



REPORT

THE POLISH INSTITUTE OF INTERNATIONAL AFFAIRS

NUCLEAR-BACKED “LITTLE GREEN MEN:” NUCLEAR MESSAGING IN THE UKRAINE CRISIS

WARSAW
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Introduction

Russia’s aggressive actions against Ukraine have exposed the challenge of Moscow’s approach to conflict.¹ The element most highlighted is its use of “hybrid warfare,” epitomised by the so-called “little green men”—Russian soldiers albeit without insignia who played an instrumental role in the annexation of Crimea. These “little green men” were used in conjunction with other hybrid tactics such as the covert engagement of Russian forces on the ground, economic pressure, and an unprecedented disinformation campaign. The hybrid warfare tools were, however, not used alone. The credibility and effectiveness of this hybrid warfare campaign was backed up by Russia’s potential to use its full spectrum of military capabilities, including conventional and nuclear forces. Russian tactics that exploited ambiguity of intent and attribution have been surprising and confusing, and they have created difficulties for NATO, which is determined to effectively address them.²

Of all the components of Russia’s approach to warfare, the nuclear element is the most controversial. There are divergent opinions whether Russia’s nuclear weapons have played any important role during the Ukraine crisis and whether the crisis should have any implications for NATO’s nuclear policy. According to some observers, the Ukraine crisis did not have a nuclear dimension, or at least not to a significant degree. For example, according to a report by the International Security Advisory Board of the U.S. Department of State from December 2014:

*The annexation of Crimea and continued attempts to destabilise eastern Ukraine constitute a crisis. This crisis involves nuclear states but is not a nuclear crisis and we should take no action implying otherwise. The United States and NATO have a clear nuclear policy. Nothing about the Ukrainian crisis warrants changing that policy.*³

The conclusions of this report differ from the above judgment. There is evidence that indicates that nuclear weapons have played an important role during the Ukraine crisis. One may, for example, describe the Ukraine crisis as a nuclear crisis per the logic of Paul H. Nitze’s argument:

*Whether or not atomic weapons are ever again used in warfare, the very fact of their existence, the possibility that they could be used, will affect the future of wars. In this sense Korea was an atomic war even though no atomic weapons were used. In this sense even the Cold War is an atomic cold war.*⁴

However, during the Ukraine crisis not only the “very fact of nuclear weapons existence” has played a role. Russia’s activities in and around Ukraine have been accompanied with unprecedented dissemination of nuclear weapons-related information, originating from the Kremlin. It is reasonable to infer that during the crisis Russia has deliberately sent nuclear messages

¹ The author would like to thank William Alberque, Artur Kacprzyk, Łukasz Kulesa, and Prof. David S. Yost for their invaluable comments and suggestions to earlier drafts of this report. The report greatly benefited from the author’s research at the National Security Affairs Department of the Naval Postgraduate School in Monterey, California, funded by an “Etiuda 2” scholarship awarded by the Polish National Science Centre. The author is also thankful to U.S. experts and officials with whom he conducted interviews in Washington D.C. in June 2015, participants in the PISM seminar “NATO Deterrence and Defence: In the Shadow of the Ukraine Crisis” in December 2014, and for the invitation to NATO’s Nuclear Policy Symposium in October 2014 in Wrocław, Poland, where some arguments included in the report were initially presented. Any shortcomings are, however, the author’s sole responsibility.

² For insightful analysis of Russia’s approach to warfare, see: D. Johnson, *Russia’s Approach to Conflict—Implications for NATO’s Deterrence and Defence*, NATO Defence College Research Paper No. 111, April 2015, www.ndc.nato.int/news/current_news.php?icode=797.

³ “Report on U.S.–Russia Relations,” International Security Advisory Board, U.S. Department of State, 9 December 2014, p. 14, www.state.gov/documents/organization/235118.pdf.

⁴ P.H. Nitze, “Atoms, Strategy and Policy,” *Foreign Affairs*, January 1956; one of the epigraphs in: R.K. Betts, *Nuclear Blackmail and Nuclear Balance*, The Brookings Institution, Washington, D.C., 1987, p. 1.

to NATO and that Russia's nuclear muscle flexing has been an integral part of Moscow's approach to warfare in the Ukraine crisis. Since March 2014, an abundant number of Russian statements and activities have fallen under the definition of a nuclear threat, understood as:

[A]ny official suggestion that nuclear weapons may be used if the dispute is not settled on acceptable terms. Such threats can be signals of intentions—hints through public statements, diplomatic channels, or deliberate leaks about internal discussions or plans. Or they could be signaled through observable preparation or exercising of nuclear capabilities beyond normal peacetime status, indicating greater readiness to execute wartime missions. In general, the latter should seem the more potent gesture, on the principle that actions speak louder than words.⁵

The nuclear dimension of the Ukraine crisis also is corroborated by NATO's response to Russia's nuclear messages. The Alliance has responded in a very restrained manner and rightly avoided engaging in tit-for-tat nuclear messaging with Russia. At the same time, however, the Ukraine crisis exposed NATO's communication gaps and corresponding challenges to the effectiveness of NATO's nuclear deterrence and assurance.

While some steps, such as basing nuclear weapons in Central and Eastern Europe, would be inappropriate,⁶ NATO adaptation to a new nuclear landscape in Europe is required. NATO has wide options that go beyond doing nothing or undertaking the unnecessary steps. NATO Allies should consider rebalancing their thinking towards nuclear deterrence, a re-examination of their nuclear crisis-management tools and exercises, refreshing declaratory policy and re-designing their nuclear communication strategy.

⁵ R.K. Betts, *op. cit.*, p. 6.

⁶ Such new basing would contravene the pledge made at the NATO Ministerial in December 1996: "... Enlarging the Alliance will not require a change in NATO's current nuclear posture and therefore NATO countries have no intention, no plan, and no reason to deploy nuclear weapons on the territory of new members nor any need to change any aspect of NATO's nuclear posture or nuclear policy, and we do not foresee any future need to do so," M-NAC-2(96)165, *NATO Ministerial Communique*, Brussels, 10 December 1996, par. 5, www.nato.int/docu/pr/1996/p96-165e.htm.

Russia’s Nuclear Messaging

Nuclear Shoe-Banging

It has argued that “the sincerest form of declaration is one that is repeated often and at the highest level.”⁷ During the Ukraine crisis, Russian officials, including President Vladimir Putin, have repeatedly conveyed a message perceived as “don’t mess with nuclear-armed Russia.”

In August 2014, Putin emphasised that no country has an intention to “start a large-scale conflict against Russia” because it is “one of the world’s biggest nuclear powers.”⁸ A veiled nuclear threat was included in his statement in October 2014, when, referring to the prospect of further Western sanctions against Russia, Putin stated that attempts to “blackmail” Russia could lead to “a discord between large nuclear powers” with dramatic consequences for strategic stability.⁹ He also seemed to praise Nikita Khrushchev’s Cold War nuclear missile brinkmanship, which in his view convinced the U.S. and NATO that “Nikita is best left alone.”¹⁰

The Russian nuclear resolve was especially highlighted with regards to Crimea. In a documentary aired on Russian television in March 2015, Vladimir Putin acknowledged that he was ready to signal Russia’s readiness to use nuclear weapons during the Crimea annexation.¹¹ Since then, Russian officials have tacitly suggested that Russia reserves the option of nuclear usage to retain new territory. In July 2014, Russian Foreign Minister Sergei Lavrov noted that in case of aggression, Russia has “the doctrine of national security and it very clearly regulates the actions that will be taken in this case.”¹² The right to deploy nuclear weapons in Crimea was also repeatedly asserted by Russian officials.¹³ The statements can be juxtaposed with reports that Russia has been moving nuclear-capable forces to Crimea and Ukrainian official statements that Russia has been renovating nuclear storage infrastructure in Sevastopol.¹⁴

⁷ M. Chalmers, *Nuclear Narratives: Reflections on Declaratory Policy*, Whitehall Report 1-10, Royal United Services Institute 2010, p. 8, https://www.rusi.org/downloads/assets/WHR_Nuclear_Narratives.pdf.

⁸ “Excerpts from a transcript of a meeting of the President of the Russian Federation Vladimir Putin with Seliger 2014 10th National Youth Forum Participants,” Kremlin press release, 29 August 2014, <http://eng.kremlin.ru/transcripts/22864>.

⁹ “Vladimir Putin issues new ‘large nuclear power’ warning to West,” *The Telegraph*, 16 October 2014, www.telegraph.co.uk/news/worldnews/vladimir-putin/11167192/Vladimir-Putin-issues-new-large-nuclear-power-warning-to-West.html.

¹⁰ “Excerpts from a transcript of the final plenary meeting of the Valdai International Discussion Club’s XI session, Sochi,” Kremlin press release, 24 October 2014, <http://eng.kremlin.ru/news/23137>.

¹¹ “Putin was ready to put nuclear weapons on alert in Crimea crisis,” *Financial Times*, 15 March 2015, www.ft.com/intl/cms/s/0/41873ed2-cb60-11e4-8ad9-00144feab7de.html.

¹² “Russia Threatens Nuclear Strikes Over Crimea,” *The Diplomat*, 11 July 2014, <http://thediplomat.com/2014/07/russia-threatens-nuclear-strikes-over-crimea>.

¹³ “Russia says it has a right to put nuclear weapons in Crimea,” *Los Angeles Times*, 15 December 2014, www.latimes.com/world/europe/la-fg-russia-nuclear-crimea-20141215-story.html; “Crimea Could Serve as Location to Deploy Nuclear Weapons, Russia Says,” *Newsweek*, 13 March 2015, www.newsweek.com/crimea-could-serve-location-deploy-nuclear-weapons-russia-says-313545.

¹⁴ “Russia to deploy Tu-22M3 ‘Backfire’ bombers to Crimea,” *IHS Jane’s Defence Weekly*, 27 March 2014, www.janes.com/article/36140/russia-to-deploy-tu-22m3-backfire-bombers-to-crimea; “Ukraine’s statement at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons,” 9 December 2014, <https://www.youtube.com/watch?v=JgzBOgxXHM8>; According to the supreme commander of NATO, Gen. Philip Breedlove, Russia’s new deployments to Crimea have transformed it into a significant “power projection platform,” a development that may also apply to nuclear-capable systems: “NATO Commander Breedlove: Imported Russian Missiles Have Turned Crimea into a Black Sea ‘Power Projection’ Platform,” *USNI News*, 25 February 2015, <http://news.usni.org/2015/02/25/nato-commander-breedlove-imported-russian-missiles-have-turned-crimea-into-a-black-sea-power-projection-platform>. It remains, however, unclear, whether the actual nuclear warheads are in Crimea or not; “NATO commander concerned by armored convoys entering Ukraine from Russia,” *Reuters*, 11 November 2014, www.reuters.com/article/2014/11/11/

While modernising Russia's nuclear arsenal has long been at the top of Russia's military priorities, it was during the Ukraine crisis that Russian officials, including Putin, warned of "surprising the West with our new developments in offensive nuclear weapons."¹⁵ In September 2014, Russian officials also announced a decision that by 2020 Russia will renew not 70% of its strategic nuclear forces, as had been presumed, but all of them.¹⁶

The need for nuclear messaging seemed to prevail over budgetary realities and the capacities of Russia's nuclear complex. In June 2015, Putin announced that Russia would add more than 40 intercontinental-range ballistic missiles (ICBMs) to its arsenal, which contrasted with his statements made six months earlier that Russia would build 50 new ICBMs.¹⁷ The nuclear posturing also prevailed over concerns about undermining Russia's long-standing claim that U.S. missile defence poses a threat to Russia's strategic deterrent. Russia's Deputy Prime Minister Dmitry Rogozin boasted in January 2015 that "neither the current, nor even the projected American missile defence system could stop or cast doubt on Russia's strategic missile potential."¹⁸ Similarly, while making the announcement about the 40 new ICBMs, Russia's president highlighted that the missiles would be able "to overcome even the most technically advanced anti-missile defence systems."¹⁹

It might also be argued that Russia's work on its newest military doctrine was exploited by Moscow to create additional confusion about the circumstances in which it could resort to nuclear-weapon use. In remarks reminiscent of the statement in 2009 by Nikolai Patrushev, secretary of the Russian Security Council, that Russia could use nuclear weapons pre-emptively in regional and local wars, Gen. Yuri Yakubov, a senior defence ministry official, advocated in September 2014 that Russia "hash out the conditions under which Russia could carry out a pre-emptive strike."²⁰ The Patrushev and Yakubov remarks can be regarded as references to the Russian doctrine of de-escalation—the threat to conduct a limited nuclear strike if Russia faces overwhelming conventional forces with an intention to paralyse an adversary's decision-making, bring an early end to an armed conflict on Russia's terms, or to scare an adversary into suing for peace. This is presumably envisioned as a deterrent to the U.S. or its allies from engagement in conflicts in which Russia has an important stake.²¹ Even though the pre-emptive strike option was not included in the 2010 or 2014 Russian military doctrines, the remarks have raised questions as to whether it is in fact included in the classified annexes to them. Also, one has to be cautious in reaching conclusions on Russian nuclear policy on the basis of an analysis of public military doctrine, versus observing its exercises and scenarios it uses as it prepares and trains to fight.²²

us-ukraine-crisis-nato-idUSKCN0IV1I820141111; H.M. Kristensen, "Rumors about Nuclear Weapons in Crimea," 18 December 2014, <https://fas.org/blogs/security/2014/12/crimea>.

¹⁵ J. Tayler, "Vladimir Putin goes rogue: Ukraine, NATO, nuclear weapons—and a very dangerous new reality," Salon, 29 August 2014, www.salon.com/2014/08/28/vladimir_putin_goes_rogue_ukraine_nato_nuclear_weapons_and_a_very_dangerous_new_reality; a similar suggestion was repeated one month later by Russia's Deputy Prime Minister Dmitry Rogozin: "Deputy PM Rogozin: Russia to Fully Renew Strategic Nuclear Arsenal by 2020," Sputnik News, 22 September 2014, <http://sputniknews.com/military/20140922/193160754.html>.

¹⁶ "Deputy PM Rogozin ...," *Sputnik News*, *op. cit.*

¹⁷ A. Golts, "Russia Should Lay Off the Saber Rattling (Op-Ed)," *Moscow Times*, 22 June 2015, www.themoscowtimes.com/article.php?id=524156.

¹⁸ "U.S. 'Cannot Stop' Russian Nuclear Missiles—Deputy Prime Minister," *The Moscow Times*, 26 January 2015, www.themoscowtimes.com/article.php?id=514884.

¹⁹ "Putin says Russia beefing up nuclear arsenal, NATO denounces 'saber-rattling'," *Reuters*, 16 June 2015, www.reuters.com/article/2015/06/16/us-russia-nuclear-putin-idUSKBN0OW17X20150616.

²⁰ "Russian General Calls for Preemptive Nuclear Strike Doctrine against NATO," *The Moscow Times*, 3 September 2014, www.themoscowtimes.com/business/article/russian-general-calls-for-preemptive-nuclear-strike-doctrine-against-nato/506370.html.

²¹ N.N. Sokov, "Why Russia calls a limited nuclear strike 'de-escalation'," *Bulletin of the Atomic Scientist*, 13 March 2014, <http://thebulletin.org/why-russia-calls-limited-nuclear-strike-de-escalation>.

