile and nuclear activities in exchange for a halt to large-scale US-ROK military exercises. "Double suspension" could bring the parties back into negotiation and be followed, he said, by a dual-track approach to denuclearize the Peninsula and establish a peace mechanism, in order to address both sides' security concerns.<sup>64</sup> China repeated the proposal at the 21 June high-level talks.

The benefit of a freeze is that without flight testing, North Korea cannot develop a reliable ICBM. A moratorium on long-range missile tests would also lower tensions and, by removing the incentive for a preventive US attack, preserve peace. If rolling back the nuclear weapons program is undoable for the time being, stopping North Korea from developing better bombs and longer-range missiles is a worthy secondary goal. Former Secretary of Defense Bill Perry argues passionately for this approach:

"...it is my strongly held view that we do not have it in our power today to negotiate an end to the nuclear weapons program in North Korea, but we do have it in our power, probably, to lessen the danger, and the number one objective of that would be to stop ICBM testing, stop nuclear testing. That would go a long way, I think, towards lessening the danger."<sup>65</sup>

In addition to a freeze on ICBM and nuclear tests, Perry and others would add a ban on DPRK export of nuclear technology. These three

63 Stay Committed to the Goal of Denuclearization Uphold Peace and Stability on the Peninsula, Statement by Foreign Minister Wang Yi at the UN Security Council Ministerial Session on the Nuclear Issue on the Korean Peninsula. Ministry of Foreign Affairs of the People's Republic of China. April 28, 2017. Available at: [http://www.fmprc.gov.cn/mfa\\_eng/zxxx\\_662805/t1458508.shtml](http://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1458508.shtml) (accessed 30 June 2017).

64 Blanchard B. China asks North Korea to stop missile tests, tells US and South to seek talks. Reuters. March 8, 2017. Available at: <http://www.reuters.com/article/us-northkorea-missiles-china-idUSKBN16F0AA> (accessed 30 June 2017).

65 Perry W.J. Verbatim Transcript of a 38 North Press Briefing...

moratoria would all be verifiable remotely by US national technical means. A freeze should also include long-range missile launches short of an ICBM and nuclear activities at Yongbyon, including uranium enrichment, plus the return of IAEA inspectors, measures that were all included in the Leap Day Deal and which would not pose verification problems.

What the US might be willing to give up for a freeze is contentious. Most American analysts would say "not much," given that North Korea is already obliged to stop testing under successive Security Council resolutions, and that a freeze is a far cry from the denuclearization goal. DPRK demands for sanctions relief, removal of the Terminal High Altitude Area Defense missile defense system (portions of which were installed in South Korea earlier this year for protection against DPRK missiles) and any hint of accepting North Korea as a nuclear-armed state should all be rejected. It should at least be possible, however, to offer the food assistance that was unofficially tied to the Leap Day deal in 2012. The offer was for 240,000 metric tons of "nutritional assistance" such as high-protein biscuits, "with the prospect of additional assistance based on continued need."<sup>66</sup> At an estimated cost of \$200-250 million, this was a bargain.

No matter what the quid pro quo, North Korea may not be inclined to consider any limits until it has developed a nuclear-tipped ICBM. By then, however, there would be far less value for the other side in a launch moratorium. North Korea would have greater leverage in any negotiations if the topic were broached before it is too late. Although Pyongyang has not itself promoted a "freeze for freeze," the DPRK ambassador to India, Kye Chun-yong, said in a 21 April interview that his country could consider a temporary halt.<sup>67</sup>

For its part, the Trump Administration rejected China's proposal, which would run counter to the US policy of maximum pressure. American

<sup>66</sup> US-DPRK Bilateral Discussions, Press Statement. US Department of State. February 29, 2012. Available at: <https://2009-2017.state.gov/r/pa/prs/ps/2012/02/184869.htm> (accessed 30 June 2017).

<sup>67</sup> Sanger D.E., Harris G. US Pressed to Pursue Deal to Freeze North Korea Missile Tests // New York Times. 2017. 22 June. Available at: [https://www.nytimes.com/2017/06/21/world/asia/north-korea-missile-tests.html?\\_r=0](https://www.nytimes.com/2017/06/21/world/asia/north-korea-missile-tests.html?_r=0) (accessed 30 June 2017).

officials and many non-governmental analysts fear that a freeze would simply lock in North Korea's strategic advances and give de facto recognition of a nuclear-armed status. The threat to Japan and South Korea would remain undiminished, perhaps giving the misimpression that the US cares only about protecting its own homeland from DPRK missile attacks. Halting joint exercises is deemed out of the question because of the need for military forces to maintain operational readiness. The US also argues that the exercises are purely defensive and thus should not be traded for a halt to DPRK missile launches that are offensive and, under UN resolutions, illegal. The North Koreans see it the opposite way around.

Opponents of the double suspension proposal note the past cases when negotiated moratoria on missile tests were broken and point to the difficulty of verifying a freeze on fissile material production and missile development activity that should be part of a negotiated freeze. If North Korea is able to continue such work, a freeze that could be broken at any time would not create real security. Critics also worry about the precedent set if North Korea's violation of the NPT were seen to be swept under the rug. The latter concern is among many reasons why any freeze must be tied to a denuclearization agreement. As long as North Korea rejects this basic premise of the Six Party Talks, the double suspension proposal will not win approval by Washington.

The arguments against a freeze are strong but not insurmountable. A freeze, as an initial step in a negotiation on denuclearization, would not cede that goal. Nor would talking to North Korea confer recognition of a nuclear-armed status, implicitly or otherwise. Whatever North Korea might boast, a de facto status is only in the minds of the beholder; its negotiating partners would continue to insist on denuclearization as the goal.

It should be possible to consider variations of the freeze proposal. Rather than halting joint exercises, they perhaps could be reduced in scale and length or moved, if military professionals judge that this can be done without undermining their readiness purpose or the affirmation of US deterrence commitments that they represent. Drills practicing



"decapitation" might be omitted, for example, as well as overflights by nuclear-capable aircraft, which are largely for show, since the US is unlikely to use nuclear bombs in a new Korean war. Scaling back the exercises in other ways could be tied to military confidence-building measures that might also relieve North Korea of some of the expense of conducting large-scale exercises. Realizing that a total suspension is not in the cards, North Korea has suggested that it could exercise restraint in missile testing if the US and ROK adjusted the exercises to make them appear less threatening.<sup>68</sup>

As of late June, newly elected South Korean President Moon Jae-in has kept his cards close to his chest with regard to China's double suspension proposal. As a candidate, he showed interest in the idea, but since election, he has distanced himself from it in order not to damage relations with Washington.<sup>69</sup>

### **Engagement**

Moon probably would like to return to some semblance of the "Sunshine policy" of South Korea's last two progressive presidents, Kim Dae-jung (1998-2003) and Roh Moo-hyun (2003-2008), the latter of whom Moon served as chief of staff. The sunshine policy aimed to soften North Korean attitudes through interactions and economic assistance. The aid rescued Pyongyang from an economic crisis but did not stem its nuclear program and sparked tensions with Washington. Roh was followed by two conservatives who turned the tables on sunshine in favor of sanctions, yet had no more success in reining in the North. Moon sees both sanctions and engagement as necessary tools that should be applied simultaneously but cautiously. The inevitable play on words is to dub his approach a "Moonshine policy."

68 Wit J.S., Sokolsky R. How Trump Could Get a Deal with North Korea. The Atlantic. February 13, 2017. Available at: <https://www.theatlantic.com/international/archive/2017/02/north-korea-ballistic-missile-test/516537/> (accessed 30 June 2017).

69 Ji D. Seoul distances itself from adviser comments on joint military exercises. NK News. June 19, 2017. Available at: <https://www.nknews.org/2017/06/seoul-distances-itself-from-adviser-comments-on-joint-military-exercises/> (accessed 30 June 2017).

Moon also wants the ROK to take the lead in dealing with North Korea.<sup>70</sup> It makes sense for many reasons for South Korea to be deeply involved, if not leading, any diplomatic engagement with the North. Not only is South Korea the country with most to lose in the event of war, it also is central to information-sharing strategies that hold the most promise for changing North Korean behavior and for the aid and reconstruction efforts that will be necessary in the event of DPRK collapse.

The Trump Administration, after first seeming to eschew diplomatic engagement,<sup>71</sup> has come around keeping the door to dialog open. In a 1 May interview, President Trump said if it were appropriate, he himself would be "honored" to meet with Kim Jong-un, although he added that it would need to be under the "right conditions."<sup>72</sup> Later that day, spokesman Sean Spicer clarified that "those circumstances do not exist now." Parroting Trump, on 13 May, Choe Son-hui, director-general of the North America bureau chief of North Korea's foreign ministry, said the DPRK "will hold dialogue under right conditions."<sup>73</sup>

What are the right conditions, one might ask, and how long should one wait for them to materialize? US Ambassador to the UN Nikki Haley said on 16 May: "We are ready to talk, but not until we see a total stop of the nuclear process and any test there."<sup>74</sup> Two days later,

70 Fifiield A., Seo Y. Interview with Moon Jae-in, Set to Be South Korea's Next President // Washington Post. 2017. 2 May. Available at: <https://www.washingtonpost.com/news/worldviews/wp/2017/05/02/interview-with-moon-jae-in-set-to-become-south-koreas-next-president/> (accessed 30 June 2017).

