SWP Comment

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The End of the INF Treaty is Looming

A New Nuclear Arms Race Can Still Be Prevented Wolfgang Richter

President Trump wants to terminate the Intermediate-Range Nuclear Forces (INF) Treaty signed in 1987. Its aim was to end the nuclear deployment race between the US and the then Soviet Union in Europe. Trump justified his intention by accusing Russia of violating the Treaty. Moscow denies this and also accuses Washington of being in breach of the Treaty. Trump has argued that China's INF potential is also jeopardising the US's strategic position. However, this unilateral move by Washington contradicts NATO's recent positions. If the US were to withdraw from the INF Treaty, another cornerstone of the European security order and the global nuclear order would collapse. Unpredictability and destabilisation would increase. Europe must resolutely oppose the threat of a new nuclear arms race. It should insist on verifying the accusations from both sides under transparent and cooperative conditions and, if necessary, agree on additional stabilisation measures in order to preserve the Treaty or limit the consequences of a US withdrawal.

The Intermediate-Range Nuclear Forces (INF) Treaty obliges the US and the former Soviet Union to destroy ground-launched cruise missiles (GLCMs) with a range of between 500 and 5,500 km, as well as their launchers and infrastructure. It prohibits their reintroduction, manufacture, flight-testing and depot storage.

The INF Treaty ended the "missile crisis" between Moscow and Washington that lasted from 1978 to 1985. Germany and other Western European countries had feared that the USSR might blackmail Europe with a massive deployment of SS-20 medium-range missiles because the nuclear balance discouraged the US from strategic escalation. As a result, in 1979, NATO decided by consensus to station 572 mediumrange missiles in Western Europe and to seek dialogue with the USSR. This additional deployment led to mass protests, especially in Germany.

The INF Treaty entered into force in 1988. By May 1991, 846 US and 1,846 Soviet INF systems had been completely destroyed. Since it eliminated a whole category of nuclear weapons, the Treaty is considered an important turning point on the path to ending the Cold War and a key element of European security architecture.

On 20 October 2018, President Trump announced during an election campaign appearance that the US would withdraw from the INF Treaty because Russia had





been violating it for four years. Also China's INF arsenal had contributed to the US's strategic disadvantage, although it is not a contracting party. A future trilateral agreement should, therefore, also include China. As long as this is not achieved, the US would increase deployment to force a solution.

Trump put the decision in the context of a political power struggle between the US, Russia and China. He is of the view that Moscow wants to expand its global position at the expense of the US. However, he did not mention the strategic situation in Europe or a concrete threat to alliance partners.

Allegations of breaching the Treaty

Since 2014, the US has been publicly accusing Russia of having tested and deployed Iskander 9M729 (known as SSC-8 in NATO vernacular), ground launched cruise missiles (GLCMs) with a maximum range of 2,600 km. The SSC-8s are supposed to have been deployed on mobile launchers in two missile units, namely in Yekaterinburg (Sverdlovsk region), east of the Ural Mountains and at the Kapustin Jar test site near the Caspian Sea. The US accuses Russia of having developed these GLCMs since 2008.

After much hesitation, Moscow conceded the existence of the new system, but denies its alleged range and rejects the allegation it was in breach of the Treaty. The US has not submitted any evidence. Russian Deputy Foreign Minister, Sergei Ryabkov, said that Russia complies with the INF Treaty. According to Ryabkov, the US wants to force Russia to make new concessions.

Moscow also accuses the US of violating the INF Treaty, suggesting the US had deployed medium-range ballistic missiles to test its missile defence system. Furthermore, the technical features of US longrange drones matched those of banned GLCMs.

In particular, the US had deployed Mk-41 launchers on land in Deveselu, Romania (*Aegis Ashore*), which are also used on US ships for vertically launched cruise missiles (SLCM *Tomahawk*), and planned to deploy them in Poland. From there, the US would be able to launch GLCMs against targets in Russia. This option is also explicitly mentioned in the US Nuclear Posture Review from February 2018.

Washington rejects Russia's accusations, stating that a combat drone is not a cruise missile because it can return to its starting point. It also said that the missiles used for missile defence tests were not banned by the INF Treaty. Due to their modified software and cabling, the *Aegis Ashore* systems are only suitable for launching defence missiles. Furthermore, the bilateral deployment agreement with Romania is a legally binding agreement that the systems should only be used for missile defence.

