It's not rocket science

After scrapping INF, how might we prevent Arms Race 2.0?

BY RICHARD BURT AND JON WOLFSTHAL

s we move into 2019, a new round of US-Russian nuclear competition -Arms Race 2.0 - is clearly emerging. The risk of nuclear conflict through deliberate action or some tragic combination of mistakes and escalation is growing. While both sides are developing and deploying new offensive and defensive strategic systems, the two governments are taking actions that could lower the threshold to nuclear use.

Amid all of this, political engagement, strategic dialogue and trust have evaporated from this complex and increasingly adversarial relationship. This dynamic not only threatens to undo 50 years of efforts to avoid the possibility of a US-Russian nuclear exchange; it also undermines attempts to slow or halt the spread of nuclear weapons globally.

Despite the crises and close calls, we survived the Cold War without using nuclear weapons. But Arms Race 2.0 is arguably more dangerous in an era characterized by cyberenhanced information warfare and the introduction of advanced capabilities by both countries that could undermine strategic stability.

One special new problem is the extent to which Washington and Moscow have interconnected their own nuclear and non-nuclear command, communication and control systems. This mixing of capabilities, described by analysts at the Carnegie Endowment as "nuclear entanglement," further increases the risk that conventional conflicts could escalate quickly to the nuclear level through miscalculation.

We will need to be more than lucky to manage this new competition. US and Russian leaders will need to be smarter and more focused than their predecessors to ensure that their efforts prevent any unintended or unexpected event from quickly triggering a more dangerous conflict.

Unfortunately, the toxic character of the current US-Russian political relationship will make this process much more difficult. The latest casualty in the growing freeze between Moscow and Washington is the 1987 Intermediate Range Nuclear Forces Treaty (INF). Adopting the INF agreement banning all nuclear or conventionally armed groundbased missiles with ranges between

500 and 5,500 kilometers marked a critical step in ending the Cold War. Its entry into force ushered in a generation of nuclear transparency and reduction agreements that have served the security interests of both countries and Europe as a whole.

In 2013, Washington accused Russia of violating the treaty by testing and later deploying the 9M729 can quickly escalate will further

Europe is an accident waiting to happen. The Nuclear Crisis Group (NCG), an international group of specialists tracking potential nuclear flashpoints around the globe, catalogued in 2018 alone over 170 military incidents between NATO and Russian military forces in the European region that had the

For the Trump administration, steeped as it is in the anti-arms control views of its national security advisor John Bolton, arms accords are viewed as a menace. In an environment where Russia is seen as having violated or skirted the limits on several arms control agreements, it is easy to understand how Trump could be convinced to let such agreements die or, better

efit from a new phase of nuclear competition or, instead, seeks to negotiate new deals from a position of strength. In the meantime, however, Moscow seems intent on sowing confusion among its adversaries and leaving opaque the nature of its nuclear capabilities and doctrine.

This combination of short-sight-



"No puppet. No puppet. You're the puppet." Demonstrators protest the looming cancellation of the INF Treaty in front of the US embassy in Berlin on Feb. 1

cruise missile and has now canceled the agreement. Russia, which denies any such violation, has, in turn, accused NATO and the United States of undermining the INF pact by deploying launchers for missile defenses in Romania that can also fire offensive missiles banned by the

Neither side has shown a willingness to compromise in order to efits it brings, although Russia has made some last-minute efforts to at least appear as though it seeks a diplomatic solution. In retrospect, it seems inevitable that the INF Treaty was to be scrapped, to the detriment of stability and predictability in Europe and elsewhere. If INF-range missiles are again deployed in or around Europe, the risk that a crisis or mistake

potential for serious escalation. Yet the refusal by Moscow and Washington to engage seriously on INF, or more broadly on political and security issues, is a symptom of the growing distrust and animosity felt on both sides of the relationship.