71 In visiting Tokyo on 16 March, Secretary of State Rex Tillerson said diplomatic efforts of the past 20 years had failed and that it was time to try a different approach. See: Fifiield A., Gearan A. Tillerson says diplomacy with North Korea has 'failed'; Pyongyang warns of war // Washington Post. 2017. 16 March. Available at: [https://www.washingtonpost.com/world/asia\\_pacific/tillerson-stresses-regional-cooperation-to-curb-north-koreas-weapons-programs/2017/03/16/4ec5e07c-09ab-11e7-bd19-fd3afa0f7e2a\\_story.html?utm\\_term=.722e1b83ee80](https://www.washingtonpost.com/world/asia_pacific/tillerson-stresses-regional-cooperation-to-curb-north-koreas-weapons-programs/2017/03/16/4ec5e07c-09ab-11e7-bd19-fd3afa0f7e2a_story.html?utm_term=.722e1b83ee80) (accessed 30 June 2017).

72 Wang Ch. Trump repeats that he's open to meeting Kim Jong Un, says he 'would be honored to do it'. CNBC. May 1, 2017. Available at: <http://www.cnbc.com/2017/05/01/trump-repeats-that-hes-open-to-meeting-kim-jong-un-says-he-would-be-honored-to-do-it.html> (accessed 30 June 2017).

73 Parker A., Gearan A. President Trump says he would be 'honored' to meet with North Korea dictator // Washington Post. 2017. 1 May. Available at: [https://www.washingtonpost.com/news/post-politics/wp/2017/05/01/trump-says-hed-be-honored-to-meet-with-north-korean-dictator/?utm\\_term=.f366f9724651](https://www.washingtonpost.com/news/post-politics/wp/2017/05/01/trump-says-hed-be-honored-to-meet-with-north-korean-dictator/?utm_term=.f366f9724651) (accessed 30 June 2017).

74 US Ambassador Haley: North Korea Needs to Stop Nuclear Program Before Any Talks. VOA. 16 May 2017. Available at: <https://www.voanews.com/a/united-nations-ambassador-haley-north-korea-stop-nuclear-program/3853506.html> (accessed 30 June 2017).

Tillerson reportedly said that Pyongyang should refrain from conducting nuclear or missile tests for a certain period of time so as to create the right atmosphere for talks.<sup>75</sup>

Given the accelerated pace of North Korea's missile program, time is not on the side of concerned states. Professor Moon Chung-in, who on 21 May was nominated by President Moon as a special on unification, diplomacy and national security affairs, argued in a commentary the next day that "we cannot sit around and wait for the "right conditions." To secure an initiative in nuclear resolution, preemptive talks with North Korea are essential. Of course, working-level talks may be difficult at this point. But roundabout ways should be used for behind-the-curtain contacts."<sup>76</sup> Former US Senator Sam Nunn similarly argues for initiating informal talks, above all in order to prevent a tragic miscalculation by North Korea.<sup>77</sup>

US engagement with North Korea would better position Washington to persuade Beijing to join in tougher sanctions, since China has long insisted that pressure must be coupled with diplomacy. An engagement strategy would also help keep South Korea in alignment on North Korea policy. Keeping diplomatic channels open is also necessary as an off-ramp for Kim Jong-un should he decide to seek relief from the increasing pressure of sanctions. Contacts with North Korea are useful in order to sound out North Korean terms, float confidence-building proposals and confirm US goals and policies.

For North Korea, the right conditions appear to mean when the US is ready to talk about a peace treaty without conditions. In effect, the DPRK wants to be recognized as nuclear-armed and to conduct bilateral arms control with the US on this basis. In seeking a peace treaty

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<sup>75</sup> Jae-soon Ch. Tillerson wants NK to trust US promise of no hostility, refrain from nuclear, missile tests. *Yonhap News Agency*. May 19, 2017. Available at: <http://english.yonhapnews.co.kr/northkorea/2017/05/19/38/0401000000AEN20170519002652315F.html> (accessed 30 June 2017).

<sup>76</sup> Chung-in M. A path for diplomatic success. *Korea Joongang Daily*. May 22, 2017. Available at: <http://koreajoongangdaily.joins.com/news/article/Article.aspx?aid=3033648> (accessed 30 June 2017).

<sup>77</sup> Former Senator Sam Nunn on CNN re. North Korea — Interview by Wolf Blitzer. *Nuclear Threat Initiative*. April 24, 2017. Available at: <http://www.nti.org/newsroom/news/former-senator-sam-nunn-cnn-re-north-korea-interview-wolf-blitzer/> (accessed 30 June 2017).

to replace the Korean War armistice agreement, North Korea's underlying goal is to see the end of the US-ROK alliance and the presence of US forces on the peninsula. Such conditions are unacceptable to the US. But negotiating a formal end to the Korean War should not itself be ruled unacceptable, as long as South Korea is either directly involved or is satisfied via indirect involvement that its interests are being protected. The US should also have no objection to repeating the respect for North Korean sovereignty and the assurances of no "hostile intent" or intention to attack that were included in the 2005 Joint Declaration.

If information communication channels can be established, one potential US envoy to North Korea might be President Trump's son-in-law Jared Kushner, who, despite having no previous diplomatic experience was tapped to engage with Canada and Mexico and even to tackle the thorny Israel-Palestine imbroglio. Kim Jong-un has declined to meet with almost every visiting dignitary the past five years, and is not known to have met any American except for the glitzy former basketball star Dennis Rodman. Given the Korean societal emphasis on family connections, it is plausible that Kim would be attracted to the symbolism of meeting Kushner.<sup>78</sup> Although Richard Nixon's 1972 visit to China is over-played as a model for unlikely diplomatic gambits, a Trump breakthrough with North Korea could be of comparable historic importance.

Prospects for US engagement with North Korea deteriorated in mid-June, however, when Otto Warmbier, the 22-year-old college student whom Pyongyang had imprisoned for 17 months over a trivial prank before releasing him in a coma, died shortly after being reunited with his parents. Americans were outraged at what they saw as murder. For over a year, US diplomats had been negotiating with Choi Sun-hee, director-general of the DPRK Foreign Ministry's North America

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<sup>78</sup> Fitzpatrick M. Send Jared Kushner to Pyongyang. International Institute for Strategic Studies. April 6, 2017. Available at: <https://www.iiss.org/en/politics%20and%20strategy/blogsections/2017-6dda/april-198e/send-jared-kushner-to-pyongyang-64af> (accessed 30 June 2017).

Affairs Bureau, over release of Warmbier and three other US prisoners. Talks also reportedly touched on the nuclear issue and some US officials had hoped that the opening could expand. Immediate release of the other prisoners, whom America regards as hostages, could salvage the communication channel with Choi, but Pyongyang does not appear inclined to make that concession.

The DPRK leadership also appears disinterested in pursuing engagement with South Korea. Shortly after Moon was elected, North Korea conducted the most rapid-paced missile test series yet, firing off missiles on May 14, 21 and 29 and June 8. The insult to Moon was reminiscent of the way in which North Korea responded with a ballistic missile test then a nuclear test to newly elected President Obama's offer of improved relations in early 2009.

If the flight tests were intended as a means of pressuring Moon to offer concessions, they had the opposite effect of creating closer harmony with US policy than otherwise might have been the case given Moon's pro-engagement posture as a presidential candidate. Among other measures, he had indicated an interest in re-opening the Kaesong Industrial Park, which at its peak in 2015 employed over 54,000 North Koreans. In February 2016, Park closed it in retaliation for DPRK rocket launches and to deprive the regime of hard currency earned from the venture that Seoul claimed was being used to fund the nuclear and missile programs. Trying to re-open Kaesong would open a can of worms for Moon, not least because it would violate the ban in UN Security Council Resolution 2321 on investment insurance and on representative offices and banking accounts dealing with North Korea. Although exceptions could be sought from UN sanctions, the Moon government would find it politically awkward to seek them when North Korea is acting so hostile.

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Tough sanctions and other forms of pressure are needed to persuade Kim Jong-un that maintaining the nuclear weapons program

is at the expense of his regime's survival. Pressure alone will not suffice, however. It needs to be combined with an engagement strategy. China's double suspension proposal is one potential path forward, as long as it does not detract from the denuclearization goal. DPRK confirmation of the denuclearization premise need not be a condition for beginning informal talks on variations of the freeze-for-freeze idea and other confidence-building measures. But it should be a condition for any ensuring agreement. If the regime continues to resist the goal sought by all other concerned states, then justice would be served if it does not in fact survive. The "maximum pressure" being applied to coerce Kim into making the right choice may contribute to his fall, even though "regime change" is not the professed goal of the United States. It would be his choice.

