

II. US–Russian nuclear arms control and disarmament

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In 2018 the slowly collapsing Russian–US nuclear arms control and disarmament agenda was close to losing another key pillar. In October, the USA announced that it would formally withdraw from the 1987 Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty) if Russia failed to promptly address US compliance concerns.¹ The year ended with growing pessimism that neither party would take steps to resolve mutual accusations of INF Treaty non-compliance and preserve the agreement. There were more positive developments relating to Russia and the USA completing the implementation of the 2010 Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START) by the specified deadline.² However, the prospects for sustaining this progress by negotiating deeper reductions in deployed strategic nuclear forces beyond those mandated by New START seemed remote. This section describes developments with regard to the INF Treaty and New START in 2018.

The collapse of the Russian–US arms control agenda is linked to deteriorating Russian–US and Russian–North Atlantic Treaty Organization (NATO) political and security relations more generally, as well as to changes in the international security environment and military technological developments in recent years. The growing capabilities of other nuclear-armed countries, particularly China, and technological developments in the areas of missile defence, precision-guided weapons and hypersonic missiles have created new problems for existing nuclear arms control agreements.

Implementation of New START final limits

Russia and the United States continued to implement New START in 2018. Under the treaty, the two parties agreed to limit the number of their deployed strategic nuclear warheads to 1550 each and to limit the number of their deployed strategic missile launchers and heavy bombers equipped for nuclear armaments to 700 each (see table 7.1).

New START contains transparency and verification measures—such as biannual data exchanges, notifications and up to 18 on-site inspections annually—that have helped to build mutual confidence between the parties about the size and composition of their respective strategic nuclear forces. The 15th session of the treaty’s Bilateral Consultative Commission was

¹ For a summary and other details of the INF Treaty see annex A, section III, in this volume.

² For a summary and other details of New Start see annex A, section III, in this volume.

Table 7.1. Russian and US aggregate numbers of strategic offensive arms under New START, as of 5 February 2011 and 1 September 2018

Category of data	Treaty limits ^a	Russia		United States	
		Feb. 2011	Sep. 2018	Feb. 2011	Sep. 2018
Deployed ICBMs, SLBMs and heavy bombers	700	521	517	882	659
Warheads on deployed ICBMs, SLBMs and heavy bombers ^b	1550	1537	1420	1800	1398
Deployed and non-deployed launchers of ICBMs, SLBMs and heavy bombers	800	865	775	1124	800

ICBM = intercontinental ballistic missile; New Start = 2010 Russian–US Treaty on Measures for the Further Reduction and Limitation of Strategic Offensive Arms; SLBM = submarine-launched ballistic missile.

^a To be reached by 5 Feb. 2018.

^b Each heavy bomber, whether equipped with cruise missiles or gravity bombs, is counted as carrying only 1 warhead, even though the aircraft can carry larger weapon payloads.

Source: 'New START Treaty aggregate numbers of strategic offensive arms', US Department of State, 1 Sep. 2018.

held in Geneva, Switzerland, on 10–20 April 2018 to discuss practical issues related to implementation. No details were made publicly available by either side about the outcome of the session.³

The biannual treaty data collected in September 2018 showed that both Russian and US holdings were within the final treaty limits (see table 7.1). The USA officially confirmed that it had completed its reductions of warheads and delivery systems and achieved the New START limits in August 2017.⁴ Russia officially confirmed that it had reached the New START limits on 5 February 2018.⁵

Based on US data from 2017, the USA certified that Russia was in compliance with New START.⁶ However, it also raised implementation-related questions through diplomatic channels and the Bilateral Consultative Commission.⁷ Russia has also raised implementation-related questions and argues that

³ US Department of State, 'Fifteenth Session of the Bilateral Consultative Commission Under the New START Treaty', Media note, 19 Apr. 2018.

⁴ Nauert, H., US Department of State, 'New START Treaty central limits take effect', Press statement, 5 Feb. 2018.