²² See also: R.N. McDermott, "Russia's Conventional Military Weakness and Substrategic Nuclear Policy," *The Foreign Military Studies Office*, July 2011, p. 12, <http://fmso.leavenworth.army.mil/Collaboration/international/>

The subtle nuclear messaging was accompanied by menacing and provocative statements by Russian officials and public figures. In May 2014, Rogozin, reacting to being barred from an overflight of Romanian territory, tweeted that the next time he “will fly on board” a Tu-160 strategic nuclear bomber.²³ In August 2014, the vice speaker of the Russian Duma, Vladimir Zhirinovskiy, threatened nuclear use against NATO member states, declaring that “the Baltic States and Poland are doomed,” and that they “will be wiped out” and “nothing will remain there.”²⁴ Earlier, in March 2014, another controversial figure, Rossiya 1 news channel television anchor Dmitry Kiselyov, vividly explained that Russia is the only country capable of turning the United States into “radioactive ashes.”²⁵ While all these figures are known for their controversial opinions, their pronouncements have added to the abundance of nuclear rhetoric originating from Moscow. According to Alexander Golts, a Russian commentator concerned about Russian “nuclear euphoria,” “even Soviet propagandists never allowed themselves to speak so flippantly about the prospect of nuclear war.”²⁶

Stepped up Bomber Diplomacy

Since the annexation of Crimea, Russia has unprecedentedly and aggressively increased the activities of its aviation forces by violating or closely approaching the airspace of NATO and EU members, creating a risk of serious incidents.²⁷ In 2014, NATO aircraft intercepted different types of Russian aircraft over 400 times, about four times as many as in 2013.²⁸ The purposes of Russia’s activities could be manifold, including testing and gathering information about the reaction times of NATO air defence systems. Many of these activities have, however, had an explicit or implicit nuclear dimension. This particularly applies to the stepped-up number of flights by Russia’s nuclear-capable bombers.

Russian nuclear-capable strategic bombers such as the Tu-95MS (Bear-H), the Tu-160 (Blackjack), and the intermediate-range Tu-22M3 (Backfire-C) can be assigned to strictly conventional missions. The 2014 Russian military doctrine introduced the notion of conventional deterrence, and air-launched cruise missiles delivered by bombers play an important role in it. Various types of missiles with conventional payloads provide Russia with additional deterrent and strike options short of the nuclear threshold.²⁹ It is nonetheless hard to delink the employment

McDermott/Russia-NuclearPolicy.pdf; P. Schulte, P.S. Hilde, K. Zysk, Ł. Kulesa, J. Durkalec, *The Warsaw Workshop: Prospects for Information Sharing and Confidence Building on Non-Strategic Nuclear Weapons in Europe*, Polish Institute of International Affairs, the Nuclear Policy Program of the Carnegie Endowment for International Peace, Norwegian Institute for Defence Studies, 2013, p. 11, www.pism.pl/files/?id_plik=13452.

²³ “Romania queries Moscow after deputy PM sends bomber jet tweets,” *Reuters*, 10 May 2014, www.reuters.com/article/2014/05/10/us-ukraine-crisis-romania-russia-idUSBREA4905X20140510.

²⁴ “Poland Asks Russia to Explain Politician’s Threat to ‘Wipe Out’ Baltics,” *The Moscow Times*, 13 August 2014, www.themoscowtimes.com/news/article/poland-asks-russia-to-explain-politician-s-threat-to-wipe-out-baltics/505058.html.

²⁵ “Russian TV host: Russia is the only country with capability to turn U.S. into ‘radioactive ashes,’” *The Washington Post*, 16 March 2014, www.washingtonpost.com/blogs/worldviews/wp/2014/03/16/russian-tv-host-russia-is-the-only-country-with-capability-to-turn-u-s-into-radioactive-ashes.

²⁶ A. Golts, “Russia’s Nuclear Euphoria Ignores Reality,” *The Moscow Times*, 6 October 2014, www.themoscowtimes.com/opinion/article/russia-s-nuclear-euphoria-ignores-reality/508499.html.

²⁷ T. Frear, Ł. Kulesa, I. Kearns, “Dangerous Brinkmanship: Close Military Encounters Between Russia and the West in 2014,” *Policy Brief*, European Leadership Network 2014, www.europeanleadershipnetwork.org/medialibrary/2014/11/05/3b2f357f/Dangerous%20Brinkmanship.pdf.

²⁸ “Press conference by the NATO Secretary General, Jens Stoltenberg, for the launch of the Annual Report 2014,” NATO HQ, Brussels, 30 January 2015, www.nato.int/cps/en/natohq/opinions_117022.htm.

²⁹ “Statement of Admiral William E. Gortney, United States Navy Commander, United States Northern Command and North American Aerospace Defense Command before the Senate Armed Services Committee,” 12 March 2015, p. 6, www.northcom.mil/Portals/28/Documents/Gortney_03-12-15_posture%20statement.pdf; “New Russian Military Doctrine Says NATO Top Threat,” *The New York Times*, 26 December 2014, www.nytimes.com/aponline/2014/12/26/world/europe/ap-eu-russia-military-doctrine.html.

of a nuclear-capable bomber from its nuclear delivery role, especially because it is difficult to determine with certainty whether a cruise missile carried by a bomber is conventional or nuclear tipped. Whatever their real mission in a specific operation, nuclear-capable bombers always convey a nuclear message.

The number of Russian heavy bomber aircraft patrols outside Russian airspace has increased since March 2014. According to the commander of the North American Aerospace Defence Command, Adm. William Gortney, Russia has made more patrols “than in any year since the Cold War.”³⁰ The exact number of bomber patrols has not been made public, including those closely approaching NATO member airspace and flights intercepted by NATO aircraft. Adm. Gortney stated that “the numbers have gone up, but I don’t like to give percentages, because one to five is 500 percent, and that may overstate it. But the numbers have gone up”³¹

The bomber flights were not new, though, as Russia restored regular long-range flights of strategic bombers in August 2007. What has changed is that the flights often went beyond the routine and were extremely provocative. They have been longer and their patterns differed from those in the past, even from those conducted by the Soviet Union.³² Their complexity has increased with greater numbers of heavy bombers flown within more diverse groups of aircraft.³³ Russia has been clearly building on lessons learnt from past activities and has qualitatively improved its performance, including “interoperability between Russian long-range aviation and other elements of the Russian military.”³⁴ Russia has seemed to make efforts to ensure that the messaging was not overlooked, including:

- the reported violation of Dutch airspace by a pair of Tu-95 bombers on 23 April 2014;³⁵
- the flight of four Bear strategic bombers just 50 miles off the California coast in June 2014—the closest strategic bomber flights near a U.S. coast since the end of the Cold War;³⁶
- the largest number of Russian bombers since the end of the Cold War making an incursion in a short period of time into the U.S. and Canada air defence zone—in August 2014, over

³⁰ “Statement of Admiral William E. Gortney ...,” *op. cit.*, p. 5.

³¹ “Department of Defense Press Briefing by Admiral Gortney, Commander of North American Aerospace Defense Command and U.S. Northern Command,” Pentagon, 7 April 2015, www.defense.gov/Transcripts/Transcript.aspx?TranscriptID=5612; Public reports about the number of Russian bomber flights are imprecise and confusing. According to one source, in 2014, there were at least 10 Russian bomber flights into the U.S. air defence identification zone—an area stretching between the 13.8 miles that international law defines as U.S. territory and 200 miles from the U.S. coast. Reportedly, the incursion number doubled the pre-crisis average of five a year. “Russian bomber flights buzzing U.S. airspace doubled last year,” *The Washington Times*, 7 June 2015, www.washingtontimes.com/news/2015/jun/7/russian-bomber-flights-buzzing-us-airspace-doubled/?page=all#pagebreak; However, according to a different source, before the Ukraine crisis Russian bombers had flown into the U.S. air defence zone about 10 times a year. “Russia flexes muscles with long-range bomber flights near U.S. shores,” CNN, 13 November 2014, <http://edition.cnn.com/2014/11/13/world/europe/russia-bombers-plan>; According to then-Canadian Defence Minister Peter MacKay, between 2007 and 2010 Canadian military aircraft intercepted between 12 and 18 Russian bombers annually: “Canadian fighter jets intercept Russian bombers in Arctic,” *CBC News*, 19 September 2014, www.cbc.ca/news/canada/canadian-fighter-jets-intercept-russian-bombers-in-arctic-1.2772440.

³² “Stenographic Transcript, Hearing to Receive Testimony on U.S. Northern Command and U.S. Southern Command in Review of the Defense Authorization Request for Fiscal Year 2016 and the Future Years Defense Program,” Senate Armed Services Committee, p. 64, www.armed-services.senate.gov/imo/media/doc/15-25%20-%203-12-15.pdf.

³³ “Norway to restructure military in response to Russian ‘aggression,’” *The Guardian*, 25 February 2015, www.theguardian.com/world/2015/feb/25/norway-to-restructure-military-in-response-to-russian-aggression. Usually, Russia’s bomber patrols include two to four planes. In the past, Russia has only sometimes used 6–8 planes. “Japan and South Korea monitor Russian patrolling mission,” *Itar-Tass*, 9 February 2012, <http://tass.ru/en/archive/669508>.

³⁴ “Statement of Admiral William E. Gortney ...,” *op. cit.*, p. 5.

³⁵ “Nice air-to-air image of Russian Tu-95 Bear bomber intercepted off UK by RAF Typhoon,” *The Aviationist*, 25 April 2014, <http://theaviationist.com/2014/04/25/raf-releases-photo-bear>.

³⁶ B. Gertz, “Russian Bombers Fly within 50 Miles of California Coast,” *The Washington Free Beacon*, 11 June 2014, <http://freebeacon.com/national-security/russian-bombers-fly-within-50-miles-of-california-coast>.

- a 10-day period, at least 16 Russian bomber flights were tracked and intercepted in the U.S. and Canadian air defence zone;³⁷
- the simulation of cruise missile attacks against the United States by two Russian Tu-95 bombers in September 2014;³⁸
 - the participation of Russian bombers in unusual large-scale manoeuvres: six Tu-95 strategic bombers were among a dozen aircraft intercepted over the Baltic Sea, the North Sea, the Atlantic Ocean and the Black Sea on 28 and 29 October 2014;³⁹
 - the testing of larger and more complex formations of bomber aircraft: for example, on 7 December 2014, NATO fighter jets conducting Baltic Air Policing intercepted six nuclear capable bombers—four Tu-95s and two Tu-22s;⁴⁰
 - the conduct of what may be full-combat-mission-package bomber flights: in September 2014, two Tu-95s flew only 55 nautical miles from the Alaskan coast, escorted by two MiG-31 Foxhound long-range fighters and two Il-78 air refuelling tankers;⁴¹
 - the first-ever flight of Russian Tu-22 bombers over the Baltic Sea at supersonic speeds in March 2015.⁴² The Tu-22s were seen over the Baltic Sea for the first time in years.⁴³
 - an unarmed but actual warhead carried by a bomber that deviated from a standard patrol route: one of a pair of Tu-95 bombers that were intercepted in January 2015 next to UK airspace was reportedly carrying unarmed nuclear warhead on an air-launched cruise missile. The bombers took an unusual route and were accompanied by two Il-78 tankers and two MiG-31 fighter jets.⁴⁴

Russia’s bomber diplomacy has gone beyond the Euro-Atlantic region. Moscow has stepped up its air activities in the Asia-Pacific region as well. This was reflected by two circumnavigations of the U.S. Pacific Island of Guam and flights around Japan and South Korea.⁴⁵ Russia has also increased several-fold the intensity of air force flights in the Arctic.⁴⁶ Also, on 12 November 2014, Russian Defence Minister Sergei Shoigu announced that Russia will conduct bomber patrols, not

³⁷ B. Gertz, “Russian Nuclear Bombers Buzz Alaska, N. Europe,” *The Washington Free Beacon*, 19 September 2014, <http://freebeacon.com/national-security/russian-nuclear-bombers-buzz-northern-europe>.

³⁸ Reportedly, the bombers practiced runs to a pre-determined “launch box”—an optimum point for firing nuclear-armed cruise missiles at U.S. targets: B. Gertz, “Russian Strategic Bombers Near Canada Practice Cruise Missile Strikes on US,” *The Washington Free Beacon*, 8 September 2014, <http://freebeacon.com/national-security/russian-strategic-bombers-near-canada-practice-cruise-missile-strikes-on-us>.

³⁹ “NATO Tracks Large-Scale Russian Air Activity in Europe,” NATO, 29 October 2014, <http://aco.nato.int/nato-tracks-largescale-russian-air-activity-in-europe.aspx>.

⁴⁰ “NATO Intercepts Russian Bombers Over Baltic Sea,” *Defense News*, 9 December 2014, www.defensenews.com/article/20141209/DEFREG01/312090038.

⁴¹ “US & Russia Re-Arming for a New Cold War,” *The Daily Beast*, 30 September 2014, www.thedailybeast.com/articles/2014/09/30/us-russia-re-arming-for-a-new-cold-war.html.

⁴² “Russian Tu-22 bomber scares NATO air defenses flying at supersonic speed over the Baltic Sea for the first time,” *The Aviationist*, 24 March 2015, <http://theaviationist.com/2015/03/24/tu-22-supersonic-over-baltic>.

⁴³ “Swedish jets track 4 Russian planes over Baltic Sea,” *Russia Today*, 24 March 2015, <http://rt.com/news/243629-sweden-russia-planes-interception>.

⁴⁴ “Intercepted Russian bomber was carrying a nuclear missile over the Channel,” *Sunday Express*, 1 February 2015, www.express.co.uk/news/uk/555454/Intercepted-Russian-bomber-was-carrying-a-nuclear-missile-over-the-Channel.

⁴⁵ “U.S.: Russian planes flew near California, Guam, in upped activity,” *Reuters*, 6 May 2014, www.reuters.com/article/2014/05/06/us-usa-russia-asiapac-idUSBREA4501M20140506; “Japan orders interceptors up in air as Russian bombers fly around,” *Itar-Tass*, 15 July 2014, <http://en.itar-tass.com/world/697170>; B. Gertz, “Russian Bombers Threaten Guam,” *The Washington Free Beacon*, 19 November 2014, <http://freebeacon.com/national-security/russian-bombers-threaten-guam>.

⁴⁶ “Russian strategic bombers carry out patrol over Arctic,” *Itar-Tass*, 14 March 2014, <http://en.itar-tass.com/russia/723501>; “Several Russian Tu-95MS bombers fly over Arctic,” *Itar-Tass*, 30 July 2014, <http://en.itar-tass.com/russia/742906>.

only along Russia's borders, over the Arctic Ocean, in the western Atlantic and eastern Pacific but also in the Caribbean and in the Gulf of Mexico.⁴⁷

Two crashes of Tu-95 bombers, the first one on 8 June and the second on 14 July 2015, which were among a series of crashes of Russian aircraft over a period of a month-and-a-half, suggest that with highly intensive activities accompanying the Ukraine crisis Russia has overstretched its Soviet-built bomber fleet. According to Paul Schwartz, an expert on the Russian military, there is "clearly a linkage between the increased tempo of military operations undertaken over the last year and a half and the increased spate of accidents for military aircraft."⁴⁸ The accidents only further corroborate the unusual character of Russia's bomber activities during the period of the Ukraine crisis. They demonstrate that Russia's signalling needs prevailed over the actual readiness of its bomber aircraft to conduct intensified operations.