## 9. NUCLEAR WAR MUST NEVER BE FOUGHT: THE NEED FOR A NEW GLOBAL CONSENSUS

*John Carlson*<sup>1</sup>

*"A nuclear war cannot be won and must never be fought."  
President Ronald Reagan, 1984*

Nearly half a century after the conclusion of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), and more than 25 years after the end of the Cold War, the world still has some 15,000 nuclear weapons. The division reflected in the NPT between nuclear-weapon states and non-nuclear-weapon states was never intended to be permanent, but today the nuclear-weapon states are acting as if nuclear weapons are here to stay.

The nuclear-weapon states have no negotiations in prospect on further nuclear reductions, let alone elimination. Nuclear arsenals are being upgraded, military planners are considering new uses for nuclear weapons, and political leaders are even threatening the use of nuclear weapons. Scenarios for "limited" nuclear wars have re-emerged.

Deeply concerned that progress in nuclear arms reductions and disarmament has stalled, in December 2016 the UN General Assembly convened negotiations for a treaty to ban nuclear weapons. The negotiating conference adopted a draft treaty on 7 July 2017.<sup>2</sup> The nuclear-weapon states and their allies boycotted the negotiations, arguing that only a step-by-step

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1 John Carlson – Member of the International Advisory Committee of the International Luxembourg Forum on Preventing Nuclear Catastrophe; Counsellor to the Nuclear Threat Initiative; Visiting Fellow at the Lowy Institute for International Policy in Sydney; Member of the Asia Pacific Leadership Network (Australia).

2 Draft treaty on the prohibition of nuclear weapons. A/CONF.229/2017/L.3/Rev.1. United Nations. July 6, 2017. Available at: <http://www.undocs.org/en/a/conf.229/2017/L.3/Rev.1> (accessed 8 July 2017).



approach to disarmament can work. Their position lacks credibility when no such steps are being taken or are even under discussion.

If the current attitudes of the nuclear-weapon states continue there is a serious risk that the arms control achievements of the past will start to unravel, and the world will face an increased risk of nuclear war. As will be discussed, the consequences of even a "limited" nuclear war would be catastrophic. The world has a common interest in avoiding nuclear war — but this requires nuclear weapons to be eliminated. While nuclear weapons exist, especially in such large numbers, there is a real danger — even an inevitability — they will be used, whether intentionally, by accident, or by rogue or terrorist action. It is essential for all governments to take this risk seriously and to work together in reducing and ultimately eliminating nuclear weapons.

The call for a ban treaty by the great majority of states is a clear signal that the arms control and disarmament agenda needs re-energizing. The nuclear-weapon states need to take this seriously, not just to meet the expectations of the wider international community, but because it is very much in their own interest to reduce the risk of nuclear war.

Rather than reject the ban concept out of hand, the nuclear-weapon states should seriously consider how the concept can be made to work. The arms control and disarmament agenda would be given a major boost if key ban principles could be adopted. For example, a no first use treaty (a prohibition on using nuclear weapons unless attacked with nuclear weapons) would be a powerful affirmation of the commitment to nuclear disarmament. Such a prohibition would change mindsets on the retention of nuclear weapons and help ensure that practical steps towards elimination are given the priority they need.

## **Multilateral efforts on nuclear disarmament**

Immediately after the US used atomic bombs on Hiroshima and Nagasaki in 1945 it was recognised these were not ordinary weapons, their destructive capabilities were such that international controls were essential to prevent their spread and further use. In an Agreed Declaration of 15 November

1945 the US President and the Prime Ministers of the United Kingdom and Canada stated that the development of atomic weapons "has placed at the disposal of mankind means of destruction hitherto unknown, against which there can be no adequate military defense." They advocated establishing a United Nations Commission to make specific proposals, including "for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction."<sup>3</sup>

The "problems raised by the discovery of atomic energy" was one of the first issues on the agenda of the United Nations when it was established in 1946. Proposals were advanced for placing nuclear programs under international control.<sup>4</sup> The Soviet Union however feared this was a scheme to maintain the US monopoly over nuclear weapons, and a lack of trust prevented any agreement on international control. The Cold War followed. The Soviet Union conducted its first nuclear test in 1949, and a nuclear arms race began between the US and the Soviet Union. Further states developed nuclear weapons: the UK conducted its first nuclear test in 1952, France in 1960, and China in 1964.

During the period leading up to the negotiation of the NPT various proposals were advanced by the US, Soviet Union, UK and France for nuclear disarmament, international inspection arrangements, conventional force limitations, international control over nuclear programs, a nuclear test ban, and so on. As a consequence of these proposals the complexities of the major disarmament issues were reduced to formulations that could be negotiated, but there was insufficient will or commonality of purpose for serious negotiations to proceed. The main agreement reached was the 1963 Partial Test Ban Treaty, which prohibited all nuclear tests except those conducted underground. Another achievement was the 1959 Antarctic Treaty, which

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3 Atomic Energy. Agreed declaration by the President of the United States, the Prime Minister of the United Kingdom, and the Prime Minister of Canada. November 15, 1945. Available at: <https://www.loc.gov/law/help/us-treaties/bevans/m-ust000003-1304.pdf> (accessed 11 June 2017).

4 See e.g. The Acheson-Lilienthal Report. Report on the International Control of Atomic Energy. March 16, 1946. Available at: <http://www.learnworld.com/ZNW/LWText.Acheson-Lilienthal.html> (accessed 11 June 2017); and The Baruch Plan. Presented to the United Nations Atomic Energy Commission. June 14, 1946. Available at: <http://www.atomicarchive.com/Docs/Deterrence/BaruchPlan.shtml> (accessed 11 June 2017).

prohibited all military activities in Antarctica, thereby establishing the world's first nuclear weapon-free zone.

Negotiations on the NPT commenced in 1965. By that year the US had over 31,000 nuclear weapons and the Soviet Union had over 6,000 (the US nuclear arsenal peaked soon after, in 1966, at 31,225; the Soviet Union went on to reach 45,000 in 1986).<sup>5</sup> The NPT was concluded and opened for signature in 1968. The five states that had nuclear weapons prior to 1967 – the US, Soviet Union, UK, France and China – were recognised in the treaty as *nuclear-weapon states*.

The collective purpose and commitment expressed in the NPT is that states without nuclear weapons will not seek to acquire them and states with nuclear weapons will pursue disarmament. Subsequently, the nuclear-weapon states have emphasised the treaty's provisions on *horizontal proliferation*, that is, countering the spread of nuclear weapons to additional states, but have not given similar importance to disarmament. This unequal treatment does not reflect the provisions of the treaty which require all parties to work for nuclear arms reductions and disarmament. It is clear that the division between nuclear-weapon states and non-nuclear-weapon states is not intended to be permanent, ultimately all parties are to be non-nuclear-weapon states. In Article VI the parties undertake: "... to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control."

The drafters of the NPT recognised that nuclear disarmament would take many years and a series of agreements to achieve. They also recognised that conventional force imbalances can be a factor in national decisions on nuclear forces and would also have to be addressed in disarmament negotiations. In the 1960s the time was not right to deal with all these complexities. Accordingly, the NPT left arms reductions and disarmament issues to future

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5 Norris R.S., Kristensen H.M. Global nuclear weapons inventories, 1945-2010 // Bulletin of the Atomic Scientists. July/August 2010. Pp. 77-83. Available at: <http://journals.sagepub.com/doi/pdf/10.2968/066004008> (accessed 11 June 2017).

negotiations. Some states have considered that the obligation to pursue disarmament negotiations is a minimal obligation, requiring only that negotiations are held. However, the International Court of Justice, in its 1996 Advisory Opinion on the legality of nuclear weapons (discussed below), decided unanimously that Article VI is not only an obligation to pursue negotiations in good faith, but an obligation to “bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.”<sup>6</sup>

Since the conclusion of the NPT in 1968, there have been no multilateral negotiations on nuclear arms reductions, and none seriously addressing nuclear disarmament. A number of bilateral nuclear arms agreements were negotiated between the US and the Soviet Union/Russia. These include the 1972 Strategic Arms Limitation Treaty (SALT I), SALT II in 1979, the 1987 Intermediate-Range Nuclear Forces Treaty (INF), the 1991 Strategic Arms Reduction Treaty (START I), START II in 1993, the 2002 Strategic Offensive Reductions Treaty (SORT), and New START in 2010. There have also been substantial unilateral reductions by the US and Russia, and unilateral reductions by UK and France.

The main multilateral agreement complementary to the objective of nuclear disarmament concluded since the NPT is the 1996 Comprehensive Nuclear-Test-Ban Treaty (CTBT). The CTBT is in provisional operation pending the ratifications needed for formal entry into force. Other multilateral treaties that make an important contribution in this area are the various nuclear weapon-free zone treaties (discussed further below).

A complication in pursuing multilateral arms negotiations is that the Article VI commitment does not apply to the states outside the NPT. The NPT nuclear-weapon states will not commit to major arms reductions, let alone disarmament, without the non-NPT states doing likewise. Accordingly there is a need for a negotiating process that complements but is wider than the NPT.

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<sup>6</sup> Legality of the threat or use of nuclear weapons. International Courts of Justice. July 8, 1996. Paragraph 105.F. Available at: <http://www.icj-cij.org/docket/files/95/7495.pdf> (accessed 11 June 2017).