Verification gap

The accusations from both sides differ in the extent to which they can be reliably checked. The Russian allegations against the US concern questions of Treaty interpretation; the underlying facts as such are undisputed. In turn, the US accuses Russia of secretly breaching the Treaty. However, it is difficult to assess the factual basis of these allegations because the US only selectively communicates the sources of its findings. Nor do the allies' expressions of solidarity suggest that they have any significant findings of their own.

If the allies had information they had acquired by technical means — such as satellite imagery or communications surveillance — they could make a substantial contribution to clarifying the situation. There is no doubt that espionage findings from human sources should also be taken seriously, but they do not provide definitive certainty. For example, former US Secretary of State, Colin Powell, justified the decision to launch the Iraq War in the United Nations Security Council in 2003 with false information attributed to an unreliable human source.

On the other hand, Russia has so far done little to dispel suspicion of them

having breached the Treaty. The accusations could best be investigated by means of cooperative verification, which has proved effective in arms control for many years now.

The INF verification regime provides for mutual on-site inspections to verify that the ballistic missiles and cruise missiles listed in the Treaty, as well as their launchers and infrastructure, have been destroyed as agreed. Cameras on factory gates were used to monitor whether production had stopped. Former launch facilities in Germany were also regularly checked. The regime ended in May 2001.

The Special Verification Commission (SVC) aims to clarify issues of Treaty implementation through dialogue. Since the breakup of the Soviet Union, members of the Consultation Forum have also included the post-Soviet states of Ukraine, Belarus and Kazakhstan.

However, the INF Treaty does not contain any mechanisms to prove whether one party is circumventing Treaty rules, such as inspections of undeclared facilities announced at short notice. In order to enable this, the US and Russia would have to agree bilaterally or at the SVC to modify and reintroduce the INF verification regime.

Verification options

First of all, data and facts would have to be exchanged at the SVC in order to substantiate the allegations and to clarify technical issues. In fact, the SVC met in 2017, but neither there nor in bilateral dialogue was it possible to reach agreement on the matter. The US complains that Russia has not demonstrated the transparency required to constructively address the allegations.

A bilateral expert meeting, which had been arranged at the SVC in December 2017, does not appear to have taken place yet. At the meeting, experts would have discussed the allegations from both sides in detail. It would have been a chance to see how serious the Russian national security advisor, Nikolai Patrushev, was when he said Russia wanted to contribute transparently to clarifying the situation. He had expressed this sentiment in talks with US security advisor, John Bolton, in Moscow on 22 October 2018, who explained President Trump's intention to withdraw from the Treaty.

The opportunities for a cooperative solution to the dispute are, therefore, by no means exhausted. A meeting of experts could be used to discuss whether differences in the interpretation of technical provisions could be eliminated with the help of clarifying protocols. An agreement on data exchange and mutual verification would be essential. It should include satellite and aerial observations as well as onsite inspections.

The introduction of a prohibited INF system into field formations would not only require blueprints, but also a larger number of missiles, carrier vehicles, launchers and associated infrastructure. This would include accommodation, warehouses, parking, supply and repair facilities as well as training areas. The existence of such military equipment and infrastructure can be determined through national satellite reconnaissance and cooperative observation flights conducted under the Treaty on Open Skies (OS).

OS observation flights can take place multilaterally with the participation of other state parties. Such flights were regularly used to monitor nuclear weapons infrastructure. During the flights, photographs are taken by mutual agreement thus providing a solid factual basis for substantial dialogue. They can also be exchanged with third parties. Although it is not possible to determine the precise ranges of GLCMs with aerial photographs, they can confirm the existence of new weapon systems and provide data about their dimensions and associated infrastructure.

The operational ranges of ballistic missiles and cruise missiles depend on a number of variables. The most important variables are the masses of the casings, of the control devices and engines, of the amount of fuel and of the warhead, but also engine

thrust and aerodynamic properties. As a result, the outer dimensions only allow approximations of the missiles' probable ranges, if assumptions about the variables are correct. The INF Treaty therefore refers to the maximum distance the standard version of a missile can travel until the fuel has been fully consumed.

Clarity is best achieved by exchanging telemetric data, demonstrating systems onsite and observing flight tests. It would also have to be established whether the test is for systems which, although within the INF range, are not covered by the INF Treaty.