In addition to long-range bombers, Russia possesses nuclear-capable tactical aircraft, including the Su-24M (Fencer-D) and Su-34 (Fullback).⁴⁹ Conveying a nuclear message with tactical aircraft is more demanding than with strategic bombers. The primary role of tactical aircraft is conventional, and nuclear signalling requires some hint that the fighter-bombers involved are specifically on a nuclear mission (for example, a flight with a real warhead or a nuclear-capable missile or gravity bomb, or exercises of procedures for taking nuclear-armed missiles or bombs from nuclear storage sites and mounting them on aircraft). From available reports it is difficult to determine whether Russia has used nuclear-capable tactical aircraft to convey a nuclear message.⁵⁰

Nuclear signals can also be sent by naval forces, including submarines, even though their main task is to cruise undetected. There is increasingly strong evidence that Russia routinely sends submarines armed with nuclear sea-launched cruise missiles on patrols near the Atlantic seaboard of the United States.⁵¹ Also, according to a Russian official, between January 2014 and March 2015, in the Pacific Ocean the deployment for operational duty of ballistic missile submarines

⁴⁷ "Russia flexes muscles with long-range bomber flights near U.S. shores," *CNN*, 13 November 2014, <http://edition.cnn.com/2014/11/13/world/europe/russia-bombers-plan>; "Russia has never flown bomber patrols over Gulf of Mexico before, US official claims," *Fox News*, 13 November 2014, www.foxnews.com/world/2014/11/13/russian-defense-ministry-says-bomber-patrols-will-reach-gulf-mexico.

⁴⁸ "Op Tempo, Sustainment Flaws Hit Russian Air Force," *Defense News*, 12 July 2015, www.defensenews.com/story/defense/air-space/2015/07/12/russian-fleets-crashing-ukraine-nato-fighter-bomber/29962399; see also: "Russian 'Bear' bombers set to be grounded again following Far East crash," *IHS Jane's Defence Weekly*, 13 July 2015, www.janes.com/article/52962/russian-bear-bombers-set-to-be-grounded-again-following-far-east-crash; "Two Pilots Killed In Russian Tu-95 Bomber Crash," *Defense News*, 14 July 2015, www.defensenews.com/story/defense/2015/07/14/russia-tu-95-crash/30130517; D. Sharkov, "'Overstretched' Russian air force suffers three crashes in five days," *Newsweek*, 9 June 2015, <http://europe.newsweek.com/overstretched-russian-air-force-suffers-three-jet-crashes-five-days-328470>.

⁴⁹ There are different estimates whether there are other types of dual-capable fighter-bombers and whether Russia's tactical fleet can deliver only nuclear gravity bombs or also nuclear variants of air-to-surface cruise missiles. For more, see: I. Sutyagin, *Atomic Accounting: A New Estimate of Russia's Non-Strategic Nuclear Forces*, RUSI Occasional Paper, November 2012, pp. 27–35, https://www.rusi.org/downloads/assets/1211_OP_Atomic_Accounting_Web_updated.pdf; H.M. Kristensen, R.S. Norris, "Russian nuclear forces 2014," *Bulletin of the Atomic Scientists*, vol. 70, iss. 2, p. 82, <http://bos.sagepub.com/content/70/2/75.full.pdf+html>.

⁵⁰ For example, in April 2014, the U.S. guided missile destroyer *USS Donald Cook* (DDG-75), and then in September 2014, the Canadian Navy frigate *HMCS Toronto* (FFH-333) were overflown by Russian Su-24 Fencers. There have been, however, no reports claiming that their actions were nuclear-related: "NATO Ship in Black Sea Buzzed By Russian Planes, Russia Disputes Account," *USNI News*, 9 September 2014, <http://news.usni.org/2014/09/09/nato-ship-black-sea-buzzed-russian-planes-russia-disputes-account>; also, two Su-24s violated Swedish airspace in September 2014 in what was described by then-Swedish Foreign Minister Carl Bildt as "the most serious aerial incursion by the Russians during my years as foreign minister" (see: "Sweden protests over Russian plane incursions," *The Local*, 19 September 2014, www.thelocal.se/20140919/russian-flights-condemned-by-social-democrats).

⁵¹ J. Lewis, "Led Zeppelin Comes to Washington," *Foreign Policy*, 5 January 2015, <http://foreignpolicy.com/2015/01/05/led-zeppelin-comes-to-washington-russia-nukes-putin-arms-control>.

and multipurpose nuclear submarines has increased by almost 50% compared to 2013.⁵² Russian submarine activities around Europe have also been worrisome, although there is no public information about their nuclear dimension.⁵³

Massive Nuclear-Exchange Drills

Since March 2014 Russia has conducted an unprecedented number of nuclear-related exercises, including surprise drills of an exceptional scale. They included delivery systems of strategic and non-strategic nuclear weapons.

Three-day massive snap exercises of strategic forces in late March 2014 involved roughly 10,000 military personnel and 1,000 pieces of equipment from more than 30 units.⁵⁴ The command-and-control exercises in May 2014 involved launches of Topol/SS-25 ICBMs, two R-29RM Sineva sea-launched ballistic missiles (SLBMs), and the salvo firing of six air-launched cruise missiles (ALCMs). The exercises were overseen by President Putin, who was accompanied by the presidents of Armenia, Belarus, Kyrgyzstan, and Tajikistan.⁵⁵ The major exercises in September 2014 involved strategic rocket forces, 4,000 military personnel, around 400 technical units, *spetsnaz* units, and extensive use of air power.⁵⁶ The exercises testing the readiness of Strategic Missile Troops in January 2015 encompassed more than 1,200 servicemen and cooperation with the Emergencies Ministry, the Interior Ministry and the Federal Security Service.⁵⁷ The surprise massive exercises conducted in February 2015 took place in 12 regions of Russia and involved more than 30 missile regiments of Russia’s Strategic Rocket Forces.⁵⁸

The scenarios for the large-scale exercises included the simulation of nuclear strikes. Russia’s strategic forces trained on readiness to conduct massive and simultaneous use of nuclear missiles, including launch-on-warning missile strikes, countering a nuclear attack by missile defence systems,⁵⁹ manoeuvring in actual combat, and conducting combat missions in conditions of active radio-electronic jamming and enemy sabotage in areas of deployment of Russian nuclear forces.

In addition, some of Russia’s exercises conducted during the Ukraine crisis included coordinated operations of different types of nuclear-capable systems in conjunction with conventional capabilities. There is no publicly available evidence that nuclear-capable systems have been used in the practice nuclear-related scenarios. Nonetheless, in the past, Russia conducted exercises that suggested a close integration between conventional and nuclear

⁵² “More Russian nuclear submarines deployed in the Pacific,” *Russia and India Report*, 2 April 2015, http://in.rbth.com/economics/2015/04/02/more_russian_nuclear_submarines_deployed_in_the_pacific_42335.html.

⁵³ “Russia a threat to Baltic states after Ukraine conflict, warns Michael Fallon,” *The Guardian*, 18 February 2015, www.theguardian.com/politics/2015/feb/19/russia-a-threat-to-baltic-states-after-ukraine-conflict-warns-michael-fallon.

⁵⁴ “Russia’s Military Begins Massive Nuclear War Drill,” *The Diplomat*, 29 March 2014, <http://thediplomat.com/2014/03/russias-military-begins-massive-nuclear-war-drill>.

⁵⁵ “Multiple missile launches during a command and control exercise,” *Russian strategic nuclear forces blog*, 8 May 2014, http://russianforces.org/blog/2014/05/multiple_missile_launches_duri.shtml; B. Gertz, “Russia Conducts Large-Scale Nuclear Attack Exercise,” *The Washington Free Beacon*, 8 May 2014, <http://freebeacon.com/national-security/russia-conducts-large-scale-nuclear-attack-exercise>.

⁵⁶ “Russia’s strategic nuclear forces to hold major exercise this month,” *Reuters*, 3 September 2014, <http://uk.reuters.com/article/2014/09/03/uk-ukraine-crisis-russia-exercises-idUKKBN0GY0H620140903>.

⁵⁷ “Russia’s Strategic Missile Troops begin this year’s first snap check,” *Itar-Tass*, 20 January 2015, <http://itar-tass.com/en/russia/772070>.

⁵⁸ “Russian Strategic Missile Forces conduct exercises in 12 regions,” *Itar-Tass*, 12 February 2015, <http://tass.ru/en/russia/777221>.

⁵⁹ See also: “Russian Aerospace Defense Forces hold anti-nuclear military exercise,” *Itar-Tass*, 19 September 2014, <http://en.itar-tass.com/russia/750368>.

missions. For example, large-scale conventional scenarios such as those in the *Zapad 2009* and *Zapad 2013* exercises reportedly involved a simulated use of nuclear weapons.⁶⁰ Exercises with nuclear-capable systems, especially in proximity to NATO's neighbourhood, may be designed to create an impression that Russia's non-strategic nuclear weapons are on a high-readiness status (warheads can be relatively quickly loaded on delivery vehicles) and that their threshold for use is lower than represented in its publicly-available 2014 military doctrine.

The live fire drills of missile formations of the Western Military District and the Long-range Russian Aviation Command that took place in late May and early June 2014 involved coordinated strikes of nuclear-capable Iskander-M ballistic missiles and air-launched cruise missiles.⁶¹ The exercises of the Baltic Fleet, airborne troops and air force units that took place later in June involved Tu-22 Backfire bombers.⁶² In July 2014, TU-95 "Bear" strategic bombers, alongside other air, land and naval strike forces, practiced attacks on a target on the water in the Black Sea.⁶³ The large snap drills that took place from 5 to 10 December 2014 in Kaliningrad encompassed 9,000 servicemen, 642 military vehicles, including 250 tanks and APCs, over 100 artillery units, 55 warships and also the Iskander ballistic missile systems, all of which were rapidly transferred from Russia's mainland.⁶⁴ Russia also reportedly deployed Iskander ballistic missiles to Kaliningrad as part of large-scale-warfare snap drills of the Northern Fleet, the Western Military District and airborne formations in March 2015 involving 80,000 troops, 41 warships, 15 submarines and 220 aircraft. As part of these exercises, Tu-22, Tu-95 and Tu-160 bombers performed flights in the Arctic region. During the snap inspection, Russia also reportedly deployed Tu-22 intermediate bombers to Crimea.⁶⁵

In addition, Russia has conducted a number of test launches of ICBMs and SLBMs. As such, the launches seemed to be ordinary in nature. They were aimed at combat training, experimental work and development launches, or pre-serial-production tests.⁶⁶ Sometimes, however, they raised attention. In late October and early November 2014, Russia seemed to test its entire nuclear triad by launching a Topol-M ICBM and Bulava and Sineva SLBMs and by conducting large-scale

⁶⁰ "Insight—Russia's nuclear strategy raises concerns in NATO," *Reuters*, 4 February 2015, <http://uk.reuters.com/article/2015/02/04/uk-ukraine-crisis-russia-nuclear-insight-idUKKBN0L825A20150204>; A similar observation about *Zapad 2013* was made by an official from a NATO member state at a PISM seminar in Warsaw in December 2014.

⁶¹ "Russia to test-launch Iskander-M missiles, missiles from bombers—defense ministry," *Itar-Tass*, 2 June 2014, <http://en.itar-tass.com/russia/734298>.

⁶² "Russia starts military drills in Kaliningrad Region simultaneously with NATO's maneuvers," *Itar-Tass*, 10 June 2014, <http://en.itar-tass.com/russia/735536>.

⁶³ M. Bugriy, "Nuclear Deterrence in the Context of the Ukrainian–Russian Conflict," *Eurasia Daily Monitor*, vol. 11, iss. 135, 24 July 2014, [www.jamestown.org/programs/edm/single/?tx_ttnews\[tt_news\]=42664&cHash=cbaae99ec2540bfa457e52ce48a1c624#.VHtSfcm-3Kc](http://www.jamestown.org/programs/edm/single/?tx_ttnews[tt_news]=42664&cHash=cbaae99ec2540bfa457e52ce48a1c624#.VHtSfcm-3Kc).

⁶⁴ "Putin Orders Snap Military Drills on NATO Border," *Newsweek*, 16 December 2014, www.newsweek.com/putin-orders-snap-military-drills-russian-troops-nato-border-292308; "Russian military completes rapid-deployment drills in Kaliningrad," *Russia Today*, 17 December 2014, <http://rt.com/news/214667-russia-drills-kaliningrad-region>.

⁶⁵ "Russian Defence Minister General of the Army Sergei Shoigu held debriefing concerning the surprise combat readiness inspection," Ministry of Defence of the Russian Federation, 18 March 2015, http://eng.mil.ru/en/news_page/country/more.htm?id=12010701@egNews; "Crews of strategic bombers carry out flights in the Arctic Region imitating activities of imaginary enemy," Ministry of Defence of the Russian Federation, 19 March 2015, http://eng.mil.ru/en/news_page/country/more.htm?id=12010807@egNews; "Number of servicemen involved in surprise inspection increased to 80 thousand," Ministry of Defence of the Russian Federation, 19 March 2015, http://eng.mil.ru/en/news_page/country/more.htm?id=12010900@egNews; "Russia Puts Military in Baltics, South on Full Alert in Drills," *Bloomberg*, 17 March 2015, www.bloomberg.com/news/articles/2015-03-17/russia-puts-military-in-baltics-south-on-full-alert-in-drills.

⁶⁶ For more, see: "Strategic Rocket Forces launch plans in 2014 and 2015," *Russian strategic nuclear forces blog*, 17 December 2014, http://russianforces.org/blog/2014/12/strategic_rocket_forces_launch_1.shtml.

manoeuvres of strategic bombers.⁶⁷ Russia’s public diplomacy efforts have been aligned skilfully enough to make tests that likely were previously scheduled seem timed to send strong signals.

A Hybrid War Context

Taking into account the above examples, it is reasonable to infer that during the ongoing conflict in Ukraine, Russia has been sending deliberate nuclear signals. Furthermore, the nuclear messaging seems to play an integral role in Russia’s approach to warfare during the Ukraine crisis.

First and foremost, the context matters. Russia’s nuclear-related activities have been taking place against the backdrop of its aggression against Ukraine. During the crisis, even routine military behaviour translates into a signal, and Russia has gone beyond its standard routine. Its nuclear-related actions during the Ukraine crisis have been unprecedented in frequency, scale and complexity, and provocative in nature. The number alone of nuclear-related activities and statements that have originated from Moscow has been itself disturbing.

The specific timing also has been important. Speeches, exercises and bomber flights have often coincided with critical periods of the ongoing crisis and decisive moments aimed at responding to Russia’s aggressive behaviour. Examples of this include during its annexation of Crimea in March 2014, the further escalation of the crisis in August 2014 with the incursion of Russian troops into eastern Ukraine, the NATO Wales Summit, the visit of the Ukrainian president to Canada and the United States in September 2014, and the European Council meeting in March 2015 when EU leaders were discussing the future of sanctions against Russia.