In principle a negotiating forum inclusive of the non-NPT states is provided by the Conference on Disarmament (CD). The CD was able to successfully conclude negotiation of the 1993 Chemical Weapons Convention (CWC). The CD also held negotiations on the CTBT but was unable to reach consensus, and the CTBT was eventually concluded in the UN General Assembly in 1996. More recently the CD has been attempting to negotiate a fissile material cut-off treaty (FMCT), but has been unable to reach consensus on an agenda to allow these and other negotiations to proceed. Unless the CD can change its consensus rule it is apparent that it has passed the limit of its usefulness.

The most recent multilateral negotiations relating to nuclear disarmament were the nuclear weapon ban negotiations held this year (2017). These negotiations have proven highly contentious, with all five nuclear-weapon states and thirty-odd non-nuclear-weapon state allies and supporters, together with the nuclear-armed states outside the NPT, deciding to boycott them. These negotiations and arguments made against them are discussed below.

### ***The situation today***

Despite the concern from the beginning of the nuclear age to prevent the spread of nuclear weapons, and to eliminate existing holdings, the number of states with nuclear weapons has slowly but steadily increased. Today there are nine states with nuclear weapons:

the *nuclear-weapon states* recognized by the NPT – the US, Russia, China, France and the UK;

three states that never joined the NPT – India, Pakistan, and Israel (which does not acknowledge its nuclear status); and

North Korea. North Korea is a unique case, having been a non-nuclear-weapon state party to the NPT. North Korea's nuclear weapons program is illegal, violating the NPT prior to its withdrawal in 2003, and subsequently violating Security Council resolutions.

During the Cold War, the prospect of MAD – *mutually assured destruction*, not only of the US and the Soviet Union but of human

civilization — prompted a global movement against nuclear weapons. Today the public assumes the danger of nuclear war has passed, and has seemingly given little thought to the continuing existence of nuclear weapons, at least until recently. The danger of a war of annihilation between the US and Russia has mostly (though not entirely) passed, and both countries have made substantial reductions in their nuclear weapon numbers. Nonetheless, each still has over 1,500 “strategic” weapons deployed, most on high alert, launch-ready status, with thousands more in reserve or classed as “tactical” (battlefield) weapons. The public overlooks the dangers this situation presents, and is more conscious of nuclear dangers now, not because of continued large deployments by the US and Russia, but mainly because of the evolving North Korean crisis.

While attention is now focused on North Korea, there is little public awareness of the arms race between India and Pakistan, and the risk of nuclear war between the two. In addition, there is a continuing risk of proliferation, that is, further states acquiring nuclear weapons. Three states — Iraq, Libya and Syria — had nuclear weapon programs which were stopped through external intervention. Iran’s nuclear ambitions have been curbed for the time being, but a long-term solution is needed. A number of states are considered to have *nuclear latency*, that is, the technical capability to produce nuclear weapons if they took the decision to do so. In this regard there is concern that Japan and South Korea might seek nuclear weapons if the North Korean threat worsens.

## The “purpose” of nuclear weapons

Historically the principal purpose of nuclear weapons has always been seen as deterrence, or at least maintaining strategic parity with an adversary (ensuring mutual deterrence). Thus, a major driver for the Manhattan Project was the belief that Nazi Germany was trying to develop nuclear weapons — for the Allies it was essential to achieve this first. Following the end of World War II, after a brief period of US monopoly over nuclear weapons, an arms race began between the US and the Soviet Union. This evolved into a situation of mutual vulnerability, a *balance of terror*, which led to the concept of

*mutually assured destruction*, MAD. The basis of MAD was that neither side could afford to attack the other because retaliation would inflict damage at an existential scale, effectively destroying the state. Nuclear deterrence became to be seen as a vital stabilizing factor, deterring not only nuclear attack but *any* significant military conflict between nuclear-armed adversaries.

If nuclear weapons were to be used only for deterrence against nuclear attack, they would have limited utility — if MAD was an inevitable consequence, clearly neither side would want to initiate a nuclear conflict. Military planners began to think of new missions for nuclear weapons, where they could be used in the battle field without (hopefully) provoking a massive nuclear response. This led to the idea of *tactical* nuclear weapons. One influence was NATO's concern about Soviet superiority in tank numbers — it was feared that if the Soviet Union decided to invade Western Europe, Soviet tanks could overwhelm defending forces before NATO had time to mount an effective defense. Various "low-yield" weapons were developed to meet this threat, including artillery shells, demolition mines, and enhanced radiation weapons (the *neutron bomb*). Other tactical nuclear weapons included surface-to-air missiles, anti-ship missiles, depth charges and torpedoes (for example, Soviet submarines carried nuclear torpedoes from the late 1950s).

The drafters of the NPT recognized that conventional force imbalances could be a factor influencing nuclear weapon programs, so the NPT calls for general disarmament as well as nuclear disarmament.

Today the interest in tactical nuclear weapons has declined, partly because of major improvements in the accuracy and destructive force of non-nuclear weapons, and partly because of concerns whether, if tactical nuclear weapons were used, it would be possible to avoid uncontrolled nuclear escalation. Another important factor was the realization that even low-yield nuclear weapons could cause major casualties and widespread contamination. "Low-yield" is a relative term — if Germany had been defended against Soviet tanks by 5 kiloton weapons large areas of the country would have been devastated.

Most nuclear-armed states have a declared policy on the use of nuclear weapons. In all cases the purpose of nuclear weapons is "strategic", today no



state has a declared policy of using nuclear weapons for tactical purposes. Pakistan might be considered an exception, since it says it would use nuclear weapons against an invading India army. These weapons might be "tactical" in form, but the purpose is strategic because such an attack would be considered an existential threat, that is, the survival of Pakistan would be at stake. This highlights that when it comes to nuclear weapons the distinction between "strategic" and "tactical" can be arbitrary.

**China** and **India** have each declared a "no first use" policy, that is, neither would be the first to use nuclear weapons in any conflict. This is tantamount to a "sole purpose" policy, that *the sole purpose of nuclear weapons is deterrence against nuclear attack*.

**US** policy on use of nuclear weapons is set out in the 2010 Nuclear Posture Review (NPR)<sup>7</sup>, which says the fundamental role of nuclear weapons is to deter nuclear attack on the US, its allies and partners. However the NPR says that with respect to states with nuclear weapons and states not in compliance with their nuclear non-proliferation obligations "there remains a narrow range of contingencies in which nuclear weapons may still play a role in deterring a conventional or CBR<sup>8</sup> attack against the US or its allies and partners."

The 2010 NPR adds, the US is "not prepared at the present time to adopt a universal policy that deterring nuclear attack is the sole purpose of nuclear weapons, but will work to establish conditions under which such a policy could be safely adopted." Subsequently, President Obama considered declaring a *sole purpose* policy but finally decided to leave US policy as declared in 2010. The Trump Administration has initiated a new Nuclear Posture Review, expected to be completed by the end of 2017.

**Russian** policy on nuclear weapons, set out in 2010, reserves the right to use nuclear weapons in response to an attack against Russia or its allies using nuclear weapons or other weapons of mass destruction, as well as in the case of aggression against Russia using conventional weapons

<sup>7</sup> Nuclear Posture Review Report. US Department of Defense. April 2010. Available at: [www.defense.gov/Portals/1/features/defenseReviews/NPR/2010\\_Nuclear\\_Posture\\_Review\\_Report.pdf](http://www.defense.gov/Portals/1/features/defenseReviews/NPR/2010_Nuclear_Posture_Review_Report.pdf) (accessed 11 June 2017).

<sup>8</sup> Chemical or biological weapons.

that presents an existential threat ("a threat to the very existence of the state").<sup>9</sup>

In 2003 Russia had articulated an "escalate to de-escalate" strategy, involving limited use of nuclear weapons against a conventional attack<sup>10</sup>, but this was not mentioned in the 2010 document.

**UK** policy, set out in 2015<sup>11</sup>, is to use nuclear weapons "only in extreme circumstances of self-defense", including the defense of NATO allies. The UK maintains ambiguity about precisely when, how and at what scale it would use nuclear weapons, "in order not to simplify the calculations of any potential aggressor." The UK Defense Secretary has said the UK does not rule out the use of nuclear weapons for a first strike "in the most extreme circumstances."<sup>12</sup>

While the UK's policy is primarily deterrence against use of nuclear weapons, it reserves the right to review its policy if the future threat, development or proliferation of other weapons of mass destruction, such as chemical and biological capabilities, make this necessary.

**French** policy on nuclear weapons is "strictly defensive, nuclear deterrence protects France from any state-led aggression against its vital interests, of whatever origin and in whatever form." "Use of nuclear weapons would only be conceivable in extreme circumstances of legitimate self-defense."<sup>13</sup> Like the UK, France reserves the right to use nuclear weapons first in a conflict.

As already mentioned, **Pakistan** has a policy of using nuclear weapons against invading Indian forces — in other words, a policy of first use.

9 Military Doctrine of the Russian Federation. President of Russia. February 5, 2010. Available at: <http://www.kremlin.ru/supplement/461> (accessed 11 June 2017).