⁵ Russian Ministry of Foreign Affairs, 'Statement by Vladimir I. Yermakov, Head of delegation of the Russian Federation to the First Committee of the 73rd UNGA session, Director of the Department for Nonproliferation and Arms Control of the Ministry of Foreign Affairs of the Russian Federation, within the General Debate, New York, 9 Oct. 2018', 10 Oct. 2018.

⁶ US Department of State, 'Annual report on implementation of the New Start Treaty', Jan. 2018.

⁷ US Department of State (note 6).

these must all be resolved before any extension or renegotiation of New START, which will expire in February 2021, 10 years after it entered into force.⁸ New START stipulates the possibility of a five-year extension without negotiations. Against a background of growing pessimism about the future of Russian–US arms control, the year ended with no clear indication of whether the two sides would agree to an extension for a further five years.

The USA links the question of New START extension or any other development in bilateral strategic limitations to several issues, above all the alleged violation of the INF Treaty by Russia (see below). During a Moscow meeting between US National Security Advisor John Bolton and his Russian counterparts in October 2018, Bolton mentioned in an interview that the USA would take a decision on the future of New START closer to the date of the treaty's expiration.⁹

The INF Treaty: Towards the endgame?

In December 2018, NATO Secretary General Jens Stoltenberg warned Russia that it had a 'last chance' to comply with the INF Treaty following US threats in October to withdraw from it.¹⁰ The USA had been persuaded by European NATO member states to give Russia a 60-day grace period until mid February 2019 to promptly address US compliance concerns.¹¹ Russia has consistently refuted accusations that it is in non-compliance with the INF Treaty and has tabled counter claims against the USA. This section highlights the respective positions of the two sides and reviews the key developments in 2018.

INF compliance concerns

Under the INF Treaty, the Soviet Union and the USA agreed not to possess, produce or flight test ground-launched ballistic and cruise missiles of intermediate and shorter ranges (from 500 to 5500 kilometres). One of the treaty outcomes was the removal of those weapons with either nuclear or conventional warheads from Europe.

The USA first raised its compliance concerns with Russia in 2013. It made its first public accusation in 2014 that Russia was in violation of the INF Treaty as a result of conducting flight tests of a new ground-launched cruise missile

⁸ Russian Ministry of Foreign Affairs, 'Comment by the Information and Press Department on the latest data regarding the aggregate numbers of US strategic offensive arms published by the US Department of State', 27 Feb. 2018; and Russian Ministry of Foreign Affairs, 'Statement by the Russian delegation in the First Committee of the UN General Assembly on "Nuclear Weapons" cluster', 23 Oct. 2018.

⁹ US Embassy and Consulates in Russia, 'APNSA John Bolton Interview with Elena Chernenko, Kommersant', Unofficial transcript, 22 Oct. 2018.

¹⁰ NATO, 'Press conference by NATO Secretary General Jens Stoltenberg following the meeting of the North Atlantic Council in foreign ministers' session', 4 Dec. 2018.

¹¹ Williams, A., 'US, NATO give Russia 60 days to comply with nuclear pact', NBC News, 4 Dec. 2018.

(GLCM) with a range proscribed by the treaty.¹² Each subsequent annual US State Department compliance assessment has repeated these allegations.¹³ Russia has consistently rejected the US allegations as baseless and criticized the USA for failing to provide any evidence or specific facts about the alleged Russian violation.¹⁴ Russian-US tensions continued over the issue and in 2017 the dispute moved increasingly into the public domain.¹⁵ Specifically, the USA has accused Russia of having deployed a new GLCM system, which it identified as the Novator 9M729 (or SSC-8 under the NATO designation).¹⁶

The missile's technical specifications remained the subject of speculation and no evidence of the alleged treaty violation was made public by the USA. There was broad agreement within the expert community, however, that the 9M729 resembles the intermediate-range Kalibr sea-launched cruise missile (SLCM), and that it is part of the Iskander system being used for other types of missiles, both ballistic and cruise missiles, in compliance with the INF Treaty.¹⁷ In 2017 the USA imposed sanctions intended to pressure Russia into compliance, and threatened to withdraw from the treaty and start research and development of its own intermediate medium-range GLCM if Russia refused to return to compliance.¹⁸