Whether the accumulation of Russia’s nuclear signals during the Ukraine crisis differs from those issued by the Soviet Union in crisis situations is worth further research. According to Richard Betts’ 1987 book, the Soviet Union was reserved in nuclear sabre-rattling during Cold War crises. Its nuclear threats were less frequent than U.S. deterrent signals, were restricted to rhetorical allusions, and often were seen as bluster because they were issued after the peak of the crises had passed. Most of them were also directed against U.S. allies rather than Washington itself.⁶⁸ The exception to this, of course, is nuclear testing, which was used frequently by both sides to send strong messages of displeasure or to reciprocate for tests by the other side.⁶⁹

What makes nuclear sabre-rattling a perfect instrument in the age of “little green men” is that its deliberate psychological use can be denied, even though its effects show otherwise. Similar to hybrid-warfare tools, the use of nuclear messaging at the same time leaves Russia room for more or less plausible deniability. Such use of nuclear threats is neither new nor is it Russia’s invention. In fact, even during the Cold War nuclear threats were usually hesitant and elliptical so they could be seen as murky or muted as trivial. Nuclear signalling has constituted “a tentative sort of blackmail, something halfway between stark blackmail and shifty bluff.”⁷⁰ Nuclear signals have tended to be vague and deniable as “for diplomatic coercion in a delicate situation, ambiguity may be preferable to clarity” and because “in the dim light of crisis manoeuvring, shadows can be as frightening and cautionary as the things that cast them.”⁷¹

⁶⁷ “Russia exercises its strategic nuclear ‘triad,’” *IHS Jane’s Defence Weekly*, 9 November 2014, www.janes.com/article/45524/russia-exercises-its-strategic-nuclear-triad; “Russia plays nuclear war-games in Barents Region,” *Barents Observer*, 1 November 2014, <http://barentsobserver.com/en/security/2014/11/russia-plays-nuclear-war-games-barents-region-01-11>.

⁶⁸ R.K. Betts, *op. cit.*, pp. 6–7, 17.

⁶⁹ During the Cold War there was a strong correlation between U.S. and Soviet tests. See: “1945–1998” by Isao Hashimoto, www.ctbto.org/specials/1945-1998-by-isao-hashimoto.

⁷⁰ R.K. Betts, *op. cit.*, p. 8.

⁷¹ *Ibidem*, p. 30.

Russia's nuclear muscle flexing has not been meaningless and is not easy to dismiss. However, it may be argued that it has been unrelated to the events in Ukraine. What one might perceive as a worrying pattern could be rationalised as an unintended effect of a process of reinvigorating the capabilities of Russia's nuclear forces, which was underway long before the Ukraine crisis began. The significance of Russia's nuclear activities also can be downplayed. The massive snap drills can be described as a necessity because to effectively perform a deterrence mission at least some nuclear and conventional forces have to be at the highest readiness status.⁷² According to Russian officials, strategic bomber exercises are not "threatening, destabilizing or disruptive" because they are "carried out in strict compliance with international legal norms" without violations of airspace.⁷³ Provocative and menacing statements by Russian politicians about nuclear weapons can be treated as a bluff that would never be turned into real contingencies. Finally, any reports about Russia's implicit threats can be denounced as "a classic example of the continuing hysteria and the demonization" of Russia.⁷⁴

Nuclear signalling does not necessarily reflect the actual thinking of Russia's leaders about their willingness to employ nuclear weapons. In the end, Russia's leaders seem rational; and it would be extremely risky for them to assume that after nuclear use there would not be NATO retaliation—especially as it would directly challenge the United States.⁷⁵ Also, as one Russian expert has argued "a world in which Russia had delivered a first 'limited' nuclear strike against a NATO member and the Alliance had decided not to reciprocate could hardly be seen as one in which Russia could enjoy the benefits of its 'victory'."⁷⁶

Russia seems to rather employ in practice Thomas Schelling's concept of "competition in risk taking" aimed at achieving political goals "not so much by tests of force as by tests of nerve." In this form of competition "issues are decided not by who can bring the most force to bear in a locality, or on particular issue, but by who is eventually willing to bring more force to bear or able to make it appear that more is forthcoming."⁷⁷ With its actions, Russia seems to suggest that if seriously challenged by NATO it may have no other choice than to escalate to a nuclear level or that it may "inadvertently go over the brink" by accident or miscalculation.⁷⁸ Russia issues nuclear threats because it assumes that it would not have to turn them into real actions. It seems to serve Russia's approach to conflict, geared towards achieving strategic aims without war. In this case, Russia's comparative advantage is its unpredictability, as a factor of deception and a desire to introduce or enhance instability in the international system as a revisionist power.

⁷² According to Russia's Deputy Minister of Defence Anatoly Antonov, "[t]he inspections proved to be a necessary and effective means for increasing the combat readiness of the Armed Forces. It is important that the Army and the Navy got accustomed to such inspections which will be repeated in the future ... This is neither a clatter of tracks, nor sabre-rattling, nor a show of muscles;" "Russia informed European countries about the surprise inspection held in the Armed Forces," Ministry of Defence of the Russian Federation, 19 March 2015, http://eng.mil.ru/en/news_page/country/more.htm?id=12010919@egNews.

⁷³ "Foreign Office claims Russian bombers pose threat to civilian flights, no details given," *Russia Today*, 30 January 2015, <http://rt.com/uk/227831-russian-ambassador-jets-uk>; "Alexander Yakovenko, Russian Ambassador to the United Kingdom of Great Britain and Northern Ireland, NATO–Russia jet scrambling hysteria: Who is the real threat?," *Russia Today*, 20 February 2015, <http://rt.com/op-edge/234231-nato-russia-uk-planes>.

⁷⁴ "Putin spokesman slams *Times* 'demonizing' Russia over perceived nuclear threat," *Russia Today*, 2 April 2015, <http://rt.com/news/246213-russia-demonization-west-putin>.

⁷⁵ Ł. Kulesa, "Putin's nuclear bluff," in: *Forum: NATO and Russia—Survival*, vol. 57, no. 2, April/May 2015, p. 126.

⁷⁶ M. Troitskiy, "Nuclear escalation and the 'Russian world'," in *Forum: NATO and Russia—Survival*, vol. 57, no. 2, April/May 2015, p. 137.

⁷⁷ T.C. Schelling, *Arms and Influence*, New Haven and London, Yale University Press, 1967, p. 94. The argument about employment by Russia of Schelling's concept was made by Dave Johnson, see: D. Johnson, "Russia's Approach to Conflict—Implications for NATO's Deterrence and Defence," *op. cit.*, p. 11.

⁷⁸ T.C. Schelling, *Arms and Influence*, *op. cit.*, p. 99.

There are several reasons why Russia might have found it useful now to flex its nuclear muscles.

With its nuclear posturing Russia most likely has intended to send a message to NATO member states. An implicit but unlimited threat of nuclear escalation has been used to minimise even the very remote possibility that NATO members would think of direct engagement in Ukraine. Such “just-in-case nuclear sabre-rattling” could be a result of Russia’s perception of a general conventional inferiority vis-à-vis NATO and therefore an embrace of a relative advantage in asymmetric competition. In relation to the Alliance, Russia has a conventional-weapons and a time-to-attack advantage in Central and Eastern Europe. Still, it would not be able to withstand a NATO, especially a U.S.-led conventional counterattack. Russia’s aggression against Ukraine has demonstrated that Russia has some highly capable elite conventional units. It also has potent nuclear forces. At the same time, Russia seems to be still “ashamed of what is in the middle.”⁷⁹ That is, despite considerable improvements so far, Russia still seems to lack confidence in the vast majority of its conventional forces, which consistently fall short in exercises.⁸⁰ The Ukraine crisis absorbed much of Russia’s conventional capability quite quickly, and has required pauses to rotate out and rest its elite units. According to Pavel Baev, an expert on Russian military reform, the perception of a general conventional imbalance in Europe is likely to make it “imperative for Russia to try to harvest some political dividends from the massive investment in its nuclear forces. Putin just cannot afford not to play on this source of strength because he has no other.”⁸¹

It is also possible that Russia’s nuclear signalling has been aimed at strengthening its psychological position vis-à-vis the West during the crisis. It might be designed to demonstrate to Western leaders just how high Russia sees the stakes in Ukraine, and Russia’s resolve to finish the crisis on its own terms. Moscow also might seek to decrease the costs of its aggressive actions, which could result from harsher and stricter economic sanctions imposed by the West, or provision by the West of lethal military equipment to Ukraine. Russia might attempt to convince Western countries that such actions would lead to a long-term worsening of relations with Russia and that it is not in their interest because their security would suffer, the adaptation to long-term changes in the security landscape in Europe would be too costly, and it would involve a return to a Cold War-style nuclear standoff in Europe. Russia might assume that by nuclear messaging it can create discord within NATO and weaken Western consensus on how to respond to Russia’s aggressive acts. In this context, the Kremlin might also attempt to nullify NATO’s reassurance measures to Central and Eastern European NATO members—countries that have felt threatened by Russia’s aggression against Ukraine. Reportedly, former Russian officials have warned that if NATO moved more forces to the Baltic States it would spark a “spectrum of responses from nuclear to non-military.”⁸²

Furthermore, claims about the right to deploy nuclear-related elements to Crimea have been used by Russia as a psychological tool to secure its gains. They have been meant to highlight Russia’s view that Crimea has become part of Russian territory and that any attempts to bring it back to Ukraine would lead to nuclear escalation. The basing of actual nuclear warheads in Crimea would have profound political significance as an ultimate marking of Russia’s new territory.

⁷⁹ This is a quote by an official from a NATO member state at a PISM seminar in Warsaw in December 2014.

⁸⁰ For example, see: R. McDermott, “Russia Reinforces Crimea as Military Conceals Underlying Conventional Weakness,” *Eurasia Daily Monitor*, vol. 12, iss. 59, 31 March 2015, [www.jamestown.org/single/?tx_ttnews\[tt_news\]=43723&no_cache=1#.VW_UMEY7Xh4](http://www.jamestown.org/single/?tx_ttnews[tt_news]=43723&no_cache=1#.VW_UMEY7Xh4).

⁸¹ P.K. Baev, “Apocalypse a bit later: The meaning of Putin’s nuclear threats,” Brookings Institution, 1 April 2015, www.brookings.edu/blogs/order-from-chaos/posts/2015/04/01-putin-nuclear-threats-meaning.

⁸² “Putin threat of nuclear showdown over Baltics,” *The Times*, 2 April 2015, www.thetimes.co.uk/tto/news/world/europe/article4399758.ece; M. Laurinavičius, “Russia’s nuclear blackmail and new threats of covert diplomacy,” *Delfi* (by *The Lithuania Tribune*), 9 April 2015, <http://en.delfi.lt/opinion/opinion-russias-nuclear-blackmail-and-new-threats-of-covert-diplomacy.d?id=67654958>.

Last but not least, both Russia's conventional and nuclear posturing might have been intended to distract NATO members' attention from covert Russian activities elsewhere, in particular in eastern Ukraine. It also might be aimed at domestic audiences to create a perception of Russia's strength, divert attention from economic and social problems by highlighting the alleged threat posed by NATO, strengthening the support of defence-sector workers, who are seen as an important constituency, or a combination of all of these.⁸³

While Russia's nuclear sabre-rattling has had an influence on the Ukraine crisis by defining its limits, it is hard to assess with certainty the real impact.

If Russia's main goal was to prevent direct NATO intervention, Russia's nuclear signals seem superfluous. NATO members had no discernible will or even the ability to do what Russia's nuclear signals aimed to prevent. The fact that NATO did not directly engage in the conflict by sending troops was mainly a result of the absence of Article 5 guarantees to Ukraine and NATO's unwillingness to risk or fight any kind of war with Russia over Ukraine. However, even though Russia's signals did not have an impact on NATO decision-making, they could have provided Russia's leaders with enough self-confidence to undertake aggressive actions against Ukraine.

If Russia's main nuclear messaging goal was to limit negative outcomes of aggressive actions against Ukraine, the signals alone do not seem determinative in forcing a change in some NATO members' actions and decisions. For example, the debate over whether to provide Ukraine with lethal armaments has been mainly driven by differing judgments as to whether doing so would lead to a de-escalation of the conflict by raising the costs to Russia or whether it would give Russia a pretext for further escalation.⁸⁴

Despite Russia's nuclear threats NATO members have undertaken substantial conventional reinforcements of Central and Eastern European countries. In this respect, Russia's nuclear sabre-rattling seems counterproductive as it has strengthened Alliance solidarity. The unwillingness of some NATO members to renounce the Alliance's unilateral pledge not to engage in "additional permanent stationing of substantial combat forces"⁸⁵ resulted from broader political and practical considerations rather than fear of Russia's nuclear-related reactions.

No matter its real impact, Moscow's conduct shows that the use of nuclear messaging as a tool of influencing other countries' decisions is not an exceptional event but part of a regular pattern of behaviour. Reportedly, "the Russians did go to a nuclear alert in 2008 over Georgia when a U.S. cruiser went into the Black Sea."⁸⁶ Furthermore, Russia has consistently used nuclear messaging as a way to demonstrate its displeasure with the development of U.S. and NATO missile defence in Europe. It has repeatedly threatened to deploy nuclear-capable missiles in Kaliningrad Oblast, just next to the Polish and Lithuanian border. On 30 October 2013, two days after the official commencement of construction of a missile defence site in Romania, Russia conducted a surprise large-scale readiness test of its missile forces, including the launches of four

⁸³ R. Sokolsky, P. Stronski, "Don't Overreact to Russia and Its Forty 'New' Intercontinental Ballistic Missiles," Carnegie Moscow Centre, 18 June 2015, <http://carnegie.ru/eurasiaoutlook/?fa=60446>.

⁸⁴ For a different view on the impact of Russia's nuclear sabre-rattling on NATO behaviour, see: A. Applebaum, "An Old Threat Made New: Why Nuclear Weapons Suddenly Matter More than Ever," *Slate*, 2 April 2015, www.slate.com/articles/news_and_politics/foreigners/2015/04/nuclear_weapons_suddenly_matter_more_than_ever_how_these_weapons_of_mass.html?wpsrc=sh_all_dt_tw_top.

⁸⁵ "Press Release (97)27," NATO, 14 March 1997, www.nato.int/DOCU/pr/1997/p97-027e.htm.

⁸⁶ Presumably, the nuclear alert resulted from Russia's worries that the U.S. ship was armed with nuclear-tipped cruise missiles. However, the missiles were retired in 1992: "Transcript of Air Force Association, National Defense Industrial Association and Reserve Officers Association Capitol Hill Forum with Frank Miller, Principal at the Scowcroft Group, on 'Does a Modern Deterrent Matter? The Case of Ballistic Missile Defense and Nuclear Forces,'" 22 May 2015, p. 11, <http://higherlogicdownload.s3.amazonaws.com/AFA/6379b747-7730-4f82-9b45-a1c80d6c8fdb/UploadedImages/Events/Heussy/052215afamillerfinal.pdf>.

intercontinental and four short-range ballistic missiles. In March 2015, Russia threatened Denmark that it would become a nuclear target if it provided national assets to NATO missile defence.⁸⁷

The Ukraine crisis also demonstrates that Russian nuclear weapons do not have only a traditional deterrent role in preventing war. Russia’s nuclear signalling during the Ukraine crisis is consistent with a definition of coercive diplomacy, understood as “the use of coercion (including exploitation of the danger of escalation to nuclear war) to bring about change in the status quo, to compel changes in the policies of an adversary, or to support other foreign policy objectives.”⁸⁸ During the Ukraine crisis, Russia’s nuclear signalling has been used as a tool supporting a change in the status quo, consistent with Russia’s general foreign policy orientation as a revisionist power. It has provided Russia cover for conventional and unconventional activities against Ukraine on the ground.

What is also important is that nuclear messaging during the Ukraine crisis has been accompanied by other cases of worrying Russian nuclear-related behaviour.