10 See: Doctrine. Red Stars. Available at: <http://www.red-stars.org/spip.php?article8> (accessed 11 June 2017).

11 National Security Strategy and Strategic Defense and Security Review 2015. UK Government. November 2015. Available at: [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/478936/52309\\_Cm\\_9161\\_NSS\\_SD\\_Review\\_PRINT\\_only.pdf](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/478936/52309_Cm_9161_NSS_SD_Review_PRINT_only.pdf) (accessed 11 June 2017).

12 Merrick R. Theresa May would fire UK's nuclear weapons as a 'first strike', says Defense Secretary Michael Fallon // Independent. 2017. 24 April. Available at: <http://www.independent.co.uk/news/uk/politics/theresa-may-nuclear-weapons-first-strike-michael-fallon-general-election-jeremy-corbyn-trident-a7698621.html> (accessed 11 June 2017).

13 White Paper on National Defense and Security. April 29, 2013. Available at: <https://otan.delegfrance.org/White-Paper-on-defence-and> (accessed 11 June 2017).

## **Negative security assurances (NSA)**

The NPT nuclear-weapon states have all declared they will not use nuclear weapons against non-nuclear-weapon states, but in some cases these declarations are qualified. The NSA declared by the US excludes non-nuclear-weapon states that are not in compliance with their NPT non-proliferation obligations, and the US reserves the possibility of adjusting the NSA to take account of biological weapon threats that may evolve.

The Russian and French NSAs exclude non-nuclear-weapon states that carry out or sustain an attack against them or their allies in alliance or association with a nuclear-weapon state.

The UK's NSA excludes any state acting in association or alliance with a nuclear-weapon state that attacks the UK, its territories or allies, or any state in breach of its NPT commitments.

## **Extended nuclear deterrence**

A number of nuclear-weapon states extend the terms of their deterrence policies to include protection of allied non-nuclear-weapon states. This is described as *extended nuclear deterrence*, or informally a "nuclear umbrella." The existence of alliances including extended nuclear deterrence explains the number of non-nuclear-weapon states that have sided with the nuclear-weapon states in opposing nuclear weapon ban negotiations, as discussed below.

## **The imperative to eliminate nuclear weapons**

President Reagan put the case very succinctly: "A nuclear war cannot be won and must never be fought. The only value in ... possessing nuclear weapons is to make sure they will never be used. But then would it not be better to do away with them entirely?"<sup>14</sup>

The fundamental reasons for eliminating nuclear weapons – their immense destructive power and the inability to ensure adequate defense against them – remain as true today as when these problems were first

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<sup>14</sup> Reagan R. *Address Before a Joint Session of the Congress on the State of the Union. January 25, 1984.* Available at: <http://www.presidency.ucsb.edu/ws/?pid=40205> (accessed 11 June 2017).

recognized in 1945. Ballistic missile defense has done little to change this situation – the odds favor the attacker as only one or two weapons need to reach their targets to inflict unacceptable damage.

As will be discussed, nuclear weapons are, at least in circumstances where reason prevails, unusable, and at the same time their existence remains an existential threat both to their possessors and to the world as a whole.

### ***The inutility of nuclear weapons***

Nuclear weapons are inherently unusable, as demonstrated by the fact they have not been used since 1945. This proposition, however, is reliable only if the world can always depend on rational actors, command and control systems that work perfectly, and a total absence of mistakes, malfunctions, accidents, security breaches, and so on. It also assumes leaders can make the right decisions under extreme stress, for example if woken in the early morning and given 20 minutes to decide whether to launch a retaliatory strike for an apparent incoming attack.

In the real world, perfect circumstances to take rational decisions cannot be guaranteed. During and even after the Cold War there were several instances of false alarms or errors, where the US or the Soviet Union/Russia believed it was under attack.<sup>15</sup> Catastrophe was avoided by cool heads and good luck – but the world cannot rely on good luck on every occasion. Steps should be taken to reduce risk, for example by de-alerting (taking weapons off readiness for launch-on-warning) and improving communication channels, but there is no escaping the fact that while nuclear weapons exist there is an ever present risk they will be used.

#### (a) Using nuclear weapons would have catastrophic and global consequences

This issue has several aspects: the destructive power of nuclear weapons;

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<sup>15</sup> See e.g. Lewis J. Nightmare on Nuke Street: Twelve terrifying tales from the nuclear crypt // Foreign Policy. 2012. 30 October. Available at: [http://www.foreignpolicy.com/articles/2012/10/30/nightmare\\_on\\_nuke\\_street](http://www.foreignpolicy.com/articles/2012/10/30/nightmare_on_nuke_street) (accessed 11 June 2017); and Lewis P., Williams H., Pelopidas B., Aghlani S. Too Close for Comfort: Cases of Near Nuclear Use and Options for Policy. Chatham House. April 2014. Available at: [www.chathamhouse.org/sites/files/chathamhouse/field/field\\_document/20140428TooCloseforComfortNuclearUseLewisWilliamsPelopidasAghlani.pdf](http://www.chathamhouse.org/sites/files/chathamhouse/field/field_document/20140428TooCloseforComfortNuclearUseLewisWilliamsPelopidasAghlani.pdf) (accessed 11 June 2017).

the impossibility of limiting the effects of a weapon to the intended target; and the impossibility of limiting the impact of nuclear war to the protagonists.

Various scenarios have been put forward for fighting a "limited" nuclear war, for example a limited nuclear strike to signal preparedness to escalate, in the belief that the threat of escalation will cause the adversary to halt hostilities. However, it is impossible to be confident such a scenario will go to plan — there is simply no experience of how leaders and commanders will react under nuclear attack, in fact there is every possibility of uncontrollable escalation.

One scenario put to the International Court of Justice in 1996 (see below) of where use of nuclear weapons could be lawful was the use of low-yield nuclear weapons in remote areas, for example, against naval vessels. The Court concluded that the proponents had failed to make the case that use of nuclear weapons would be legal in such circumstances. Regardless of the legal arguments, we must recall a key fact that emerged after the 1962 Cuban missile crisis — during this crisis, the crew of a Soviet submarine, believing they were under attack by the US Navy, came close to launching a nuclear torpedo. If this had happened it would have led to nuclear retaliation by the US, and almost certainly escalation into a full scale nuclear war. This situation was later described by one of those involved as "the most dangerous moment in human history."<sup>16</sup>

An assessment of a "limited" nuclear war, published in 1979<sup>17</sup> but remaining a landmark study today, showed the catastrophic effects of a scenario in which the US and the Soviet Union each used 80 warheads targeting petroleum and transport centers. The consequences would clearly exceed any definition of "acceptable" damage. To quote just two findings: "Nobody knows how to estimate the likelihood that industrial civilization might collapse in the areas attacked; additionally, the possibility of significant long-term ecological damage cannot be excluded;" "the uncertainties are such that no government could predict with any confidence what the results

<sup>16</sup> Schlesinger A.M. Foreword. In Kennedy R. *Thirteen Days: A Memoir of the Cuban Missile Crisis*. New York, 1999.

<sup>17</sup> *The Effects of Nuclear War*. US Office of Technology Assessment. May 1979. Available at: <http://atomicarchive.com/Docs/pdfs/7906.pdf> (accessed 11 June 2017).

of a limited attack or counterattack would be even if there was no further escalation."

Even if a nuclear exchange can be "limited", the consequences cannot be limited. The spread of radioactive fallout from nuclear strikes cannot be controlled, and wide-spread climatic effects are likely due to dust and soot particles from nuclear explosions and fires — resulting in lower temperatures, a phenomenon described as *nuclear winter*. Although there is debate whether the dangers of nuclear winter have been overstated<sup>18</sup>, studies suggest that even a "limited" regional war, say between India and Pakistan each using 50 nuclear weapons, would have global consequences.<sup>19</sup> These could include lower agricultural production — so nuclear winter would lead to *nuclear famine*. Increased cancer rates, and DNA damage to human, animal and plant life can also be expected due to increased UV radiation resulting from damage to the Earth's ozone layer.

(b) There is a taboo against using nuclear weapons

Notwithstanding a number of threats or perceived threats to use nuclear weapons, a powerful "taboo" against use has held since 1945. Some commentators argue that nuclear weapons have not been used because of their impracticality (lack of suitable targets, doubts they would result in a decisive outcome) or the risk of escalation, but there is no doubt political and moral considerations have been predominant. One factor has been recognition that any use would reduce the barriers against subsequent use, with unforeseeable consequences. No doubt political leaders have also been constrained by world opinion and concerns about their place in history.

The taboo is important, but it is not absolute. While nuclear weapons are politically unusable in circumstances where calm reason prevails, as discussed above this is not necessarily the case in a situation of extreme pressure where decision-makers believe an attack is in progress. We have seen

18 Nuclear Winter? Nukes pretty please. May 12, 2016. Available at: <http://nukespp.blogspot.com.au/2016/05/nuclear-winter.html> (accessed 11 June 2017).