Russia countered with its own allegations of US non-compliance with the INF Treaty. Russia claimed that the USA was: deploying a missile defence interceptor system—the Mk-41 missile launcher (Aegis Ashore)—in Eastern Europe that could also be used to launch prohibited GLCMs; using targets for missile defence tests with similar characteristics to proscribed intermediate-range missiles; and manufacturing armed unmanned aerial vehicles (UAVs) that fall under the treaty's definition of a GLCM.¹⁹ The USA dismissed Russia's allegations as an attempt to deflect attention from its own violation of the treaty.²⁰ At least one independent US expert argues that if the US

¹² See Kile, S., 'Russian-US nuclear arms control', *SIPRI Yearbook 2015*, pp. 540–45.

¹³ See e.g. US Department of State, Bureau of Arms Control, Verification and Compliance Factsheet, 'INF Treaty: At a Glance', 8 Dec. 2017.

¹⁴ See e.g. Russian Ministry of Foreign Affairs, 'Comment by the Information and Press Department on the US State Department's report on adherence to and compliance with arms control, non-proliferation, and disarmament agreements and commitments', 11 June 2015.

¹⁵ See Kile, S., 'Russian-US nuclear arms control', *SIPRI Yearbook 2018*, pp. 319–24.

¹⁶ On Russian nuclear forces, see chapter 6, section II, in this volume.

¹⁷ Podvig, P., 'The INF Treaty culprit identified: Now what?', *Russian Strategic Nuclear Forces*, 5 Dec. 2017; and Gibbons-Neff, T., 'This is the ground-launched cruise missile that Russia has reportedly just deployed', *Washington Post*, 15 Feb. 2017.

¹⁸ Kile (note 15); Hellman, G., 'Trump approves new Russian sanctions for violating cold war arms pact', *Politico*, 12 Sep. 2017; and US Department of State, 'Trump administration INF Treaty integrated strategy', Press statement, 8 Dec. 2017.

¹⁹ Russian Ministry of Foreign Affairs, 'Deputy Foreign Minister Sergey Ryabkov's comment on anti-Russia attacks by the US over the INF Treaty', 9 Dec. 2017.

²⁰ US Department of State, Bureau of Arms Control, Verification and Compliance Factsheet, 'Refuting Russian allegations of US noncompliance with the INF Treaty', 8 Dec. 2017.

Aegis-based systems in Eastern Europe were equipped with cruise missiles it would indeed violate the INF Treaty.²¹

Despite two meetings under the treaty's dispute resolution mechanism, the Special Verification Commission, in November 2016 and December 2017, as well as discussions in several other venues between 2014 and 2017, no progress was made in resolving the mutual recriminations between the two parties.²²

Key developments in 2018: US coordination within NATO on exiting the treaty

The US Nuclear Posture Review (NPR) published in February 2018, among other things, confirmed plans to develop a new intermediate-range GLCM. It also identified the possibility of developing a 'low-yield' nuclear warhead for US submarine-launched ballistic missiles.²³ The NPR contends that this capability would strengthen nuclear deterrence. While testifying before the House Armed Services Committee, US Secretary of Defense James Mattis said that the proposed new nuclear systems could be used as pressure to bring Russia back into compliance with the INF Treaty.²⁴

The USA also began to increase coordination on its position within NATO. The final declaration of the NATO Summit in Brussels in July 2018 addressed the alleged Russian violations of the treaty in strong terms. Whereas NATO's 2016 Warsaw Summit communiqué had highlighted the importance of the INF Treaty and called on Russia 'to preserve the viability of the INF Treaty through ensuring full and verifiable compliance', the new declaration stated that 'the most plausible assessment would be that Russia is in violation' of the treaty and 'urges Russia to address these concerns in a substantial and transparent way, and actively engage in a technical dialogue with the United States'.²⁵

It was hoped that the July 2018 Helsinki Summit between US President Donald J. Trump and Russian President Vladimir Putin, which immediately followed the NATO Summit, might create some high-level political momentum for resolution of the INF Treaty dispute. US and Russian

²¹ Postol, T. A., 'Russia may have violated the INF Treaty: Here's how the United States appears to have done the same', *Bulletin of the Atomic Scientists*, 14 Feb. 2019.