With its annexation of Crimea and military involvement in Ukraine, Moscow breached the 1994 Budapest Memorandum, under which Russia, the United States and the United Kingdom had pledged to respect Ukraine’s “territorial integrity” and “existing borders” in return for Soviet-era nuclear weapons that had been based on Ukraine’s territory and Kyiv’s accession to the Non-Proliferation Treaty (NPT) as a non-nuclear weapons state. Russia’s violation of its commitment has weakened the credibility of major-power security assurances, which until then had been regarded as important instruments to persuade countries such as North Korea and Iran to renounce or end their pursuit of nuclear weapons.⁸⁹

Furthermore, the United States has determined that Russia violated the 1987 Intermediate-range Nuclear Forces (INF) Treaty that eliminated U.S. and Soviet ground-launched ballistic and cruise missiles with ranges of 500–5,500 km. According to State Department reports from July 2014 and June 2015, Russia breached its obligations not to possess, produce, or flight-test a ground-launched cruise missile with a range of 500 km to 5,500 km or to possess or produce launchers for such missiles.⁹⁰ These concerns about Russia’s non-compliance have not been resolved because Russia consequently denied the violation. However, by being found in breach of the INF Treaty, Russia has undermined one of the cornerstones of military stability and predictability in Europe. It also seems to strive to acquire diverse and tested options for a missile strike, which could broaden Russia’s options for intimidating Europe with nuclear-capable systems.⁹¹

⁸⁷ “Russia warns Denmark its warships could become nuclear targets,” *The Telegraph*, 21 March 2015, www.telegraph.co.uk/news/worldnews/europe/denmark/11487509/Russia-warns-Denmark-its-warships-could-become-nuclear-targets.html.

⁸⁸ M. Alagappa, “Exploring Roles, Strategies, and Implications: Historical and Conceptual Perspectives,” in: M. Alagappa (ed.), *The Long Shadow. Nuclear Weapons and Security in the 21st Century Asia*, Stanford University Press, Stanford, 2008, p. 84. For more on why and how regional powers armed with nuclear weapons can use them in coercive ways, see: K.A. Lieber, D.G. Press, *Coercive Nuclear Campaigns in the 21st Century: Understanding Adversary Incentives and Options for Nuclear Escalation*, Report Number 2013-001, Project on Advanced Systems and Concepts for Countering Weapons of Mass Destruction, Naval Postgraduate School, January 2013, <https://www.hsdl.org/?view&did=734062>.

⁸⁹ For an insightful analysis of the Budapest Memorandum and the consequences of its violation by Russia, see: D.S. Yost, “The Budapest Memorandum and Russia’s Intervention in Ukraine,” *International Affairs*, vol. 91, no. 3, 2015, pp. 505–538.

⁹⁰ See: the 2014 and 2015 “Reports on Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments,” U.S. State Department, Bureau of Arms Control, Verification and Compliance, www.state.gov/t/avc/rls/rpt/index.htm.

⁹¹ See: J. Durkalec, “Russia’s Violation of the INF Treaty: Consequences for NATO,” *PISM Bulletin*, no. 107 (702), 13 August 2014, www.pism.pl/files/?id_plik=17932; A.F. Woolf, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress*, Congressional Research Service Report R43832, 16 December 2014, www.fas.org/sgp/crs/nuke/R43832.pdf; K. Reif, “U.S. Explores INF Responses,” *Arms Control Today*, January/February 2015, https://www.armscontrol.org/ACT/2015_0102/News/US-Explores-INF-Responses.

NATO's Nuclear Restraint

Russia's activities have reached the news headlines and influenced public perceptions in NATO member states. They have led to a re-emergence of Cold War-style questions whether a nuclear threat could at some point in the future become real.⁹² Russia's nuclear sabre-rattling has disturbed the NATO Allies, raising questions of whether and how they should respond.

Routine and Non-routine Actions

Since the start of the Ukraine crisis, according to a NATO official, the Alliance's "nuclear readiness levels have not changed."⁹³ NATO also has mostly continued with its standard calendar of nuclear-related exercises.

From 16 to 24 June 2014, NATO held its regular *Steadfast Nimbus* command-post nuclear exercises (CPX).⁹⁴ The annual *Steadfast Noon* exercises—aimed to train ground crews in loading and unloading nuclear bombs for different types of Allied dual-capable aircraft—took place from 20 to 24 October 2014 at Ghedi Air Base in northern Italy. The exercises coincided with a Strike Evaluation (STRIKEVAL) nuclear certification inspection of the airbase.⁹⁵

While there is no publicly available information about a date, it is probable that NATO also conducted *Able Staff*, an annual command exercise of nuclear consultation procedures aimed at testing communication channels between relevant NATO bodies, permanent representatives at NATO HQ, and national capitals.⁹⁶

According to publicly available data, the United States also continued with its regular exercise calendar, including the May 2014 *Global Lightning 14* and *Constant Vigilance 14*, the October 2014 *Global Thunder 15*, the March 2015 *Global Lightning 15*, and the May 2015 *Constant Vigilance 15* exercises. According to official statements, each of these exercises was "unrelated to real-world events," had been planned "for more than a year" and was based on notional scenarios.⁹⁷

⁹² See: A. Applebaum, "War in Europe is not a hysterical idea," *Washington Post*, 29 August 2014, www.washingtonpost.com/opinions/anne-applebaum-war-in-europe-is-not-a-hysterical-idea/2014/08/29/815f29d4-2f93-11e4-bb9b-997ae96fad33_story.html; B.T. Wieliński, "Putin straszy atomówkami," *Gazeta Wyborcza*, 6 February 2015, <http://wyborcza.pl/1,75968,17366551.html#MTstream>; "Presidential candidate seeks thaw with Moscow," *Financial Times*, 17 April 2015; T. Nichols, "How America and Russia Could Start a Nuclear War," *National Interest*, 7 May 2015, <http://nationalinterest.org/feature/how-america-russia-could-start-nuclear-war-12826>.

⁹³ "NATO Monitoring Russian Saber Rattling," *Arms Control Today*, May 2015, https://www.armscontrol.org/ACT/2015_05/News-Briefs/NATO-Monitoring-Russian-Saber-Rattling.

⁹⁴ See: "Trex Matrix 2014," Allied Land Command, https://www.lc.nato.int/mv1_upload/TRAINING_AND_EXERCISE_MATRIX_2014_2015.pdf.

⁹⁵ H.M. Kristensen, "Polish F-16s in NATO Nuclear Exercise In Italy," 27 October 2014, <http://fas.org/blogs/security/2014/10/steadfastnoon/>; For more on *Steadfast Noon*, see: I. Anthony, J. Janssen, "The Future of Nuclear Weapons in NATO," Friedrich Ebert Stiftung, April 2010, p. 16, <http://library.fes.de/pdf-files/id/ipa/07151.pdf>.

⁹⁶ *Strategic Impact*, no. 2 (51), 2014, Carol I National Defence University, p. 22, http://cssas.unap.ro/en/pdf_periodicals/si51.pdf; "Armáda České Republiky v Roce 2012," Ministerstvo Obrany České Republiky 2013, p. 8, www.acr.army.cz/scripts/file.php?id=142539.

⁹⁷ *Global Lightning 14*, U.S. Strategic Command Public Affairs, 11 May 2014, www.stratcom.mil/news/2014/494/Global_Lightning_14; "U.S. Strategic Command to conduct command, control exercise," U.S. Strategic Command Public Affairs, 17 October 2014, www.stratcom.mil/news/2014/522/US_Strategic_Command_to_conduct_command_control_exercise; "U.S. Strategic Command to Conduct Command, Control Exercise," U.S. Strategic Command Public Affairs, 18 March 2015, www.stratcom.mil/news/2015/546/US_Strategic_Command_to_Conduct_Command_Control_Exercise; "USSTRATCOM conducts key command and control exercise," U.S. Strategic Command Public Affairs, 28 October 2014, www.stratcom.mil/news/2014/523/USSTRATCOM_conducts_key_command_and_control_exercise.

During the crisis, however, even routine activities sent deterrent and assurance signals. At least some of NATO’s regular activities even went beyond the routine.

The *Steadfast Noon 2014* exercises, although routine, were unusual in that for the first time they involved the participation of Polish F-16s. The participation of the Polish fighter jets, though, might have been planned before the crisis—in line with NATO efforts to ensure the broadest possible participation of NATO members in nuclear risk- and responsibility-sharing. The Polish aircraft are probably not certified for nuclear delivery roles and they have trained to provide active non-nuclear support for NATO nuclear missions. Still, the Polish participation in the exercise sent a message that Poland attaches importance to the presence of U.S. nuclear weapons in Europe.⁹⁸

Also unusual is that during the Ukraine crisis the United States has showcased the contributions of U.S. strategic forces to NATO’s deterrence posture. The United States has conducted non-routine exercises in cooperation with some NATO members.

In June 2014, the United States, on a bilateral basis, deployed in the United Kingdom three B-52s and, what was even more unusual, two B-2 strategic bombers. Reportedly, the B-52 bombers took part in the *Sabre Strike* and *Baltops* exercises held in the Baltic States.⁹⁹ It was not the first time U.S. strategic bombers had flown over the Baltic States, but they do not do so frequently or even regularly.¹⁰⁰

The exercise was repeated in June 2015 when three B-52s, followed by two B-2 bombers, were deployed to Royal Air Force Fairford in the UK. This time, the B-52s’ participation in this year’s edition of *Baltops* and *Sabre Strike* was officially announced. The 2015 exercises were “specifically designed and closely coordinated with the United Kingdom’s and the United States’ regional allies and partners.” One of the goals of the exercises was to demonstrate that U.S. strategic bombers “can strike any target, anywhere, especially from a forward deployed location like Fairford, and hold any target, country or place at risk and let them know we’re here.”¹⁰¹

In October 2014, an unspecified number of U.S. B-52s conducted two long-range flights to Europe as a part of the *Noble Justification* exercises underway in the Mediterranean Sea and Atlantic Ocean. It was highlighted that the U.S. bomber presence was “specifically requested by NATO leadership.”¹⁰²

On 1 April 2015, two pairs of B-52s made a roundtrip from their U.S. bases to the Arctic and North Sea. The *Polar Growl* training mission “enhanced their ability to work with Allied partners, while demonstrating U.S. Strategic Command capacity.” The bombers flying the North

⁹⁸ The presence of Polish aircraft in the exercises was officially confirmed by the Polish defense minister. See: “Polskie F-16 brały udział w ćwiczeniach z użyciem broni jądrowej,” *RMF24*, 5 February 2015, www.rmf24.pl/fakty/polska/news-polskie-f-16-braly-udzial-w-cwiczeniach-z-uzyciem-broni-jadr,nld,1614580.

⁹⁹ “Strategic Bombers Deploy to Europe to Train, Exercise Capabilities,” U.S. Strategic Command Public Affairs, 3 June 2014, www.stratcom.mil/news/2014/499/Strategic_Bombers_Deploy_to_Europe_to_Train_Exercise_Capabilities; “Bombers arrive at RAF Fairford to train, exercise capability,” U.S. Air Forces in Europe and Air Forces Africa Press Release, 4 June 2014, www.usafe.af.mil/news/story.asp?id=123413226; “Two B-2 Spirit stealth bombers have just arrived in UK for a quite unusual overseas deployment,” *The Aviationist*, 8 June 2014, <http://theaviationist.com/2014/06/08/b-2-have-deployed-uk>.

¹⁰⁰ Two U.S. B-52 strategic bombers flew in Lithuania’s airspace for the first time on 11th June 2012. See: “Multinational Military Exercises BALTOPS 2012,” U.S. Embassy to Lithuania, 12 June 2012, <http://vilnius.usembassy.gov/odc/multinational-military-exercise-baltops-2012.html>.

¹⁰¹ “USSTRATCOM bombers practice key capabilities,” Air Force Global Strike Command, 9 June 2015, www.afgsc.af.mil/news/story.asp?id=123450296.

¹⁰² “B-52 Stratofortresses to participate in NATO exercise,” U.S. Strategic Command Public Affairs, 17 October 2014, www.stratcom.mil/news/2014/521/B-52_Stratofortresses_to_participate_in_NATO_exercise; “NATO Naval Drills Begin in Mediterranean Sea, Atlantic Ocean,” NATO, 15 October 2014, www.nato.int/cps/en/natohq/news_113940.htm.

Sea route trained various air intercepts together with UK, Canadian and Dutch fighter aircraft. The second pair trained with Canadian aircraft and transited around the North Pole.¹⁰³

The United States also seemed to provide a broader demonstration of its strategic bombers' contribution to the Allies' security but not linked to the European theatre. At the end of September 2014, it conducted a nuclear command-and-control exercise in conjunction with air-launched cruise missile and intercontinental ballistic missile tests, and with the participation of a B-52 bomber in *Valiant Shield*—a large, combined-forces exercise in the Pacific. The exercises were aimed at demonstrating “nuclear deterrence and power projection capabilities through a coordinated display of strategic combat power.”¹⁰⁴

In May 2015, the United States conducted a series of nuclear-related exercises. Apart from *Vigilant Shield 15*, they included: U.S. Central Command's *Eager Lion 2015*, during which two B-52s alongside Jordanian F-16s conducted a low flyover and a conventional weapons demonstration; a Nuclear Weapon Systems Evaluation Program (NucWSEP), proving the strategic bomber force's ability to prepare, load, fly and deliver nuclear-capable munitions, along with a drop of two inert Joint Test Assembly munitions to simulate B61-7 and B-83 gravity weapons; a Minuteman III ICBM test; and, the annual *Road Warrior* exercises, which evaluate the skills of Missile Security Forces personnel. The accumulation of activities during this month was aimed at demonstrating the Air Force Global Strike Command's “ability to provide nuclear deterrence and long-range strike capabilities to the President and combatant commanders.”¹⁰⁵

Overall, as with Russia, the full scope of the NATO Allies' nuclear-related activities, including the UK and France, is not known. There might have been some messages “for Russia's eyes only” that were not publicised or leaked to the press. While the exact motivation behind each action can only be inferred, non-routine activities, especially those with the engagement of the NATO Allies, were probably responses to Russia's intensified nuclear activities and rhetoric.

Still, the NATO and U.S. actions have been incomparably less belligerent than Russia's. The bomber flights did not include mocked nuclear attacks on Russian territory. They did not closely approach Russian territory or force Russia to scramble fighter jets to intercept them. The number and scale of U.S. and NATO exercises have been incomparably smaller to Russia's activities and rightly avoided responding to each and every Russian action. The aim of the NATO Allies' actions was also different than Russia's exercises. Their main focus was defensive and they were aimed at reassuring NATO Allies. They were not designed to intimidate Russia and were not conducted in conjunction with aggressive actions on the ground.

Russian attempts to portray some NATO activities as destabilising do not reflect events on the ground. For example, a Russian official has described the participation of NATO dual-capable aircraft in the Baltic Air Policing mission and their basing in Poland as “shaking up stability” in Central and Eastern Europe.¹⁰⁶ However, NATO DCAs have been present continuously in the Baltic States since April 2004, long before the outbreak of the Ukraine conflict. While some of the aircraft are continuously based in Poland and the Baltics, and their number in the region has increased, this has been a measured and non-escalatory reaction to Russia's provocative military

¹⁰³ “POLAR GROWL strengthens Allied interoperability, essential bomber navigation skills,” U.S. Strategic Command Public Affairs, 1 April 2015, www.stratcom.mil/news/2015/551/POLAR_GROWL_strengthens_Allied_interoperability_essential_bomber_navigation_skil.

¹⁰⁴ “U.S. Strategic Command Conducts Training Event with Strategic Deterrence Forces,” U.S. Strategic Command Public Affairs, 29 September 2014, www.stratcom.mil/news/2014/519/US_Strategic_Command_Conducts_Training_Event_with_Strategic_Deterrence_Forces; “AFGSC provides deterrence for the modern era,” Air Force Global Strike Command Public Affairs, 26 September 2014, www.afgsc.af.mil/news/story.asp?id=123426299.