19 Climate effects of nuclear war and implications for global food production. ICR Information note No. 2. May 22, 2013. Available at: <https://www.icrc.org/eng/assets/files/2013/4132-2-nuclear-weapons-global-food-production-2013.pdf> (accessed 11 June 2017); Madrigal A. 'Regional' nuclear war would cause worldwide destruction // Wired. 2008. 7 April. Available at: <https://www.wired.com/2008/04/regional-nuclea> (accessed 11 June 2017).

that the major powers have been vulnerable to false alarms. There is even more reason for concern about the command and control systems of some of the smaller nuclear-armed states — and it must be questioned whether the taboo against nuclear use is shared by the leadership of a state such as North Korea.

(c) Use of nuclear weapons would be almost certainly unlawful

Reinforcing the political and moral constraints against nuclear use is the legal position that *any* use of nuclear weapons would almost certainly violate international humanitarian law, as set out in the Geneva Conventions and Protocols and customary international law. The basic principles of international humanitarian law relating to conduct of war include:

- distinction — the parties must distinguish between combatants and civilians;
- military necessity — an action must be aimed at a military objective; and
- proportionality — harm caused to civilians must be proportional and not excessive in relation to the anticipated military advantage.

Protocol I to the Geneva Conventions prohibits indiscriminate attacks on civilian populations, including use of technology whose scope of destruction cannot be limited. Therefore, a war that does not distinguish between civilian and military targets would be in violation of international humanitarian law. Protocol I also prohibits means of warfare that “cause widespread, long-term, and severe damage to the natural environment.”

It is difficult to see how the use of nuclear weapons could ever be consistent with these principles. Relevant considerations include:

- the destructive power of even “small” nuclear weapons;
- the deliberate targeting of cities and populations (so-called countervalue targets);
- the inevitable spread of radioactive contamination; and
- the prospect of nuclear winter and associated effects, mentioned above.

These issues were considered by the International Court of Justice (ICJ) in its 1996 Advisory Opinion on the Legality of the Threat or Use of Nuclear



Weapons.<sup>20</sup> The General Assembly had sought an advisory opinion on the question, *Is the threat or use of nuclear weapons in any circumstances permitted under international law?*

While the ICJ found "There is in neither customary nor conventional international law any comprehensive and universal prohibition of the threat or use of nuclear weapons as such ...", it also affirmed that international humanitarian law applies in cases of use, or threat of use, of nuclear weapons. The ICJ concluded that the indiscriminatory nature, destructive force and environmental consequences of nuclear weapons were such that: "... the use of nuclear weapons would generally be contrary to the rules of international law ... and in particular the principles and rules of humanitarian law."

In a much misunderstood passage, the ICJ said it: "... cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defense, in which the very survival of a State would be at stake."

This does not, as some have argued, amount to a conclusion that in some circumstances use of nuclear weapons would be legal. Rather, the ICJ considered it was unable to rule on the policies of deterrence and retaliation, and stressed that states must always comply with rules protecting civilians from the effects of warfare.

### ***Nuclear deterrence is deeply problematic***

The concept of nuclear deterrence is based on the probability of nuclear retaliation: an aggressor is deterred from using nuclear weapons by the fear that the attacked state will retaliate in kind. However, deterrence presents a dilemma: just as, for the reasons outlined above, a nuclear attack would almost certainly violate international humanitarian law, so too would nuclear retaliation. If retaliation cannot meet the principles of distinction, necessity and proportionality, and cannot avoid widespread, long-term, and severe damage to the environment, then it will violate morality and international law. Killing millions of people in retaliation for the actions of their leaders

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<sup>20</sup> Legality of the threat or use of nuclear weapons. International Courts of Justice. July 8, 1996. Available at: <http://www.icj-cij.org/docket/files/95/7495.pdf> (accessed 11 June 2017).

would amount to the war crimes of collective punishment and reprisal. It would also in all likelihood amount to the crime of genocide.<sup>21</sup>

It can be argued that if deterrence is effective, no attack will occur, so the need for retaliation will not arise. On the other hand, deterrence depends on the probability of retaliation, which requires a willingness to retaliate — if an aggressor thought a state would not retaliate, it would not be deterred from attacking. In its 1996 Advisory Opinion the ICJ was unable to express a view on the policy of deterrence, and was also unable to give a definitive answer on whether the right of a state to self-defense could include the use of nuclear weapons. However the Court emphasized that actions of self-defense must always comply with humanitarian law.

This discussion illustrates the intractable moral and legal issues associated with any use of nuclear weapons, including pursuant to nuclear deterrence. The only way these issues can be resolved is through ensuring nuclear weapons are never used — and this requires the prohibition and elimination of nuclear weapons, as has been agreed by the international community with respect to other weapons of mass destruction.

## Proposed nuclear weapon ban treaty

There is increasing frustration on the part of most non-nuclear-weapon states that the commitment in the NPT to pursue negotiations on nuclear disarmament is not being honored. For example, maintaining the option of *first use* of nuclear weapons, as distinct from deterring nuclear attack by a policy of nuclear retaliation, is seen as clearly inconsistent with a commitment to nuclear disarmament. Other actions seen as inconsistent with a commitment to disarmament include: maintenance of nuclear weapons in a state of high alert; nuclear weapon modernization programs; increases in nuclear weapon numbers; and threatening the use of nuclear weapons.

The non-nuclear-weapon states maintain there is an urgent need to change the mindset around nuclear weapons. Delegitimizing nuclear weapons is an essential step in persuading nuclear-armed states that these

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<sup>21</sup> The ICJ considered that whether use of nuclear weapons would constitute genocide depends on the specific circumstances.

weapons must be eliminated. Ban proponents point to the histories of those treaties that have outlawed an entire class of weapon, such as the Chemical Weapons Convention (CWC) and the Mine Ban Treaty. These treaties prohibit use, production, stockpiling and retention of chemical weapons and land mines respectively — states were prepared to negotiate and ratify these treaties even though at the time many of these states possessed such weapons.<sup>22</sup>

The nuclear-armed states respond that the parties to these treaties had concluded that the weapons concerned were not essential to their national security, so they were prepared to commit to a timetable for elimination. This is very different to the situation with nuclear weapons.

In December 2016 the General Assembly decided to convene negotiations on *a legally binding instrument to prohibit nuclear weapons leading to their total elimination*. Two negotiation sessions were held, in March and June-July 2017, and on 7 July 2017 a proposed treaty was adopted for submission to the General Assembly, with the proposal that it be open for signature from 20 September 2017. In the negotiating process it became apparent that a number of provisions in the treaty are contentious, though in the voting on the text there was only one vote against and one abstention.<sup>23</sup> The implications of the text require careful analysis, this was not possible in the time available for finalising this chapter.

The five nuclear-weapon states and thirty-odd non-nuclear-weapon state allies and supporters, together with the non-NPT nuclear-armed states, decided to boycott the negotiations. The arguments they have made against the negotiations are outlined below.

This boycott was particularly unwarranted because at the time it was announced there was no draft treaty text. Therefore it was not possible for the nuclear-weapon states and others to say the text was unacceptable — they objected to the idea of a treaty without being prepared to give any consideration to its substance. It was never going to be possible to draft a text reflecting the views of both sides if one side refused to participate.

<sup>22</sup> Though it should be noted that a number of states have remained outside these treaties.

<sup>23</sup> There were 122 votes in favour. Netherlands opposed and Singapore abstained.

There are two basic issues here: (a) the fact that all NPT parties are obliged to work towards the elimination of nuclear weapons; and (b) the question whether a ban treaty can make an effective contribution to this goal. On (b), some argue that pursuing a ban is unrealistic as the pace of disarmament cannot be forced. But this depends on what the ban seeks to achieve – which in turn depends on the text drafted. No-one is seriously suggesting that agreement to a ban would result in immediate disarmament. Without doubt a step-wise series of nuclear weapon reductions will be required, and total elimination is likely to take many years. This reality does not exclude that a ban could make an effective contribution.

The key issue of substance is the scope of the proposed prohibition – exactly what would be prohibited? The treaty now proposed prohibits the following actions with respect to nuclear weapons:

- development, production, manufacture, acquisition, possession, stockpiling;
- transfer, having control;
- using or threatening to use;
- assisting, encouraging or inducing anyone to engage in any activity prohibited under the treaty;
- stationing or deployment;
- testing.

The treaty provides for three groups of parties: states that had nuclear weapons after 7 July 2017 but eliminate them prior to joining the treaty; states that have nuclear weapons upon joining; and other states. States that join the treaty with nuclear weapons are required to remove them from operational status immediately, to negotiate *time-bound* plans for elimination of their nuclear weapons, and to destroy them within a deadline to be determined by the first Meeting of States Parties under the treaty.

The detailed arrangements for destruction or elimination of nuclear weapons and for verification of the declaration and elimination activities are highly sensitive and will require very complex negotiations. These arrangements would be addressed in the elimination plans to be negotiated under

the treaty. The treaty negotiations would have benefitted from a detailed examination of these various issues, but the boycott of the negotiations by the nuclear-weapon states meant this was not possible.