For example, the Treaty permits the testing of missiles or missile stages from fixed launch facilities over INF ranges, unless they are used for ground-launched INF systems. Accordingly, it would be perfectly in accordance with the Treaty to test sealaunched cruise missiles (SLCM) or missile stages for ICBMs using fixed launchers, such as those at the Kapustin Jar test site.

In return, the US, in coordination with Romania and in future with Poland, would have to allow Russian on-site inspections at *Aegis-Ashore* positions. This might convince Moscow that the Mk-41 launchers used there are technically only intended for the launch of defence missiles and that no SLCMs or GLCMs are available for them.

This configuration of the land-based Mk-41 launch systems could then be recorded in a technical protocol. The fact that it is reversible would not be a fundamental obstacle. The New Start Treaty also includes technical measures that can be reversed but are monitored at regular onsite inspections.

In order for such inspections to be effective in the long term, they would have to take place more frequently and at short notice. Inspections of non-listed facilities would have to be based on plausible justifications and quota limits. This is to prevent the verification inspections being misused to view facilities and systems that are not subject to the INF Treaty.

Multilateral verification would make the fact-finding more transparent and preferably involve former and potential countries where INF systems could be stationed. Subsequent political decisions could then be supported by a broad base of information. It might be possible to modify the INF verification regime if both sides showed the political will to uphold the Treaty, to seek cooperative solutions and to refrain from taking irreversible steps.

Military strategic context

The US are attempting to substantiate their allegation against Moscow of breaching the INF Treaty by arguing that it can no longer be in Russia's geostrategic interest. Countries on its southern and eastern peripheries have INF systems while Russia is banned from possessing them. On the other hand, it has made up for this disadvantage by equipping its flotilla in the Caspian Sea with sea-launched cruise missiles (SLCMs). When Russia intervened in the Syrian war in September 2015, it launched conventional SLCMs from the Caspian Sea at targets 1,600 kilometres away. Its fleets in the Atlantic, Pacific and European marginal seas are also equipped with SLCMs. Russian bombers also have long-range, air-launched cruise missiles (ALCMs).

The US has employed conventionally equipped SLCMs widely across the Middle East, Afghanistan and North Africa since the late 1990s. In April 2017 and April 2018, US *Aegis* warships from the Mediterranean destroyed land targets in Syria. France and the UK have also demonstrated their SLCM/ALCM capabilities in Libya and Syria.

As the US, Russia and others are increasingly equipping their armed forces with more SLCMs and ALCMs, strategic calculations have changed. They are subject neither to the limitations of the New Start Treaty nor to those of the INF Treaty, even though they have a range of well over 500 km. This has relativised the strategic value of the ban on ground-launched INF systems. SLCMs and ALCMs can reach Europe, the Middle East and much of Asia.

The military added value of a groundlaunched INF variant would be difficult to justify. It is sometimes assumed that Russian planners see it as an additional and cheaper option for reliably and quickly eliminating further US missile defence positions in Europe or Asia. But this is a speculative assumption which presupposes that new GLCMs are deployed in the most geographically favourable areas.

However, operationally effective Russian INF systems could not be deployed in secret. There are also no signs yet of US missile defence systems being more densely deployed in Europe. Russia may have developed prototypes to respond as and when they are needed.

Russian leaders fear that any expansion of US missile defence could undermine Russia's nuclear second-strike capability in the long term and thus make it susceptible to intimidation. However, in February 2018, President Putin presented modern nuclear weapons supposedly able to penetrate or bypass any defensive belt and justified them with precisely this argument.

Given the various uses of conventional cruise missiles in military conflicts, arming SLCMs with nuclear capability has a negative impact on crisis stability. It not only increases the arsenal of 'sub-strategic' nuclear deployment options, but also the grey area between nuclear and conventional deployment profiles. If a SLCM launch is mistakenly interpreted as a nuclear attack, it could have devastating consequences. This is because nuclear SLCMs can have a strategic effect as they can attack an enemy's air or missile defence installations, command centres, infrastructure or nuclear weapons from positions in the European or Asian marginal seas.

Despite these concerns, the decision made by the Trump administration in February 2018 to rearm SLCMs with nuclear warheads will increase the US's 'sub-strategic' nuclear arsenal, which is not subject to any arms control treaties. In doing so, Trump has reversed former President Obama's decision in 2010 to abandon nuclear SLCMs designed to attack land targets (TLAM-N). Russia has also modernised its nuclear SLCMs, especially its Kalibr-type cruise missiles.