These strains now threaten the entire architecture of strategic arms control. The most recent pillar of this complex structure, the 2010 save the agreement and the ben- New START Treaty, limits both Moscow and Washington to no more than 1,550 warheads on 800 missiles and bombers and expires in February 2021. The accord built on its predecessors, including the original 1991 START Treaty that enabled on-site inspections in both countries and created a system of transparency and predictability in strategic nuclear deployments that has lasted for nearly three decades.

yet, be killed by his own hand. New START has the unfortunate additional stigma in the Trump administration of having been negotiated under Barack Obama, a president whose agreements tend to die painful deaths by Trump tweets.

For Moscow, the picture is more complex, but the INF Treaty, START and New START agreements are seen as legacies of an era recognize and then openly state when a newly independent Russia that a nuclear war could not be was willing to accept what are now won and should never be fought. seen by the hawks in the Kremlin as one-sided arms control deals. Not only is Moscow developing a variety of new nuclear weapons to counter its perceived conventional inferiority; it also seems ready to walk away from deals negotiated in a period of economic and political weakness.

It is unclear whether President Putin believes that Russia will ben-

with the inherent risks of nuclear weaponry and the prospect for accidental or unintended military incidents presents a troubling set of risks. The current occupants of the White House and Kremlin - and their advisors - would do well to heed the key lessons of the Cold War. Both Ronald Reagan and Mikhail Gorbachev came to Accordingly, they turned away from nuclear brinkmanship and accepted the idea of mutual and verifiable quantitative and qualitative arms limits. In an earlier era, both Richard Nixon and Leonid Brezhnev, two hard-liners for sure, also recognized the value of détente, including strategic arms

In assessing where we should go from here, one thing is clear: Both the United States and Russia will, for the foreseeable future, seek to maintain nuclear arsenals that can survive any combination of a nuclear or hybrid first strike by the other. Thus, having enough survivable weapons to inflict unacceptable damage on the other remains the core of deterrence that should continue to guide strategic thinking in both countries. This means that new developments and programs perceived as undermining such a capability - whether new missile defense technologies, advanced and highly accurate conventional weapons or increasingly the possible impact of cyber capabilities – should be the subject of deep strategic consultations. Even if these talks do not produce new agreements, understanding the thinking and activities of both sides will reduce the risks of miscalculation and escalation.

The fact that neither Moscow nor Washington at this juncture seems interested in pursuing a serious and comprehensive dialogue over what strategic stability looks like in the 21st century represents a remarkable abdication of their global responsibilities.

The reality today is, as was the case decades ago, that neither Russia nor the US can outrace or out compete the other in the nuclear sphere. However, the "Russia issue" in US politics is increasingly toxic and it is unclear whether the nuclear agenda in the bilateral relationship can be salvaged. With accusations of collusion between Trump and Russia and hyper-partisanship now dominating Washington politics, anyone seeking a dialogue with Russia is accused of appeasing Putin. This has to end and real, sustained engagement between US and Russian officials and experts must get under way again.

Nuclear Crisis Group and the former US Chief Negotiator of the Strategic Arms Reduction

Jon Wolfsthal is director of the Nuclear Crisis Group and former senior director for arms control and nonproliferation at the National Security Council.

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surpluses, his threats with regard to punitive tariffs and the prospect that German automobile imports could be declared a danger to US national security - have come as a shock to Germans. The country's most important ally is no longer a benevolent hegemon standing for shared values; instead, it is a rude competitor that uses its political power to gain economic advantages for itself. In fact, if negotiations on Praxair's takeover of Linde were being held today, it is unclear whether German politicians might attempt to block the

The second force behind the shift in opinion in Berlin is the scandal surrounding manipulated diesel emissions. Since 2015, when it was revealed in the US that Volkswagen had installed illegal defeat devices in its diesel models in order to meet the official limits for nitrogen oxide emissions, "Dieselgate" has been one of the most discussed topics in Germany. Volkswagen already paid a fine of \$4.3 billion to the US, with a number of lawsuits on behalf of motorists in several countries still pending. Stuttgart and other German cities have even had to impose driving bans on diesel cars for some roads.