### ***Opposition to a ban treaty***

The main arguments made by the nuclear-weapon states and their allies opposing the ban negotiations can be summarized as follows:

- a ban treaty is totally unrealistic when for the foreseeable future nuclear weapons will remain essential to the national security of the nuclear-weapon states and their allies;
- the proposal will divert attention from the practical steps needed for disarmament;
- a ban will be unenforceable and therefore would raise unrealistic expectations;
- the treaty will be meaningless because the states with nuclear weapons will not join and will not be bound by it;
- any suggestion of a deadline or a time-bound process is unrealistic and totally unacceptable;
- the ban proposal is divisive and will damage the NPT.

#### (a) Is a ban treaty totally unrealistic?

A treaty that sets out the principle of eliminating nuclear weapons can only be considered unrealistic if a state has no intention to disarm at any time – for NPT parties such a position would violate their obligations under that treaty.

Whether a particular treaty is unrealistic depends on its specific provisions. As regards the treaty now proposed, the requirement for elimination of nuclear weapons on a time-bound basis is not realistic in current circumstances.

#### (b) Will the ban treaty divert attention from the practical steps needed for effective disarmament?

Article VI of the NPT recognizes that disarmament will require the negotiation of *effective measures* – this suggests a series of negotiations leading to further agreements on specific steps. Far from diverting attention from

these various practical steps, a ban treaty would instill a sense of purpose and urgency, currently lacking, for pursuing such steps.

(c) Will a ban treaty be unenforceable?

The ban treaty is important as a declaration of an international norm against the use of nuclear weapons, and as an expression of urgency for negotiating further steps leading to their elimination.

The treaty now proposed will be legally binding only for the states that become parties. It might be questioned whether the treaty would be enforceable in a practical sense. Here, there will be a powerful deterrent against violation – if a party uses nuclear weapons, other parties can be expected to retaliate, including with nuclear weapons. The situation would be similar to that pertaining to the 1925 Geneva Protocol against use of chemical weapons – compliance was strengthened by the likelihood that violation would result in retaliation in kind. A transgressor could not rely on the protection of a law that it has violated. So in reality no party's national security would be jeopardized by a ban treaty, and the security of every state would benefit if the treaty helps to progress nuclear disarmament.

(d) Will a ban treaty be meaningless because the nuclear-armed states will not join?

In the near term, if the nuclear-armed states do not join, a ban treaty might be seen as having little value. On the other hand, it would be declaratory of the views of an overwhelming majority of states, hence it would have considerable normative value. This could be expected to influence the nuclear-armed states and their allies over time, so it would be a mistake to dismiss the treaty as *meaningless*. Over time it is likely to have increasing importance.

(e) Is a deadline for nuclear disarmament unrealistic?

This depends on what the treaty says. In requiring time-bound elimination of nuclear weapons the treaty now proposed is unrealistic. However, treaties that outline the practical steps towards disarmament and establish an indicative timeframe for these steps could be achievable. This approach could be taken in future treaties negotiated by the nuclear-armed states.

(f) Will the ban treaty be divisive and damage the NPT?

As regards the treaty negotiations, the opposite is true. The great majority of NPT parties participated in the ban negotiations. It was the boycott by a minority that was divisive, particularly if this has resulted in a treaty text that has some deficiencies. However, by focusing attention on the need to take disarmament seriously, and strengthening the norm against the use of nuclear weapons, the ban negotiations have helped to advance the objectives of the NPT.

It will be important to ensure that processes under the new treaty and under the NPT are complementary. A greater potential for divisiveness however is the danger that the nuclear-armed states will still not give practical steps towards disarmament the priority expected by the rest of the world.

### ***Implications of a ban for extended nuclear deterrence***

One issue clearly on the minds of some non-nuclear-weapon states is whether continued reliance on extended nuclear deterrence can be consistent with a ban treaty. Such states may be concerned that they would have to renounce extended nuclear deterrence, hence the number of states that boycotted the ban negotiations. The treaty now proposed prohibits stationing or deployment of nuclear weapons, which could affect some alliance partners — but alliance partners that are parties to nuclear weapon-free zone treaties are already prohibited from allowing stationing of nuclear weapons in their territories.

Regardless of how a ban is expressed, nuclear deterrence will remain a reality until nuclear weapons are finally eliminated. On the other hand, clearly there is an important point of principle here. Given the moral, legal and practical arguments against the use of nuclear weapons, is it appropriate for a non-nuclear-weapon state to expect that nuclear weapons would be used on its behalf? The NPT's obligation to pursue nuclear disarmament applies to all parties, not only the nuclear-weapon states. Non-nuclear-weapon states should not be encouraging nuclear-weapon states to retain nuclear weapons.

### ***A lost opportunity***

The boycott of the negotiations was a lost opportunity for the nuclear-weapon states to explain their intentions for achieving nuclear disarmament



and the practical considerations involved, and to influence the treaty text. For the NPT parties involved in the boycott, this was hardly consistent with their obligation under Article VI to pursue negotiations on nuclear disarmament. The ban negotiations were an attempt to engage the nuclear-weapon states on an issue that is strongly felt around the world, namely the continuing danger of nuclear war. The great majority of NPT parties that participated in the negotiations are entitled to have their concerns treated with respect. The refusal of the nuclear-weapon states and their allies to engage in the negotiations was provocative and added to tensions within the NPT membership.

At the same time, the treaty now proposed can also be seen as a lost opportunity. By pressing forward with a text that is not realistically acceptable to nuclear-armed states, at least in the near term, the participating states have decided against an inclusive treaty setting out principles to which the nuclear-armed states could subscribe. The treaty would have been much more powerful if it could have brought nuclear-armed states under its umbrella. Now the onus is on the nuclear-armed states, and their allies, to develop treaty action of their own to show they take seriously the need to deal with the dangers of nuclear weapons.

### ***A ban will re-energize the commitment to disarmament***

The greatest value of a nuclear weapon ban will be in shifting away from the current “business as usual” attitude, to delegitimizing nuclear weapons and reinforcing the common goal to pursue further reductions and eventual elimination. Of particular importance, a ban would also extend disarmament commitments to the nuclear-armed states outside the NPT.

Contrary to arguments from some nuclear-weapon states, the concept of a ban is not inconsistent with the step-by-step approach to disarmament articulated to date. While the presently proposed treaty leaves little scope for a step-by-step approach, nuclear-armed states should accept the objective of a ban and the need to take the necessary practical steps. As will be discussed, some ban principles can be developed in parallel to this treaty.

## Nuclear weapons are already subject to prohibitions

In discussing the merits or otherwise of a nuclear weapon prohibition, it should be kept in mind that major prohibitions already exist. First there are the rules of international humanitarian law, discussed above. In considering the legality of nuclear weapons use, the ICJ struggled to find any circumstance in which it could conclude that the use of nuclear weapons would be lawful.

Next, there is the NPT. The concept of banning nuclear weapons has already been agreed by NPT parties. In the case of non-nuclear-weapon states, the NPT bans acquisition of nuclear weapons absolutely. In the case of the NPT nuclear-weapon states, a commitment to pursue a ban is implicit in the commitment by these states to negotiate for disarmament (Article VI).

Nuclear weapon bans have also been agreed for those regions covered by nuclear-weapon-free zone treaties. Currently there are eight such treaties:

- 1959 Antarctic Treaty;
- 1967 Outer Space Treaty;
- 1967 Treaty of Tlatelolco (Latin America);
- 1971 Seabed Arms Control Treaty;
- 1985 Treaty of Rarotonga (South Pacific);
- 1995 Treaty of Bangkok (South East Asia);
- 1996 Treaty of Pelindaba (Africa);
- 2006 Treaty of Semipalatinsk (Central Asia).

These treaties prohibit the parties from acquisition, possession, stationing, testing and use of nuclear weapons in the areas concerned.

The question is not whether there should be a prohibition on nuclear weapons, but rather, how to proceed further from the prohibitions that exist already.

## A treaty prohibiting first use of nuclear weapons

It is no surprise that the nuclear-armed states reject the idea of a prohibition on the *possession* of nuclear weapons. As drafted in the treaty now proposed, such a prohibition would require immediate disarmament, or disarmament within a specific time period, neither of which is realistic. On the other hand, it should be possible at least to contemplate a prohibition on the *first use* of nuclear weapons.

A prohibition on the first use of nuclear weapons is not far removed from the principle of *sole purpose*, that is, that the sole purpose of nuclear weapons is to deter their use by others. Such a treaty would not prohibit nuclear retaliation for a nuclear attack.

Currently two states with nuclear weapons, China and India, have an explicit *no first use* policy. These states should have no difficulty agreeing to a treaty prohibiting first use, as this would correspond to their declared policies.

The US said in 2010 that it would work to establish conditions under which a sole purpose policy could be safely adopted. Questions for the US are: what are these conditions and have they been attained as yet; or how can they be attained, and could a no first use treaty help to establish these conditions?

Current Russian policy is nuclear retaliation against nuclear attack — which is compatible with a no first use policy — and also against attack by other weapons of mass destruction or against a conventional attack that presents an existential threat. The question for Russia is whether these scenarios — a WMD attack or a conventional attack that is sufficient to justify nuclear retaliation — are realistic. In today's world only the US would be strong enough to launch a massive attack against Russia. How likely is this, and if the US did attack, how could Russia use nuclear weapons without starting an uncontrollable nuclear escalation?