¹⁰⁵ “AFGSC flexes global muscles in May,” Air Force Global Strike Command Public Affairs, 1 June 2015, www.afgsc.af.mil/news/story.asp?id=123449509.

¹⁰⁶ “NATO destabilizing Baltic by stationing nuke-capable aircraft—Moscow,” *Russia Today*, 1 December 2014, <http://rt.com/news/210383-nato-baltic-troops-russia>.

actions in and around Ukraine. Also, there have not been any indications that the aircraft had any nuclear-related tasks. There is also a huge difference between, on the one hand, NATO DCAs that have to scramble to intercept Russian bombers that endanger commercial air traffic and, on the other hand, Russia’s strategic bombers that in an aggressive manner have been approaching dangerously close to NATO borders and in some cases simulating nuclear weapon strikes on neutral states.¹⁰⁷

Cautious Statements

In keeping with its actions, NATO’s nuclear rhetoric has strikingly contrasted with Russia’s nuclear boasts.

The joint statements agreed by consensus among the 28 NATO members have been laconic. The Wales Summit Declaration simply repeated the language on nuclear issues from the 2010 Strategic Concept and included it in a short paragraph in the middle of its garrulous 113-paragraph statement.¹⁰⁸ The Defence Ministerial meeting in February 2015 started with a meeting of the Nuclear Planning Group (NPG).¹⁰⁹ However, NATO did not provide any official information about the content and conclusions of the meeting—the last time NATO issued an NPG *Communique* was in June 2007.¹¹⁰

Initially, NATO members also kept to a very low profile any information it released about nuclear-related actions. Statements about bomber deployments to Europe and other U.S. exercises were limited to concise press releases. While the U.S. acknowledged the presence of strategic bombers in Europe, the participation of B-52s in exercises in the Baltics in June 2014 was not officially announced but was inferred from a bomber patch designed for the exercise that was published on the internet.¹¹¹ The participation of Polish F-16s in *Steadfast Noon* was acknowledged only after photos from the exercises were posted online by an amateur photographer.¹¹² Also, information about NATO’s annual command-post exercises, *Able Staff* and *Steadfast Nimbus*, was not announced publicly. In fact, apart from the inclusion of the names of these exercises in a job announcement for the NATO Nuclear Policy Directorate, there is no official NATO confirmation that these exercises are nuclear-related.¹¹³ Limited information about their content can be inferred only from sporadic mentions in annual reports issued by some NATO members about their participation in multinational exercises.

¹⁰⁷ For a pre-Ukraine crisis example, see: D. Cenciotti, “Russia Simulated a Large-Scale Aerial Night Attack on Sweden,” *Business Insider*, 23 April 2013, www.businessinsider.com/david-cenciotti-russia-simulated-a-massive-aerial-attack-2013-4.

¹⁰⁸ “Wales Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Wales,” 5 September 2014, par. 50, www.nato.int/cps/en/natohq/official_texts_112964.htm.

¹⁰⁹ The NPG meetings usually take place during the Defence Ministerial meetings in October, but because of the Wales Summit it was postponed for February 2015. The last NPG meeting took place in October 2013. See: “Meeting of NATO Ministers of Defence,” Brussels, Belgium, 22–23 October 2013, www.nato.int/cps/en/natohq/events_104070.htm; “Meeting of NATO Ministers of Defence,” Brussels, Belgium, 5 February 2015, www.nato.int/cps/en/natohq/events_117083.htm.

¹¹⁰ See: *Final Communiqué*, Ministerial meetings of the Defence Planning Committee and the Nuclear Planning Group held in Brussels, 15 June 2007, www.nato.int/cps/en/natohq/news_46995.htm.

¹¹¹ “Three U.S. B-52 strategic bombers have deployed to the UK,” *The Aviationist*, 4 June 2014, <http://theaviationist.com/2014/06/04/b-52-deployed-to-fairford>.

¹¹² See: “Fabrizio Berni@Steadfast Noon 2014—Ghedi AB” (photographs), Piti Spotter Club, www.pitispotterclub.it/foto-manifestazioni-airshow-e-trasferte/2014/2014-steadfast-noon-2014-ghedi.

¹¹³ “Notification of an ‘A’ Grade Vacancy,” Nuclear Policy Directorate, Emerging Security Challenges Division, Vacancy No. 150008, www.nato.int/structur/recruit/documents/Officer,%20Nuclear%20Poilcy%20Directorate,%20Emerging%20Security%20Challenges.pdf (and) www.mfa.gr/images/docs/eukairies_stadiodromias_se_diethneis_organismous/2015/file_get_1.pdf.

The Allies' approach has been, however, evolving and they have become more outspoken this year about NATO's nuclear posture, following the NPG meeting at the NATO Defence Ministerial meeting.

In a statement to the U.S. House Armed Services Committee on 25 February 2015, Gen. Philip Breedlove, as commander of EUCOM, stated that:

EUCOM maintains a safe, secure, and effective theatre nuclear deterrent in support of NATO and enduring U.S. security commitments, with the EUCOM AOR a critical component of the U.S. Global Strike mission. Through rigorous and effective training, exercises, evaluations, inspections, operations, and sustainment, EUCOM ensures that United States nuclear weapons and the means to support and deploy those weapons are fully ready to support national and Alliance strategic nuclear directives.

The U.S. stands side-by-side with our NATO Allies to provide safe, secure, reliable, and effective nuclear forces to deter aggression against Alliance members. EUCOM and STRATCOM work closely together to provide U.S. leadership options to assure our Allies of our commitment, and as part of Operation Atlantic Resolve, EUCOM has forged a link between STRATCOM Bomber Assurance and Deterrence missions to NATO regional exercises.¹¹⁴

In May 2015, NATO published information on its website about NATO Secretary General Jens Stoltenberg's visit to the U.S. Naval Submarine Base Kings Bay in Georgia. According to the press release during the visit, the Secretary General toured the ballistic missile submarine *USS Alaska* and the base's Strategic Weapons Facility. The release contained a picture of the Secretary General in the submarine and a quote by him: "I was so impressed by the remarkable professionalism of all those who serve here and ensure that our nuclear deterrent remains safe, secure and effective."¹¹⁵ While NATO's Secretary General most likely visits many bases, some of which may or may not store nuclear weapons, he does not seem often to tour nuclear facilities in the United States.

Furthermore, in contrast to 2014, in 2015 the United States decided to widely publish information about the strategic bombers' participation in *Baltops* and *Sabre Strike*.¹¹⁶

It is worth noting that during the Ukraine crisis, NATO has avoided any statements suggesting a willingness to reconsider the nuclear "three no's" political pledge. Then-Secretary General Anders Fogh Rasmussen, responding in May 2014 to a question about whether, taking into account events in Ukraine, NATO should reconsider the pledge, noted that, "at this stage, I do not foresee any NATO request to change the content of the NATO-Russia Founding Act. But we would also expect Russia to live up to the basic principles of that joint document, the NATO-Russia Founding Act."¹¹⁷ Since then, there has not been any official or unofficial statement

¹¹⁴ "Statement by Gen. Philip Breedlove, Command of U.S. Forces Europe, to the House Armed Services Committee," 25 February 2015, p. 24, www.eucom.mil/mission/background/posture-statement.

¹¹⁵ "NATO Secretary General thanks US military personnel for their service," 28 May 2015, www.nato.int/cps/en/natohq/news_120239.htm.

¹¹⁶ See, for example, information on the Air Force Global Strike Command website: "B-52s to Demonstrate Long-Range Strategic Capabilities in Europe, Air Force Global Strike Command," 5 June 2015, www.afgsc.af.mil/news/story.asp?id=123450025; "Minot B-52s participate, train with allies in BALTOPS, Saber Strike exercises," Air Force Global Strike Command, 6 June 2015, www.afgsc.af.mil/news/story.asp?id=123450047; "B-2s demonstrate global reach," Air Force Global Strike Command, 7 June 2015, www.afgsc.af.mil/news/story.asp?id=123450108; "USSTRATCOM bombers practice key capabilities," Air Force Global Strike Command, 9 June 2015, www.afgsc.af.mil/news/story.asp?id=123450296.

¹¹⁷ The "three no's" pledge was repeated in the 1997 NATO-Russia Founding Act: "The member states of NATO reiterate that they have no intention, no plan and no reason to deploy nuclear weapons on the territory of new members, nor any need to change any aspect of NATO's nuclear posture or nuclear policy—and do not foresee any future need to do so. This subsumes the fact that NATO has decided that it has no intention, no plan, and no reason

that would suggest that NATO members, including Central and Eastern European states, were advocating a revocation of the pledge.

During the crisis, the Central and Eastern European Allies did not issue any statements that implied that they treat nuclear weapons, including U.S. weapons based in Europe, as a silver bullet protecting them against a potential threat from Russia. Instead, they asked for conventional reinforcements. Contrary to the arguments of some critics of NATO’s deterrence posture, this choice does not demonstrate the uselessness of nuclear weapons, including non-strategic nuclear weapons, but the Alliance’s prudence and restraint.¹¹⁸ It shows the awareness of the NATO Allies that nuclear weapons are weapons of last resort, useful only in extremely remote circumstances, such as a direct response to a severe nuclear threat or attack. It would be unwise to treat, for example, the presence of U.S. bombs in Europe as a deterrent against lower-level Russian conventional or unconventional attacks. If Central and Eastern European Allies did so it would show an inclination to lower the threshold of nuclear use, mirroring the evident trends in Russian nuclear weapons policy.

The Alliance’s Strategic Communication Gaps

NATO members have had reasons to be restrained in the face of Russia’s actions. They rightly have been carrying on with their activities in a manner dissimilar to Russia and have avoided engaging in tit-for-tat nuclear rhetoric or moves. NATO’s approach to its exercises and communicating information about them has been evolving. Nonetheless, for various reasons, NATO’s response to Russia’s nuclear belligerence has not been sufficient. In fact, the crisis has demonstrated challenges to NATO’s strategic communication with regard to its nuclear deterrent and assurance policy.

Deterrence

The Ukraine crisis has exposed doubts about the effectiveness of NATO’s deterrent. The widely-shared anxiety surrounding Russia’s aggression against Ukraine has been that Russia might take the risk of attacking a NATO country and use conventional forces and nuclear brinkmanship to limit the response of other NATO members. Russia might assume that taking such a gamble could pay off, as it would not have to back up its threats with actions because NATO would back off.

For example, according to Gen. Adrian Bradshaw, Deputy Supreme Allied Commander Europe, Russia could use conventional forces in conjunction with Soviet-era brinkmanship “not only for intimidation and coercion but potentially to seize NATO territory, after which the threat of escalation might be used to prevent re-establishment of territorial integrity.” The decision that

to establish nuclear weapon storage sites on the territory of those members, whether through the construction of new nuclear storage facilities or the adaptation of old nuclear storage facilities. Nuclear storage sites are understood to be facilities specifically designed for the stationing of nuclear weapons, and include all types of hardened above or below ground facilities (storage bunkers or vaults) designed for storing nuclear weapons.” See: *The Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation signed in Paris, France on 22 May 1997*.

¹¹⁸ For more about these arguments, see: H.M. Kristensen, “Italy’s Nuclear Anniversary: Fake Reassurance for a King’s Ransom,” *Federation of American Scientists Blog*, 30 June 2014, <http://fas.org/blogs/security/2014/06/ghedi>; T. Sauer, “Ukraine shows uselessness of NATO nukes in Europe,” *Bulletin of the Atomic Scientists*, 23 June 2014, <http://thebulletin.org/ukraine-shows-uselessness-nato-nukes-europe7257>; B. Blechman, R. Rumbaugh, “Bombs Away,” *Foreign Affairs*, July/August 2014; P. Foradori, “Speech at the Deterrence, Non-Proliferation, Disarmament session at the EU Non-Proliferation and Disarmament Conference,” 5 September 2014, <https://www.iiss.org/en/events/eu%20conference/sections/eu-conference-2014-4706/special-sessions-6020/special-session-10-7a22>.

such an approach could pay off would result from Putin's assumption that the Alliance leaders would not react quickly and would be too afraid of escalating the situation to respond violently.¹¹⁹

Similarly, according to a widely cited opinion by Andrey Piontkovsky, a Russian expert, Putin might calculate that a threat to use nuclear weapons—or, if that was insufficient, an actual limited nuclear strike against NATO members in Central and Eastern Europe—will not spark a NATO response and would in fact dissuade other NATO members from reinforcing and defending their attacked allies.¹²⁰

Andrei Kortunov, director of the Russian International Affairs Council, addressed this: "No one really knows if Putin is ready to launch nuclear war. Maybe Putin himself doesn't know. But the message delivered is clear: We can be more decisive than our opponents and they should keep that in mind. Who is readier to escalate: Barack Obama or Vladimir Putin? The answer is evident."¹²¹

Signatories to the CSIS European Trilateral Nuclear Dialogue 2014 Consensus Statement agreed that "[s]enior elements of the Russian government may have come to believe that nuclear weapons are, in fact, useful options whose early use in a conventional war could deliver strategic or political advantage when, in fact, precisely the opposite effect would probably occur."¹²²

Czech general Petr Pavel, who in June 2015 became the new chairman of the NATO Military Committee, was quoted in May 2015 as saying that "Russia would be able to occupy the Baltics within two days, during which NATO would be incapable of reacting to the situation. NATO would face the question of whether to start war, perhaps nuclear, against Russia over the occupied Baltics ... A different question is how effective the deterrence element, represented by NATO's Article 5 and its nuclear component, would be in relation to Russia."¹²³

The judgments cited above may not reflect the actual thinking of Russia's leaders. However, the repeated anxieties about the perception among Russia's leadership of NATO's resolve suggest that NATO members have not done enough to prevent doubts about the effectiveness of NATO's nuclear deterrence posture. There is a risk that Russia might miscalculate NATO's potential responses before or during a crisis. Even if Russia's leaders do not seriously consider an actual nuclear attack on NATO member states, they might assume that by using increasingly provocative nuclear signals during a crisis situation they could force NATO to acquiesce. Even if during the crises the NATO Allies would prove such assumptions wrong, NATO nuclear deterrence would fail to perform one of its basic functions, which is crisis prevention.

Reassurance

The public discourse accompanying Russia's aggression against Ukraine has exposed a lack of public awareness and signs of mistrust in NATO's nuclear deterrence posture.

¹¹⁹ "Russian tensions could escalate into all-out war, says NATO general," *The Telegraph*, 20 February 2015, www.telegraph.co.uk/news/uknews/defence/11425393/Russian-tensions-could-escalate-into-all-out-war-says-Gen-Adrian-Bradshaw.html. For similar opinions, see, for example: "Russian Snap Military Drill 'Could Turn into Assault on Baltic Capital'," *Newsweek*, 23 February 2015, www.newsweek.com/russian-snap-military-drill-could-turn-quick-assault-baltic-capital-308752.

¹²⁰ P. Goble, "Putin Believes He Can Win a War with NATO, Piontkovsky Says," *The Interpreter*, 10 August 2014, www.interpretermag.com/putin-believes-he-can-win-a-war-with-nato-piontkovsky-says.

¹²¹ C.J. Williams, "NATO military exercises aim to send message of resolve to Russia," *Los Angeles Times*, 7 May 2015, www.latimes.com/world/europe/la-fg-russia-nato-nuclear-threat-20150507-story.html#page=1.

¹²² "CSIS European Trilateral Nuclear Dialogue 2014," 14 January 2015, p. 2, http://csis.org/files/publication/150114_Consensus_Statement.pdf.