²² The Special Verification Commission has met 30 times. The last meeting before 2016 took place in 2003.

²³ Office of the Secretary of Defense, *Nuclear Posture Review 2018* (US Department of Defense: Washington, DC, 2018). On the US NPR, see also chapter 6, section I, in this volume.

²⁴ House Armed Services Committee, Secretary of Defense Jim Mattis, Written Statement for the Record, 6 Feb. 2018; and Daniels, J., 'Pentagon chief sees new nuclear missile as bargaining chip against Russians', CNBC, 6 Feb. 2018.

²⁵ NATO, Brussels Summit Declaration, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council, Brussels, 11–12 July 2018; and NATO, Warsaw Summit Communiqué, Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council, Warsaw, 8–9 July 2016.

representatives had met in Geneva in June 2018 for expert talks on the issue.²⁶ Following the meeting, Russian Deputy Foreign Minister Sergey Ryabkov stated that the dialogue was becoming more ‘professional and serious’.²⁷ However, even though in his press conference remarks President Putin stated that both leaders agreed to work together on several issues, including the INF Treaty, the presidential summit meeting failed to make any progress.²⁸

NATO again addressed concerns about the INF Treaty at its defence ministers meeting in early October. The meeting reflected a consensus among NATO member states about the role of Russia in the INF Treaty crisis: ‘Allies agree that Russia has not been transparent. And refuses to provide any credible answers. The most plausible assessment is that Russia is in violation of the INF Treaty’.²⁹

On 20 October, President Trump announced that the USA would withdraw from the INF Treaty in response to the long-running dispute over Russia’s alleged non-compliance, as well as concerns about China’s unconstrained stockpile of intermediate-range missiles.³⁰ While no formal withdrawal notification was submitted, which would have started a six-month clock for formal US withdrawal, this can be delivered to Russia at any time.³¹ Trump’s announcement seemed to surprise NATO member states and many reportedly expressed their concerns at a meeting of the North Atlantic Council—NATO’s principal political decision-making body—that was convened to discuss the issue on 25 October.³² John Bolton held pre-planned talks in Russia a few days later that failed to yield a breakthrough.³³

After consistently avoiding confirming that the 9M729 cruise missile had been developed, Russia belatedly acknowledged its existence but continued to deny that it has been tested or is capable of flying at an INF Treaty-proscribed

²⁶ Pedanov, S., [Sergey Ryabkov: USA Acts in a way that may be described only as preparation for violating the INF Treaty], *Mezhdunarodnaya zhizn*, 28 June 2018 (in Russian).

²⁷ [Dialogue with the USA has become more professional, Ryabkov believes], *RIA Novosti*, 28 June 2018 (in Russian).

²⁸ The White House, Remarks by President Trump and President Putin of the Russian Federation in Joint Press Conference, 16 July 2018.

²⁹ NATO, ‘Press conference by NATO Secretary General Jens Stoltenberg following the meetings of NATO defence ministers’, 4 Oct. 2018.

³⁰ Borger, J., ‘Trump says US will withdraw from nuclear arms treaty with Russia’, *The Guardian*, 21 Oct. 2018.

³¹ On the legal routes to exiting the INF Treaty see Hurd, H. and Chachko, E., ‘US withdrawal from the INF Treaty: The facts and the law’, *Lawfare*, 25 Oct. 2018; and Anderson, S. R., ‘Three ways to leave the INF Treaty’, *Lawfare*, 29 Oct. 2018.

³² Emmott, R., ‘NATO urges Trump officials not to quit nuclear treaty: Diplomats’, *Reuters*, 25 Oct. 2018; and NATO, ‘North Atlantic Council discusses INF’, Press release, 25 Oct. 2018. See also Taheran, S., ‘Select reactions to the INF Treaty crisis’, *Arms Control Association*, 14 Dec. 2018.