UK and France retain the possibility of nuclear first strike. They justify this on the basis of creating uncertainty for a potential aggressor, complicating an aggressor's calculations. It is not clear what this means (hardly surprising since the aim is to create uncertainty!), but both states seem to be saying that they might use nuclear preemption against conventional attack. They both stress however that nuclear weapons would be used only in extreme circumstances of self defense. Realistically only one state, Russia, could present an existential threat to the UK or France. Here too, how realistic is this risk, and how could the UK or France use nuclear weapons without this leading to nuclear escalation?

Pakistan has a policy of first use against invading Indian forces. India has said that any nuclear attack on Indian forces would be regarded as an attack on India and would result in nuclear retaliation. As the use of nuclear weapons

therefore invites nuclear retaliation, Pakistan needs to reconsider whether first use is a viable policy.

The nuclear-armed states should give serious consideration to a no first use treaty. As discussed, for some states such a treaty corresponds to or is close to current policy. For others, the question they must ask themselves is whether a policy of first use is realistic given the limited scenarios in which first use would be considered and the likely catastrophic consequences of any use of nuclear weapons. Why they should consider such a treaty — the advantages of a prohibition on first use — is discussed below.

The India-Pakistan situation, involving nuclear deterrence against overwhelming conventional superiority, is unique and calls for a situation-specific solution. As part of an ongoing multilateral arms control and disarmament agenda, the P-5 and other states should make every effort to assist India and Pakistan in developing conventional force limitations and confidence-building measures that remove the need for Pakistan to rely on nuclear deterrence against a conventional threat.

### ***What is the point of a treaty prohibiting first use of nuclear weapons?***

The principal argument against such a treaty is that it would be *unenforceable*, and therefore ineffective. How, it is asked, can a state rely on a treaty that is unenforceable?

Such arguments misunderstand the nature of international agreements of this kind. While taking the form of a legally binding treaty, the treaty will primarily be a *political* commitment. The treaty will have force because the parties conclude that observing it serves their national interest and violating it does not. The bottom line is that nuclear deterrence will continue to apply. A treaty on no first use would not prohibit nuclear retaliation for a nuclear attack.

If nuclear retaliation remains unaffected, what then is the point of a no first use treaty? The key point is that it will help to change the mindset with respect to nuclear weapons. While the goal of the NPT is the ultimate elimination of nuclear weapons, today actions are being taken which are

inconsistent with this goal. To give just a few examples:

- many nuclear weapons are held on launch on warning alert;
- nuclear force modernization programs imply an ongoing utility for nuclear weapons, and the likelihood of their use;
- some military planners are developing war-fighting scenarios where nuclear weapons would be used.

These actions would not be consistent with a treaty on no first use, so could no longer be justified. This situation would prompt negotiations on specific practical steps (including verification) addressing each of these areas, for example, de-alerting, ending the development of new weapons, and including tactical nuclear weapons in future arms reductions. Thus a no first use treaty would help reduce international tensions and would contribute to building the trust needed for taking these and further steps. Of particular importance, such a treaty would also extend arms reductions and disarmament commitments to the nuclear-armed states outside the NPT.

### ***A prohibition on (any) use of nuclear weapons***

Could the nuclear-armed states go further, and agree to a prohibition on *any* use of nuclear weapons? India has been advocating such a treaty since 1982. The other nuclear-armed states might object that a prohibition on use is also a prohibition on nuclear retaliation, and that would negate nuclear deterrence.

This is not a compelling argument because, as mentioned earlier, in the event of a failure of the object of the treaty (i.e. a violation of the ban on use), the other parties would consider themselves no longer bound and could decide to retaliate in kind. In the real world the likelihood of nuclear retaliation – which underpins nuclear deterrence – will remain a dominant factor while nuclear weapons exist.

Parties could choose to lodge reservations stipulating that their commitment to the ban would end if they were attacked by nuclear weapons (as was done with the 1925 Geneva Protocol with respect to chemical weapons), but in any case a party contemplating violation would have to assume the likelihood of nuclear retaliation. So, effectively a prohibition on use would

amount to a *no first use* commitment — seen this way, acceptance by the nuclear-armed states should not be unthinkable.

## Re-energizing the arms reduction and disarmament agenda

The widely held belief that the nuclear-weapon states have lost sight of the obligation to pursue nuclear disarmament is reinforced by comments, in the context of its 2017 Nuclear Posture Review, that the US would consider *whether or not, among many other things, the goal of a world without nuclear weapons is in fact a realistic objective*.<sup>24</sup> This comment calls into question the very basis of the NPT. The NPT nuclear-weapon states must remember they are committed, in the terms of Article VI, to pursue negotiations in good faith on effective measures relating to disarmament. The question is not whether this is a realistic objective, but rather what is needed to achieve it, including steps that can be taken towards this goal in the near term. Considering that the NPT has been in force for over 46 years, it is not convincing to argue it is too soon to start multilateral disarmament negotiations. If not now, when?

As discussed, a ban treaty can help re-energize arms control and disarmament efforts. No-one is suggesting that a ban treaty, whatever its scope, will be the only treaty required to eliminate nuclear weapons. A series of steps and agreements will be required, probably including (not necessarily in this order):

- de-alerting (removing nuclear weapons from immediate launch readiness);
- extension of New START by the US and Russia, and negotiations on START IV;
- establishment of a multilateral negotiating process including all the nuclear-weapon states and the non-NPT nuclear-armed states;
- no first use/sole purpose declarations — nuclear-armed states affirm

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<sup>24</sup> Gladstone R. US General Urges Nuclear Upgrade as Russia Grows 'More Aggressive' // The New York Times. 2017. 22 March. Available at: [https://www.nytimes.com/2017/03/22/world/americas/us-nuclear-weapons-russia.html?\\_r=1](https://www.nytimes.com/2017/03/22/world/americas/us-nuclear-weapons-russia.html?_r=1) (accessed 11 June 2017).

that the sole purpose of nuclear weapons is to deter nuclear attack. A no first use treaty – or even a no use treaty – would be a more powerful statement in this regard;

- entry into force of the CTBT;
- a fissile material cut-off treaty (FMCT);
- a series of arms reductions (unilateral, bilateral and multilateral), with arrangements for verification and for irreversible transfer of fissile material from weapons use;
- nuclear archaeology to account for historical fissile production;
- a range of monitoring, transparency and confidence-building measures.

A detailed discussion of these and other likely steps can be found in the 2009 report of the International Commission on Nuclear Non-Proliferation and Disarmament.<sup>25</sup> The Commission set out a two-phase process, focusing in the short and medium terms on reaching a “minimization point”, characterized by substantial nuclear weapon reductions, agreed no first use doctrine, and force deployments and alert status reflecting that doctrine, followed by a process leading to elimination.

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The 1985 Reagan-Gorbachev Reykjavik Summit showed it was within reach for the leaders of the superpowers to agree on a time table for the elimination of nuclear weapons, and it paved the way for the some of the most sweeping arms reductions in history.<sup>26</sup> It is striking that the imperative to eliminate nuclear weapons was so obvious to a Republican president over 30 years ago, but somehow this sense of purpose and urgency has been lost in the decades since.

Today, when there is no serious focus on further nuclear reductions and complementary measures, there is a real risk that the arms control

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<sup>25</sup> Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers. International Commission on Nuclear Non-proliferation and Disarmament Report. November 2009. Available at: [icnnd.org/reference/reports/ent/pdf/icnnd\\_report-eliminatingnuclearthreats.pdf](http://icnnd.org/reference/reports/ent/pdf/icnnd_report-eliminatingnuclearthreats.pdf) (accessed 11 June 2017).

<sup>26</sup> The 1987 Intermediate-Range Nuclear Forces (INF) Treaty and the 1991 Strategic Arms Reduction Treaty (START).



achievements of the past will start to come undone — what has been called “the great unravelling.”<sup>27</sup> In addition to the general ban treaty that has come out of the General Assembly negotiations, some specific treaties negotiated by the nuclear-armed states, such as a treaty on no first use, would help to arrest this trend and reinforce the need for serious efforts towards resumed and widened nuclear reductions.

Of course, progressing towards nuclear disarmament is not without its dangers. It is well understood that as nuclear weapons are reduced to much lower numbers the risk of preemptive strike might increase. It is also well understood that in a world without nuclear weapons the temptation for nuclear proliferation could be much stronger. However, the current situation, with the retention of large numbers of nuclear weapons and strategies based on their use, is even more dangerous.

For all nuclear weapons to be eliminated, the world will have to be very different to today — it will not be today's world minus nuclear weapons, but a new world where states are committed to collective security and peaceful settlement of disputes. The difficulties of achieving this are not a reason to throw up our hands and say disarmament is an impossible dream — if nothing changes we will end up with a nuclear catastrophe. Change must start somewhere — a treaty which reinforces the stigmatization of nuclear weapons and provides the impetus for further steps towards disarmament seems an excellent place to start.

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27 Krepon M. Elections, Fear of the Bomb, and the Great Unraveling. Stimson Center. October 25, 2016. Available at: <http://www.stimson.org/content/elections-fear-bomb-and-great-unraveling> (accessed 11 June 2017).