¹²³ "Gen. Petr Pavel warns that NATO and Europe have taken 'embarrassingly ineffective' steps to combat threats," *Prague Post*, 27 May 2015, www.praguepost.com/eu-news/48001-russian-annexation-of-baltics-would-take-two-days#ixzz3c4bzh0xD.

For example, some political figures in Poland, including former president and Nobel laureate Lech Wałęsa, have called for Poland to become a host state for NATO nuclear weapons, for it to lease nuclear weapons, or to build its own nuclear arsenal.¹²⁴ Some Republican members of the U.S. Congress have requested the Department of Defence give serious consideration to basing U.S. nuclear weapons in Central and Eastern Europe¹²⁵ and have asked for a study on the need for a Deterrence “Center of Excellence” at NATO.¹²⁶ Also, a number of experts have advocated re-basing U.S. B-61 nuclear gravity bombs in Central and Eastern Europe or making NATO nuclear deterrence operationally more credible, replacing gravity bombs with other systems.¹²⁷

Doubts about NATO’s nuclear deterrence posture probably do not reflect the views of the NATO Allies about the effectiveness of the current nuclear posture and its reassurance value.¹²⁸ The Allies most likely are confident about their pilots’ proficiency in delivering B-61s to targets in Russia without the need for re-basing them in Central and Eastern Europe. They could also rely on U.S., British and French strategic nuclear forces.

Still, the emerging doubts indicate that NATO has not communicated its nuclear deterrence policy effectively to the outside world, including to the public in NATO countries. Additionally,

¹²⁴ The idea of leasing of nuclear weapons was mentioned by Former President Lech Wałęsa: “Wałęsa: Polska powinna wypożyczyć rakiety, ustawić i powiedzieć ‘spróbuj, facet, no, spróbuj,’” *TVN24*, 3 September 2014, www.tvn24.pl/wiadomosci-z-kraju,3/walesa-polska-powinna-wyposzyc-rakiety-ustawic-i-powiedziec-sprobuj-facet-no-sprobuj,464477.html; A Polish member of parliament formally asked whether Poland could host U.S. nuclear weapons and, if not, whether it could build its own nuclear weapons: “Interpelacja nr 28321 do prezesa Rady Ministrów w sprawie posiadania przez Polskę taktycznej broni nuklearnej mogącej zapewnić bezpieczeństwo naszego kraju w aspekcie wypowiedzi wiceprzewodniczącego rosyjskiego parlamentu,” Warsaw, 28 August 2014, <http://sejm.gov.pl/Sejm7.nsf/InterpelacjaTresc.xsp?key=12762761&view=S>. In response to the question, the Polish Ministry of National Defence underscored the value of NATO’s nuclear policy and Polish adherence to NPT. See: <http://sejm.gov.pl/Sejm7.nsf/InterpelacjaTresc.xsp?key=2B6FFEDC&view=S>.

¹²⁵ “Letter to Secretary of Defense Chuck Hagel and Secretary of State John Kerry by Mike Rogers, Chairman, Strategic Forces Subcommittee, Mike Turner, Tactical Land and Forces Subcommittee, Committee of Armed Services, House of Representatives,” 22 January 2015, http://turner.house.gov/sites/turner.house.gov/files/wysiwyg_uploaded/January%2022,%202015%20Turner,%20Rogers%20Letter%20to%20Secretary%20Hagel,%20Secretary%20Kerry_1.pdf.

¹²⁶ See: *National Defense Authorization Act for Fiscal Year 2015, Report of the Committee on Armed Services House of Representatives on H.R. 4435*, Report 113-446, p. 243, www.gpo.gov/fdsys/pkg/CRPT-113hrpt446/pdf/CRPT-113hrpt446.pdf; The Department of Defense study found little utility for such a centre, see: “Study of a North Atlantic Treaty Organization Center of Excellence on Deterrence, Department of Defense,” 4 November 2014, http://insidedefense.com/login-redirect-cookie?destination=/sites/insidedefense.com/files/documents/jan2015/01072015_deter.pdf.

¹²⁷ It is noteworthy that even a consensus report of prominent U.S. experts that was requested by the U.S. Congress and the Department of Defense recommends that “the U.S. must lead a discussion inside NATO about the continued relevance of the limitations on NATO forces, both nuclear and conventional, that the Alliance took upon itself at the time of NATO’s first round of enlargement in 1997.” “Ensuring a Strong U.S. Defense for the Future. U.S. National Defense Panel Review of the 2014 Quadrennial Defense Review,” United States Institute of Peace, July 2014, p. 42, www.usip.org/sites/default/files/Ensuring-a-Strong-U.S.-Defense-for-the-Future-NDP-Review-of-the-QDR_0.pdf; see also: J. Thomas, “How to Place Military Pressure on Russia,” *Wall Street Journal*, 9 March 2014, www.wsj.com/articles/SB10001424052702303824204579421660993452026; E. Lucas, A.W. Mitchell et al., *Central European Security After Crimea: The Case for Strengthening NATO’s Eastern Defenses*, Center for European Policy Analysis Report No. 35, 25 March 2014, p. 8, <http://cepa.org/sites/default/files/The%20Case%20for%20Strengthening%20NATO%20Eastern%20Defenses-%20%282%29.pdf>; T. Szatkowski, “After Ukraine: Developing Central European Defense Capabilities,” Center for European Policy Analysis, 10 June 2014, <http://cepa.org/content/after-ukraine-developing-central-european-defense-capabilities>; M. Kroenig, “Facing Reality: Getting NATO Ready for a New Cold War,” *Survival*, vol. 57, no. 1, February/March 2015; K. Rak, “Polska bomba atomowa. Mit czy rzeczywistość?,” 7 April 2015, <http://wiadomosci.onet.pl/kraj/polska-bomba-atomowa-mit-czy-rzeczywistosc/gbl1lp>.

¹²⁸ For NATO’s statements from past years, see: “Active Engagement, Modern Defence: Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation Adopted by Heads of State and Government in Lisbon 19th November 2010,” par. 17–18, www.nato.int/cps/en/natolive/official_texts_68580.htm; “Deterrence and Defence Posture Review,” Press Release (2012) 063, 20 May 2012, par. 8, www.nato.int/cps/en/natolive/official_texts_87597.htm; “Wales Summit Declaration ...,” *op. cit.*, par. 50. For a more recent statement by a NATO official, see: “Russia’s Nuclear Capability,” an interview with Ambassador Alexander Vershbow, NATO Deputy Secretary General, *Defense News*, 29 March 2015, www.defensenews.com/videos/defense-news/2015/03/29/70629414.

this demonstrates that, as a result of the Ukraine crisis, NATO's current nuclear deterrence posture is not only questioned by advocates of the withdrawal of U.S. weapons to the United States but also by those who hold that the only way to maintain credible deterrence is to revise the current U.S. nuclear forces in Europe geographically and qualitatively.

Crisis Management

The Ukraine crisis has raised questions about whether NATO has sufficient nuclear crisis management tools to deal with a potential nuclear crisis with Russia. According to William Alberque, head of NATO's Arms Control and Coordination Section, since the Cold War the NATO Allies have "eliminated a lot of their institutional ability to receive, interpret, and respond to nuclear messaging from Russia, with huge implications for escalatory and de-escalatory messaging in nuclear crises." There is a need to renew "thinking about what deterrence means and what escalatory messaging means ... just in order to have peace and stability."¹²⁹

Indeed, in discussing Russia's nuclear-related activities there is a risk of falling into a trap of mistakenly depicting every Russian action as nuclear sabre-rattling. Blurring the line between nuclear and conventional capabilities by Russia further complicates reading the motives behind its actions. However, the opposite approach of not recognising or acknowledging, even in the presence of plausible evidence, that Russia is sending nuclear signals and inadequately responding to them entails even greater risks during potential crisis.

To illustrate the risks and challenges related to crisis management, one may imagine that during a crisis Russia sends its strategic bombers on patrol, but one that is provocative in scope. At the same time, it moves a large number of conventional forces, including dual-capable Iskander missiles, next to the Baltic States and Polish borders as part of a snap exercise.

In one NATO response scenario, the Alliance assumes that Russia is not issuing nuclear signals. NATO's Baltic Air Policing aircraft scramble to intercept the Russian bombers. At the same time, the United States conducts a previously planned, unrelated flight of a B-52/B-2 to the UK. Russia responds by putting more of its strategic forces on alert. Then, the United States increase the readiness of some of its nuclear forces in response to Russia's alert, perceiving it as the first round of response, while Russia sees it as the second. As a result, Russia decides to undertake further, even more provocative steps, which leads then to the crisis spiralling out of control.

In another NATO response scenario, the Alliance publicly downplays the Russian actions. At the same time, to avoid increasing tension, the NATO Allies decide not to conduct previously planned exercises of strategic bombers in Europe. To ensure that its signal has been received and to further test NATO's resolve, Russia then takes even more dramatic steps. NATO again decides not to respond. Thinking that NATO has backed down and perceiving a conventional regional advantage, Russia allows its miscalculation to embolden it to conduct a military incursion into a NATO member's territory.

Collective Response vs. U.S. Extended Deterrence

The initiative in nuclear messaging as a response to Russia's actions was taken not by NATO as a whole but primarily by the United States, which, alone or in coordination with a number of NATO Allies, conducted several strategic bomber exercises.

¹²⁹ See: "EU Non-Proliferation and Disarmament Conference 2014, 4–5 September 2014, Special Session 10: Deterrence, Non-Proliferation and Disarmament," <https://www.iiss.org/en/events/eu%20conference/sections/eu-conference-2014-4706/special-sessions-6020/special-session-10-7a22>.

There might be practical reasons why unilateral, bilateral or multilateral actions were preferred to a collective response involving all the NATO Allies. One is that standard NATO practice allows for the regular schedule of Alliance-wide exercises to be supplemented with bilateral or multilateral exercises by interested Allies. A second reason is that such exercises do not require consensus within NATO. Building consensus on such a sensitive issue would take time and would constrain the flexibility of the interested Allies in planning and conducting the exercises. Third, limiting the number of participants in exercises may make it easier to engage NATO partner countries. As part of the 2015 *Baltops* exercises, two American B-52 bombers simulated dropping naval mines outside Ravlunda on Sweden’s eastern coast.¹³⁰ As noted in the 2010 Strategic Concept, “The supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States.”¹³¹ From this perspective, it may be argued that a message sent by the United States “covers” all of NATO. Some U.S. observers hold that there is no difference between a message sent by the Alliance as a whole and one sent solely by the United States in order to bolster the credibility of U.S. extended deterrence.¹³²

However, questions about optimising the sharing of risk and responsibility in the interests of deterrence and Alliance cohesion have yet to be answered. The lack of a collective NATO response involving all or most of the Allies in some fashion might lead to the interpretation that NATO as a whole is unprepared or unwilling to send nuclear messages in response to Russia’s belligerence. Relying on unilateral U.S. action or bilateral or multilateral “coalitions of the willing” seems to contradict a long-held NATO principle that the participation of as many Allies as possible in the planning, organisation, and prospective conduct of nuclear operations strengthens the deterrence message by communicating solidarity and shared resolve. It could raise doubts about NATO’s cohesion in its approach to nuclear weapons and could have a negative impact on perceptions of the deterrence and assurance value of the Alliance’s collective nuclear policy and collective crisis-management tools. It is noteworthy that Sweden, a formally neutral country that has been known for its anti-nuclear stance, seems to be more willing than “the nuclear Alliance” as a whole to engage in publicly visible activities that can be seen as nuclear-related.

The lack of a visible collective NATO response in nuclear messaging beyond the Alliance’s Strategic Concept and other policy declarations reveals a risk of the “bilateralisation” or “multilateralisation” of NATO nuclear policy. Instead of seeking collective Alliance action during a future crisis, some NATO members might prefer to directly engage the United States and seek protection under its nuclear umbrella.

Public Communication on Russia’s Belligerence

The Ukraine crisis has demonstrated the challenges to the Alliance’s public communication strategy to address Russia’s nuclear activities.

NATO has been slow to publicly reveal and criticise Russia’s nuclear muscle-flexing. It was reluctant to issue any public statements referring to it throughout 2014. The only exceptions were statements denouncing the possible deployment of nuclear-capable systems to Crimea. A public and detailed acknowledgement of the role of Russia’s nuclear sabre-rattling was not easy for several reasons. One, there may have been anxiety among the Allies that openly criticising Russia’s provocative activities would add a more prominent nuclear dimension to the Ukraine crisis, even

¹³⁰ D. Cenciotti, “Photos show B-52s loaded with mines for simulated massive naval mine drop outside Sweden,” *The Aviationist*, 14 June 2015, <http://theaviationist.com/2015/06/14/photos-show-b-52s-loaded-with-mines-for-simulated-massive-naval-mine-drop-outside-sweden>.

¹³¹ “Active Engagement, Modern Defence ...,” *op. cit.* par. 18.

¹³² An interview with U.S. officials, Washington D.C., June 2015.

though Russia's actions meant the crisis has had a nuclear dimension since the beginning. There might also be a concern that vocal NATO statements would unnecessarily raise public anxiety.

The Alliance has become more outspoken in 2015, which demonstrates that NATO's communication vis-à-vis Russia's nuclear-related actions has evolved and that NATO has achieved consensus that silence about Russia's actions is not understood by the NATO public.¹³³ NATO's Nuclear Planning Group meeting in February 2015 and high-level discussions about Russia's activities seem to have contributed to the change of approach. For example, on 16 April 2015, NATO spokesperson Oana Lungescu stated that "Russia has started to use its nuclear weapons as a tool in its strategy of intimidation. Russia has increased nuclear rhetoric and stepped up its nuclear exercises. Russian nuclear-capable bombers are flying close to Alliance borders. Russia has also threatened to base nuclear-capable missiles in Kaliningrad and Crimea."¹³⁴ The Joint Statement of the NATO-Ukraine Commission from 13 May 2015 expressed deep concern with "statements of the Russian leadership with regard to possible future stationing of nuclear weapons and their delivery systems in Crimea, which would be destabilizing."¹³⁵ The strongest NATO statement denouncing Russia's nuclear sabre-rattling was issued by NATO Secretary General Stoltenberg in May 2015:

... Russia's recent use of nuclear rhetoric, exercises and operations are deeply troubling. As are concerns regarding its compliance with the Intermediate Nuclear Forces Treaty.

President Putin's admission that he considered putting Russia's nuclear forces on alert while Russia was annexing Crimea is but one example.

Russia has also significantly increased the scale, number and range of provocative flights by nuclear-capable bombers across much of the globe. From Japan to Gibraltar. From Crete to California. And from the Baltic Sea to the Black Sea.

Russian officials announced plans to base modern nuclear-capable missile systems in Kaliningrad. And they claim that Russia has the right to deploy nuclear forces to Crimea.

This will fundamentally change the balance of security in Europe.

We learned during the Cold War that when it comes to nuclear weapons, caution, predictability and transparency are vital.