The US has justified giving its SLCMs nuclear capability with two lines of argumentation. Firstly, the 'extended deterrence' to protect allies in East Asia could occur from sea since stationing nuclear gravity bombs on land in Japan and South Korea would be controversial. So far, however, the 'extended deterrence' has been based on the strategic nuclear potential of the US. Secondly, the Trump administration has linked it to Russia's violation of the INF Treaty and insinuates, it could reconsider the SLCM option should Moscow return to compliance. However, completely abandoning nuclear SLCMs would be incompatible with the argument that they are needed as an 'extended deterrence' from the sea.

A trilateral INF Treaty with China?

Not to be dismissed is the geostrategic argument that from 1987 new nuclear powers with INF capabilities have emerged in South and East Asia and that the People's Republic of China's INF arsenal has grown. Of course, this arsenal is aimed at deterring not only Russia, but, above all, the US from a regional intervention.

President Trump has, therefore, indicated that China must be part of a future INF Treaty. It remains unclear whether and under what conditions this approach could be coordinated with Russia and whether China would be willing to negotiate. A joint Russian-US attempt to multilateralise the INF Treaty at the United Nations failed in 2007. Neither China, France nor the UK showed any interest in the proposal.

Whether there have since been consultations between Beijing and Washington on the INF dossier has not been made public, but it is unlikely. On the contrary, Hua Chunying, spokeswoman for the Chinese Foreign Ministry, has reacted indignantly to Trump's public statement: It was "unjustifiable and unreasonable" to blame others

for the US unilaterally withdrawing from the INF Treaty. She said that China would not be blackmailed. Ever since the 1990s, the People's Republic has held the position that the major nuclear powers would have to scale down to the same levels as the smaller powers before they would consider participating in multilateral nuclear disarmament treaties.

In fact, the US and Russia have more than 90 percent of all nuclear weapons worldwide. China has around 280 to 300 nuclear warheads, approximately 60 intercontinental, ground-launched ballistic missiles and around 1,600 ground-launched, short-range and medium-range missiles and cruise missiles, most of which are deployed with conventional warheads. Approximately 90 percent of these are in the INF range.

If a trilateral treaty were to ban landbased INF systems, China would lose almost all its capacity for regional power projection with long-range stand-off weapons. Without it, China would not be able to maintain its regional strategy of sealing off the East and South China Seas from US intervention (anti-access/area denial strategy). The US, on the other hand, would not have to give up anything because they lack land-based INF carriers in the region and could continue to rely on their global missile, air and sea superiority.

It is therefore unlikely that China would cut such a 'deal'. The alternative, to strive for regional 'INF equilibrium', would also be unacceptable to China. That would mean setting upper limits and thus allowing the US to station its systems in Japan or South Korea. For Europe, this solution would be highly dangerous as it would allow INF deployment west of the Urals.

The Trump administration must have been aware that Beijing could do nothing but reject such a trilateral agreement. It therefore seems reasonable to assume that Trump's vague references to China were merely intended to justify his intention to terminate the INF Treaty.

Deployment and alliance politics

A new INF arms race would threaten the security of Europe and Asia, but not that of the American continent. Should the US seek regional INF deployment, it would need the consent of any potential deployment country, with the exception of Guam.

However, it is hard to imagine Japan, South Korea, the Philippines or Australia agreeing to a deployment of land-based medium-range systems. Precisely the Western Pacific Allies' traditional opposition to land-based nuclear weapons deployment was the reasoning used by the Trump administration to justify arming its see-launched cruise missiles (SLCMs) with nuclear capability.

But even if any US GLCMs are (initially) only conventionally armed, it would not be in South Korea's interest to destroy the recent rapprochement on the Korean peninsula with a new armaments spiral. Nor is Japan likely to be interested in bringing about a new period of strained relations with China and risking further domestic conflicts over deployment issues. Australia and the Philippines would also not be keen to sour their relations with China.

As far as Europe is concerned, the US's unilateral approach is at odds with recent alliance positions. On 7 November 2017, Secretary of Defense James Mattis briefed his NATO counterparts on the US assessment of the situation, saying that the US wanted Russia to return to treaty compliance. This was confirmed by the US State Department in April 2018. In response to Washington's allegations against Moscow, the NATO Council issued a statement on 15 December 2017 expressing concern but maintaining its support for the INF Treaty and calling on Russia to transparently and comprehensively dispel any doubts in a technical dialogue.