³³ Borger, J., ‘John Bolton pushing Trump to withdraw from Russian nuclear arms treaty’, *The Guardian*, 19 Oct. 2018; ‘Russia nuclear treaty: Bolton in Moscow amid missile tensions’, *BBC News*, 22 Oct. 2018; and ‘US will quit arms treaty despite Russian objections, Bolton says after Putin meeting’, *Moscow Times*, 24 Oct. 2018.

range.³⁴ At a meeting of the NATO-Russia Council, which brought together the 29 NATO member states plus Russia, on 31 October, NATO officials again reportedly urged Russia to return to treaty compliance.³⁵ In November, the USA provided further details of the alleged missile tests that it claims violate the treaty. According to the director of US National Intelligence, Dan Coats, Russia tested the 9M729 missile system from a fixed launcher to distances well over 500 km—as allowed by the treaty—and then later tested the same system from a ground-mobile launcher at ranges below 500 km. Coats alleged that Russia then put ‘the two types of tests together’ to ‘develop a missile that flies to the intermediate ranges prohibited by the INF Treaty and launches from a ground-mobile platform’.³⁶

Although European diplomats were reportedly attempting to salvage the treaty by acting as intermediaries between Russia and the USA, by the NATO foreign ministers meeting on 4 December the position of European NATO member states appeared to have hardened.³⁷ US Secretary of State Mike Pompeo announced at the meeting that the USA considered Russia to be in ‘material breach’ of the treaty and would withdraw from it unless Russia returned to compliance. However, rather than issue a formal withdrawal notice, Pompeo established a 60-day window, after which the USA could suspend its participation in the treaty.³⁸ The NATO foreign ministers issued a statement in which they ‘strongly support[ed] the finding of the United States that Russia is in material breach of its obligations’.³⁹

On 5 December, President Putin noted that Russia would respond ‘accordingly’ to the US withdrawal from the treaty, and the Chief of Staff of the Russian Armed Forces, General Valery Gerasimov, said that US missile sites on the territory of European NATO member states could become ‘targets of subsequent military exchanges’.⁴⁰ On 14 December, however, a

³⁴ Russian Ministry of Foreign Affairs, ‘Deputy Foreign Minister Sergey Ryabkov’s briefing on developments involving the INF Treaty, 26 Nov. 2018’, 26 Nov. 2018.

³⁵ NATO, ‘NATO–Russia Council meets in Brussels’, Press release, 31 Oct. 2018; and ‘NATO urges Russia to honor INF Treaty amid US threat to withdraw’, Radio Free Europe/Radio Liberty, 31 Oct. 2018.

³⁶ Office of the Director of National Intelligence, ‘Director of National Intelligence Daniel Coats on Russia’s Intermediate-Range Nuclear Forces (INF) Treaty Violation’, 30 Nov. 2018.

³⁷ Borger, J., ‘European diplomats mount last-ditch effort to stop US ditching INF Treaty’, *The Guardian*, 18 Nov. 2018. See also e.g. the statement by the Netherlands that it has independent confirmation of Russian non-compliance: ‘Nederlandse conclusie over de Russische schending van het INF-verdrag (Intermediate-Range Nuclear Forces)’ [Dutch conclusion on Russian violation of the INF Treaty (Intermediate-Range Nuclear Forces)], Tweede Kamer der Staten-Generaal, 27 Nov. 2018.

³⁸ US Department of State, ‘Press availability at NATO Headquarters: Michael R. Pompeo, Secretary of State’, Brussels, 4 Dec. 2018.

³⁹ NATO, ‘Statement on the Intermediate-Range Nuclear Forces (INF) Treaty’, Issued by the NATO foreign ministers, Press release, Brussels, 4 Dec. 2018; and Gramer, R. and Seligman, L., ‘Trump and NATO show rare unity in confronting Russia’s arms treaty violation’, *Foreign Policy*, 4 Dec. 2018.

⁴⁰ Grove, T., ‘Putin threatens arms race as US prepares to exit nuclear treaty’, *Wall Street Journal*, 5 Dec. 2018; and President of Russia website, ‘Vladimir Putin answered media questions after the Volunteer of Russia 2018 award ceremony’, Moscow, 5 Dec. 2018.