The diesel scandal rocked the

very core of the German auto industry, which had until recently been the pride of the country. Is it possible the industry is facing massive technical and economic problems? In Germany, more than 820,000 people are employed in the development and construction of automobiles, contributing 7.7 percent to the gross domestic product. The suspicion plaguing Germany's general public today is that the industry has missed the boat on important technical trends and might, for example, no longer play a meaningful role in battery technology development for electric cars, which is exactly where Altmaier has called for

The third and perhaps most important reason for the novel involvement of politicians in the German economy is the rise of China or, more precisely, a changed assessment of that country's economic ascent. Until recently, Germans have only benefited from China's successes. The People's Republic is Germany's most important trading partner, ahead of both the Netherlands and the US. For 2018, the total volume of trade with China reached €200 billion, with Germany exporting goods worth €93

billion euro to China and importing goods totaling €106 billion. No other European country enjoys a position comparable to Germany's status in China. Today, however, an increasing amount of skepticism is diluting that enthusiasm. After all, the Asian giant remains a communist dictatorship and continues to pursue an aggressive foreign policy increasingly characterized by the aspiration to achieve dominance. In the context of the fundamental shift toward the digital age, this behavior serves to cause anxiety The first wake-up call that

prompted Germany to rethink its policies toward China was the Kuka case. In 2016, the Augsburgbased industrial robot manufacturer was sold to the Chinese Midea Group. Prior to that, Sigmar Gabriel - a Social Democrat and then-minister of economic affairs - had tried in vain to prevent the deal and shield Kuka's strategically important robot technology. Now the technology is gone, and Kuka might even become a victim of the current Chinese-US trade dispute; as the economic climate worsens, Chinese industrial companies are buying fewer robots.

More and more Germans are worried about issues that go beyond the possible loss of a key technology. Concerns about data protection and national security are on the rise. In this realm, the focus is on the Chinese tech giant Huawei, the secondlargest provider of mobile phones worldwide. Huawei is currently expanding its market strength in Europe at a rapid pace. Deutsche Telekom, for example, is an important Huawei client. Huawei equipment is also set to play a key role in the expansion of Germany's infrastructure for the new generation of 5G mobile communications; that is, unless the federal government intervenes at the last moment and puts a stop to Huawei's plans.

And this is precisely what the US government would like to see happen. Officials in Washington fear that when push comes to shove, China could use Huawei components as tools of espionage. Meng Wanzhou, Huawei's CFO and daughter of the company's founder, was arrested recently in Canada on a warrant from the US. Concerns over the loss of data

security as a result of the use of Chinese technology are likely justified, especially considering the nonchalance with which the Beijing government uses the data of its citizens to carry out comprehensive surveillance. For European governments eager to protect their own citizens' freedoms, it would not be wise to give Huawei unprotected access to sensitive data. However, in light of the aggressive behavior exhibited by President Trump, it looks like these legitimate concerns might also be used as weapons in a Chinese-US battle for supremacy over the technology of the future.

This is the backdrop against which Germany's minister for economic affairs is now attempting to intervene in industrial policy – an approach that is very unusual in the country's economic history. Still, one of Altmaier's areas of concern is right on the nose: no new global corporations and no world market leaders are emerging in Germany anymore, or, for that matter, in the EU. The only exception to this rule is the Walldorf-based software company SAP. Almost all other globally operating companies in Germany can be traced back to the early days of industrialization: Siemens, Daimler, Thyssen-Krupp, Bayer, BASF and even Deutsche Bank. Moreover, countless names have disappeared over the course of the

years: AEG, Hoechst and Grundig. Until recently, Germany had hoped to facilitate the growth of new companies by means of improved framework conditions. Now, however, a hands-on industrial policy is being set up to accomplish that task and generate some European champions.

But does this approach make sense? There is indeed one shining example of successful European industrial policy: Airbus. But that company required a large amount of time and money to become a serious player on the global aircraft market. Only in 2001 - more than 30 years after it was founded - did the European corporation sell more planes than its US competitor Boeing. But the digital age doesn't provide companies with as much time as that. For this reason, Peter Altmaier's industrial policy initiative could easily go down in history as one of the many missteps made in these uncertain times.

Nikolaus Piper has been a business editor for the Süddeutsche Zeitung and reported for many years as a New York correspondent.