As recently as July 2018, NATO states unanimously declared that the INF Treaty was fundamental to European security and must be preserved. At the beginning of October 2018, Mattis presented new findings to NATO defence ministers. As a result, the

ministers again called on Russia to comply with the Treaty and to clarify unresolved issues in a transparent manner.

President Trump's subsequent announcement to withdraw from the INF Treaty came as a surprise. It appears the allies were only informed shortly before the announcement, but not consulted. Should the US intend to introduce new GLCMs in Europe, the allies would either have to opt for a deployment race with Russia or accept a split in the alliance. A 'coalition of the deployment willing' cannot be ruled out.

Conclusions

The US withdrawal from the Anti-Ballistic Missile (ABM) Treaty and the Iran nuclear agreement (Joint Comprehensive Plan of Action, JCPOA) as well as the erosion of the Treaty on Conventional Armed Forces in Europe (CFE Treaty) have already impacted heavily on the international security architecture. If the INF Treaty were to fall apart, another cornerstone of the European security order and the global nuclear order would be destroyed. There would then be no legal restrictions on a regional nuclear arms race in Europe and East Asia. This carries the risk of additional destabilisation amid a security crisis in which mutual trust has fallen to its lowest level since the 1960s.

The starting position for the soon to be required extension of the New Start Treaty would then be extremely unfavourable. Should it fail, from 2021, there would be no legal restrictions on US and Russian strategic nuclear weapons for the first time since 1972. The already weak credibility of the major powers in meeting disarmament obligations contained in the nuclear Non-Proliferation Treaty (NPT) would be further undermined. This would also increase pressure on the NPT. Europe would be confronted with a new debate on closing a perceived gap in nuclear armaments that could lead to an increased nuclear threat to both sides from INF redeployment. None of these scenarios is in the interests of Germany or Europe.

However, by no means have all the options for overcoming the INF crisis in a cooperative manner been exhausted. It has not yet been sufficiently clarified whether and to what extent the mutual allegations of breach of contract are misinterpretations of the source situation or different interpretations of Treaty provisions, which could be amicably resolved through additional technical protocols or joint declarations. Only an unequivocally proven intended threat to Europe, such as the operational deployment of ground-launched INF, could no longer be eliminated in a cooperative manner, unless this decision were politically revised.

Substantial joint steps would therefore first have to be agreed in order to preserve the Treaty and, if necessary, modify it. For example, the US and Russia could make a political statement on the fundamental value of the INF Treaty and express their willingness to comply with its provisions and to clarify unresolved issues in a cooperative manner.

It would then be useful to exchange, discuss and verify the relevant technical data through a combination of satellite monitoring, cooperative Open Skies observation flights and on-site inspections. Allies should be included in multilateral verification measures in order to make follow-up policy decisions based on a comprehensive factual basis.

The Federal Government should campaign for this approach at NATO and form a broad coalition of like-minded states. They should agree on the aim of not giving European approval to new deployments of INF systems in Europe unless Russia threatens European allies by stationing such systems.

Moscow is interested in Germany and France cooperating with Russia in the Normandy format on conflict settlement in Ukraine, on the reconstruction of Syria, on energy transfer and in advocating the continuation of the NATO-Russia Founding Act. Russia should be made aware that this desired cooperation also depends on it transparently complying with its obligations

under the INF Treaty and not threatening Europe with INF systems.

The crisis should also be used as an opportunity to initiate a discussion in the Alliance on the role of nuclear weapons in its deterrence strategy. There must be no grey areas of nuclear ambiguity. These could, in fact, suggest nuclear warfare capability with supposedly 'tactical' nuclear weapons and lead to fatal misjudgements in crises.

The number of employments of conventional cruise missiles is growing and if they were deployed in a nuclear role, this would have a destabilising effect. This concern could be the starting point for a modified INF Treaty or a multilateral follow-up treaty.

In addition, Germany should work to strengthen the Hague Code of Conduct against Ballistic Missile Proliferation (HCoC) by adding cruise missiles to it and improving its transparency rules. Germany should encourage a discussion at the UN Security Council on strengthening nuclear arms controls and disarmament in order to preserve strategic stability and the credibility of the non-proliferation regime.

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