Russian foreign ministry official suggested that Russia was ready to discuss mutual inspections with the USA in order to salvage the treaty.⁴¹

Does the INF Treaty have a future?

The prospects for preserving the INF Treaty appear slim. The alleged violations of the treaty are difficult to evaluate, not least because the inspection regime for verifying INF commitments ceased in 2001 in accordance with the treaty, and there are no verified technical details about the 9M729 missile system at the centre of US allegations.⁴² The only conceivable way for the USA to reverse its decision would be for Russia to ‘come back into compliance’ with its INF obligations. This seems unlikely as Russia continues to deny the US accusations and argues that the USA is itself violating the treaty.

Former officials and experts from Russia and the USA have explored potential ways of saving the treaty. Suggestions include making the 9M729 missile system available for inspection to determine whether it can travel over 500 km and allowing Russian officials to inspect NATO missile defence sites, or even modifying the Mk-41 launcher so that it cannot physically hold or launch offensive missiles.⁴³ However, it was increasingly apparent by the end of the year that for US officials, only the verified destruction of the 9M729 missile system would satisfy their call for a return to compliance.⁴⁴

Moreover, both parties seem inclined to let it collapse, partly over joint concerns about China’s growing nuclear and conventional missile inventory, which is mostly composed of systems in the INF Treaty-prohibited range.⁴⁵ Concerns have also been expressed about the efforts of other states—notably India, Pakistan, North Korea and, potentially, Iran—to acquire intermediate-range missiles. While there has been some support in the past for the idea of expanding the INF Treaty to include more states—including a 2007 US–Russian joint statement in support of imparting a ‘global character to this important regime’—there seems to be little appetite currently for

⁴¹ ‘Russia ready to discuss inspections with US on arms treaty: RIA’, Reuters, 14 Dec. 2018.

⁴² Goncharenko, R., ‘Russia’s controversial 9M729 missile system: A not-so-secret secret’, *Deutsche Welle*, 5 Dec. 2018; Reddie, A., ‘Design matters: The past, present and future of the INF Treaty’, *VERTIC Trust & Verify*, no. 162 (winter 2018); and Dolzikova, D., ‘The role of verification in the Intermediate-Range Nuclear Forces Treaty dispute’, *RUSI Commentary*, 15 Jan. 2019.

⁴³ Erästö, T. and Topychkanov, P., ‘Russian and US policies on the INF Treaty endanger arms control’, *SIPRI Topical Backgrounder*, 15 June 2018.

⁴⁴ Borger, J., ‘US to begin nuclear treaty pullout next month after Russia missile talks fail’, *The Guardian*, 16 Jan. 2019; and US Mission to the North Atlantic Treaty Organization, ‘October 2, 2018: Press briefing by Ambassador Kay Bailey Hutchison’, 2 Oct. 2018.

⁴⁵ Ghoshal, D., ‘China and the INF Treaty’, *Comparative Strategy*, vol. 35, no. 5 (2016), pp. 363–70; and Taylor, A., ‘How China plays into Trump’s decision to pull-out of INF Treaty with Russia’, *Washington Post*, 23 Oct. 2018.

multilateralizing the treaty.⁴⁶ China, for example, has expressed no interest in joining it.⁴⁷

Terminating the INF Treaty has the potential to create the most severe arms control crisis since the 1980s and risks further undermining the frayed nuclear arms control architecture. It may also result in the redeployment of systems once-prohibited in Europe by Russia and the USA, as well as, over time, new deployments of anti-missile defences in Europe and Asia.⁴⁸

⁴⁶ US Department of State, Joint US-Russian Statement on the Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles at the 62nd Session of the UN General Assembly, 25 Oct. 2007.

⁴⁷ Ministry of Foreign Affairs of China, 'Foreign Ministry spokesperson Geng Shuang's regular press conference', 5 Dec. 2018.

⁴⁸ Chalmers, M. and Stefanovich, D., 'Is this the end of nuclear arms control?', *RUSI Newsbrief*, vol. 38, no. 10 (Nov./Dec. 2018).