*Russia's nuclear sabre-rattling is unjustified, destabilizing and dangerous.*¹³⁶

¹³³ See, for example: "Statement of Principal Deputy Undersecretary of Defense for Policy Brian P. McKeon before the House Armed Services Committee on Strategic Forces," March 19, 2015, p. 4, <http://docs.house.gov/meetings/AS/AS29/20150319/103007/HRG-114-AS29-Wstate-McKeonB-20150319.pdf>; "Russia's Nuclear Capability," *op. cit.*; "Insight—Russia's nuclear strategy raises concerns in NATO," *op. cit.*; "Nuclear Weapons and International Security in the 21st Century", Remarks of Frank A. Rose, Assistant Secretary, Bureau of Arms Control, Verification and Compliance, Colorado Springs World Affairs Council, Garden of the Gods Club, Colorado Springs, CO, April 16, 2015," www.state.gov/t/avc/rls/2015/240760.htm; "Netherlands contributes to NATO's deployability and responsiveness," Ministry of Foreign Affairs of the Netherlands, 26 March 2015, www.government.nl/ministries/bz/news/2015/03/26/netherlands-contributes-to-nato-s-deployability-and-responsiveness.html; A. Barker, "NATO says Russian nuclear talk irresponsible," *Financial Times*, 13 May 2015, www.ft.com/intl/cms/s/0/9fce7c30-f99b-11e4-ae65-00144feab7de.html; "Statement of Robert Work, Deputy Secretary of Defense and Admiral James Winnefeld, Vice Chairman of the Joint Chiefs of Staff before the House Committee of Armed Services," 25 June 2015, pp. 3–4, <http://docs.house.gov/meetings/AS/AS00/20150625/103669/HRG-114-AS00-Wstate-WinnefeldJrUSNJ-20150625.pdf>.

¹³⁴ "Statement by NATO spokesperson Oana Lungescu on misleading and incorrect Russian statements," NATO, 16 April 2015, www.nato.int/cps/en/natohq/news_118761.htm?utm_source=twitter&utm_medium=press&utm_campaign=150416-russia-facts.

¹³⁵ "Joint statement of the NATO-Ukraine Commission," NATO Press Release (2015) 074, 13 May 2015, www.nato.int/cps/en/natohq/official_texts_119425.htm.

¹³⁶ "Adapting to a changed security environment," speech by NATO Secretary General Jens Stoltenberg at the Center for Strategic and International Studies (CSIS) in Washington D.C. (incl. Q&A session), 27 May 2015, www.nato.int/cps/en/natohq/opinions_120166.htm.

Overall, however, NATO’s communication on Russia’s nuclear activities has lagged behind the Alliance’s approach to other Russian actions. NATO has not published any detailed information about Russia’s nuclear signals, unlike, for example, information it has disclosed about Russian troop presence and direct engagement in fights in Ukrainian territory. There has not been any specific, official information about the exceptionally provocative nature of some of Russia’s nuclear messages, including strategic bomber flights. The information provided to the public has been very general.

Keeping more detailed information about the Russian nuclear aspects of the Ukraine crisis behind closed doors makes public discussion of nuclear matters less informed, leaving room for over- and under-estimation. It also makes the public more susceptible to Russia’s propaganda efforts to make even routine NATO nuclear-related activities appear equivalent to those of Russia or even more destabilising than Russia’s actions. This situation arises also because there is no official point of reference that would make possible a comparison between NATO and Russian activities.

The NATO Allies also did not react fast enough to take the initiative in responding to Russia’s actions. For example, the statement mentioned above by the NATO spokesperson on April 2014, was, in fact, only in response to Russia’s accusations about alleged nuclear exercises in Central and Eastern Europe. With its belated reactions, the Alliance has missed many opportunities to demonstrate publicly its discontent with Russia’s aggressive nuclear-related activities just after they took place and, as a result, seemed to be sending an unintentional signal to the public that Russia’s behaviour has been tacitly accepted as the “new normal.” The prompt criticism of Putin’s June 2015 announcement of plans to add 40 ICBMs to Russia’s nuclear arsenal may, however, signal a change in the NATO Allies’ approach.¹³⁷

¹³⁷ “Carter laments Putin’s ‘loose rhetoric’ on nukes,” *CBS News*, 22 June 2015, www.cbsnews.com/news/ash-carter-russia-vladimir-putin-loose-rhetoric-nuclear-missiles-nato.

Options for NATO's Nuclear Adaptation

As noted by NATO's Secretary General, the Alliance's greatest strength is its ability to adapt. In response to Russia's aggressive actions in and around Ukraine, the Alliance has been implementing "the biggest reinforcement of collective defence since the end of the Cold War."¹³⁸ The Alliance has rightly prioritised the need for strengthening its conventional forces for assurance and deterrence in Central and Eastern Europe. However, because of existing communication gaps, notably with Russia and with publics in NATO countries, the Alliance should begin a process of adaptation to the new nuclear reality in Europe.

This adaptation is especially important because Russia's nuclear posturing has strengthened the risk that any future crises between NATO and Russia would have a nuclear dimension and would involve Russian nuclear threats, implicit or explicit. It is difficult to imagine a hybrid or conventional attack against, for example, the Baltic States or Poland without accompanying nuclear messaging. In the future it is possible that concerns about Russia's nuclear arsenal will even further increase, particularly when taking into account Russia's aggressive nuclear modernisation and its violation of the INF treaty. It is also likely that Russia will implement lessons learnt from its nuclear messaging during the Ukraine crisis.

NATO's nuclear adaptation should not be treated as a distraction from preparation for more realistic scenarios. It should be perceived as a complementary requirement for effective collective deterrence. On the one hand, robust conventional deterrence capabilities decrease any incentives for NATO members to lower the nuclear threshold. They also reduce the risk that Russia might perceive NATO's conventional weakness in the region as an opportunity to test NATO with Russian conventional forces in a confrontation that could escalate to the nuclear level. On the other hand, Russia's approach to warfare seeks to exploit any weakness. Even if NATO was fully prepared to meet "little green men"-like attacks and a spectrum of conventional forces threats, Russia might think that nuclear brinkmanship would give it room to manoeuvre in some cases, and strengthening its reliance on nuclear weapons might be advantageous.¹³⁹ Taking Russia's challenge seriously requires taking into account the nuclear dimension of Russia's way of warfare.

The Alliance's redesign of its nuclear policy will not be an easy task for several reasons. In recent years, nuclear weapons have been one of the most controversial topics in NATO's internal discussions. While the adoption of the 2012 Deterrence and Defence Posture Review (DDPR) did not resolve existing controversies, it provided a commonly agreed way forward for the following years. At the same time, it allowed the NATO Allies to return to their preferred "let sleeping dogs lie" approach to the public discussion of nuclear issues at the higher political levels. The political discussion aimed at nuclear adaptation could create discomfort for some Allies and anxiety that it could lead to an update of NATO's nuclear policy and posture to an undesirable extent. The assessments of Russia's actions and their political implications might also vary within the Alliance, and reaching consensus on common positions could be difficult. Forging consensus also would be difficult as the public and political elites' perceptions of nuclear weapons and nuclear deterrence vary between the NATO member states. What might reassure the public in Poland might lead to protests in Germany.

¹³⁸ "Keynote speech by NATO Secretary General Jens Stoltenberg at the opening of the NATO Transformation Seminar," 25 March 2015, www.nato.int/cps/en/natohq/opinions_118435.htm.

¹³⁹ On difficulties associated with focusing solely on non-nuclear measures of deterrence and assurance, see: Ł. Kulesa, "Careful What You Wish For: Nuclear Reductions and Conventional Deterrence in Europe after Crimea," *PISM Strategic File*, no. 15 (51), August 2014, https://www.pism.pl/files/?id_plik=17896.

These circumstances notwithstanding, the benefits of re-opening NATO’s nuclear discussion outweigh the potential challenges. The evolution of the NATO Allies’ public communication strategy to address Russia’s nuclear signals during the Ukraine crisis indicates that, while difficult and slow, a change of approach is possible. According to a NATO diplomat’s remarks to the press following the June 2015 Defence Ministerial meeting, “... there are quite a lot of deliberations in the Alliance about nuclear [weapons], but it is being done very slowly and deliberately. We need to do due diligence on where we are.” In the view of the U.S. Ambassador to NATO, Douglas Lute: “There is a general assessment under way in Washington and a parallel assessment here in NATO to look at all the possible implications of what Russia says about nuclear weapons, its doctrine and so forth, its pronouncements, its rhetoric, and what we actually see on the ground in terms of development and deployment.”¹⁴⁰

NATO’s nuclear adaptation should be conducted in a way that would strengthen the perception of the effectiveness of NATO deterrence and Alliance cohesion. NATO has wide options that go beyond doing nothing or undertaking unnecessary steps. In examining NATO’s nuclear policy and posture, the Allies should consider the following measures:

Rebalancing Thinking about Nuclear Deterrence

The NATO 2010 Strategic Concept and 2012 DDPR sought to strike a balance between maintaining an effective deterrent and at the same time seeking conditions for a world without nuclear weapons.

In previous years, the NATO Allies have concentrated on the nuclear disarmament part. Discussions and thinking about the role of nuclear weapons for NATO focused primarily on conditions to further reduce the Alliance’s reliance on these weapons, in particular U.S. non-strategic nuclear weapons based in Europe. One of the core questions was whether NATO should again unilaterally reduce U.S. weapons in Europe or whether it should seek Russian reciprocity. The latter approach prevailed, leading to efforts to move toward reciprocal transparency, confidence-building measures, and reductions. Given the political context, the arms-control focus of NATO discussions was right and its success was desirable for strengthening the Alliance’s cohesion and European security.

At the same time, within NATO there was no perceived need for an extensive political discussion on how NATO should prepare itself for a nuclear crisis, not to mention a crisis involving Russia. As one observer has noted, thinking about any role for nuclear weapons in NATO, at least in some quarters, became almost “anathema.”¹⁴¹

Taking into account the new nuclear landscape in Europe, the primary and most difficult task ahead for NATO is to change its mindset about nuclear issues. The Allies should demonstrate that their top priority given the new circumstances is not preparation for future arms control treaties with Russia but successfully deterring a nuclear crisis involving Russia. It is rightly argued that “Moscow must be under no illusion: the Alliance still understands the role of nuclear weapons in deterrence, and Russia will never achieve the escalation dominance it seeks by the implied use of nuclear weapons.”¹⁴²

¹⁴⁰ “Nato to review nuclear weapon policy as attitude to Russia hardens,” *The Guardian*, 24 June 2015, www.theguardian.com/world/2015/jun/24/nato-to-review-nuclear-weapon-policy-as-attitude-to-russia-hardens?CMP=share_btn_tw.

¹⁴¹ J.A. Larsen, *The Wales Summit and NATO’s Deterrence Capabilities: An Assessment*, NATO Defence College Research Report, November 2014, p. 5, www.ndc.nato.int/news/current_news.php?icode=735.

¹⁴² J. Lindley-French, *NATO and New Ways of Warfare: Defeating Hybrid Threats*, NATO Defence College Conference Report 03/15, May 2015, pp. 8–9, www.ndc.nato.int/news/current_news.php?icode=814.

This does not mean, however, that the NATO Allies should abandon their goal of seeking a world free of nuclear weapons, and a desirable step toward this goal is agreement with Russia to increase mutual transparency and confidence and further reductions of nuclear weapons in Europe. What was desirable with Russia as a partner is even more needed with Russia as a potential adversary. In fact, Russia's actions in and around Ukraine demonstrate that there is a need for agreement on additional arms-control mechanisms that would decrease the risks of misperception and reduce the scope for reckless actions, for example, notification of strategic bomber patrols and defining a code of conduct for them. There is also a need to work on new arms-control mechanisms that could be implemented in appropriate circumstances.

Nonetheless, the Ukraine crisis has marked the failure of the process of seeking a reduction in the role of nuclear weapons in Europe as part of a broader process of building a NATO-Russia strategic partnership and mutual trust. Any arms-control arrangements with Russia in such a framework seem, unfortunately, unrealistic in the foreseeable future. NATO's new approach to nuclear arms control should be built on the premise that arms control is possible only if NATO's deterrence posture is secured. Cold War history has shown that only once the Allies have a renewed understanding and faith in Allied deterrence capabilities, including, critically, the willingness to use them, will an effort towards détente mean anything to Russia. The only way to convince Russia to decrease its reliance on nuclear weapons seems to be to deny Russia a perceived advantage from the nuclearisation of its security policy and from eroding existing mechanisms such as the INF Treaty. It is counter-intuitive but NATO's renewed focus on deterrence may contribute to a long-term goal of nuclear-weapons free world.

Re-examination of Nuclear Crisis-management Tools

In the view of former U.S. Secretary of Defence Robert McNamara, the overwhelming lesson of the Cuban missile crisis was that “[m]anaging crises is the wrong term. You don’t ‘manage’ them because you can’t manage them.”¹⁴³ There is a high risk that during the crisis “signals will be misinterpreted, actions will not be properly calibrated, situations will be misunderstood, necessary revisions of procedures will not be made, and excessive risks will be taken,” and that accidents happen.¹⁴⁴ According to McGeorge Bundy’s sober assessment: “The most important part of crisis management is not to have a crisis, because there’s no telling what will happen once you’re in one.”¹⁴⁵

The main task of NATO’s nuclear policy is to prevent any nuclear crisis from happening. Nonetheless, the NATO Allies have to take into account that crises are not fully preventable. In the future, the Alliance could be exposed to Russian nuclear threats, implicit or explicit, that might accompany aggressive policy against the NATO Allies or their partners. As noted by Thérèse Delpech, “[w]hile they are inherently unpredictable, crises should be expected as part of strategic relations among competitors or adversaries. Lack of preparation cannot be remedied by improvisation when difficulties arise.”¹⁴⁶

The NATO Allies should not shy away from thoroughly re-examining their nuclear crisis-management tools. The most immediate need is for a reassessment of NATO’s intelligence and analytical capabilities to be able to properly interpret Russia’s nuclear messages and to have

¹⁴³ J. Newhouse, *War and Peace in the Nuclear Age*, New York, 1989, p. 184.

¹⁴⁴ B.J. Bernstein, “Reconsidering the Perilous Cuban Missile Crisis 50 Years Later,” *Arms Control Today*, October 2012, https://www.armscontrol.org/act/2012_10/Reconsidering-the-Perilous-Cuban-Missile-Crisis-50-Years-Later.

¹⁴⁵ J. Newhouse, *op. cit.*, p. 184.

¹⁴⁶ T. Delpech, “Nuclear Deterrence in the 21st Century: Lessons from the Cold War for a New Era of Strategic Piracy,” Rand Corporation, 2012, p. 88, www.rand.org/content/dam/rand/pubs/monographs/2012/RAND_MG1103.pdf.

options available to react to them. In this context, the NATO Allies have to examine “under which circumstances it would be necessary and, indeed, wise to issue a nuclear threat,” something what was difficult to imagine in past years.¹⁴⁷ NATO would thereby reduce the risk of an inadvertent escalation in any future crises that might result from misreading the Russian messages or by responding inappropriately.

Adjustment of Exercise Practices

To ensure there is no doubt about the effectiveness of NATO’s nuclear deterrent, the Allies should reassess whether there is a need to adjust their nuclear practices to the new circumstances.

NATO should start by publicly acknowledging some of the existing nuclear exercises mentioned earlier in this report. The Alliance could provide official information about what regular activities are taking place and what is their main goal without providing details that could compromise NATO security. Such an approach would demand a radical change in NATO’s bureaucratic culture with regard to nuclear weapons. It might, however, strengthen assurances to the public in NATO countries who feel most exposed to Russia’s threats. It also would be in line with NATO’s goal of increasing transparency about nuclear weapons in Europe, eliminating the perception by the outside world that NATO is hiding its activities.

Nuclear scenarios also could be included in NATO’s table-top crisis-management exercises, which would strengthen the ability of NATO’s decision-makers to act during crises.

Adding a new nuclear exercise to the regular schedule probably would not be necessary. However, NATO members could decide to prepare in advance non-routine forms of nuclear messaging that could be used if circumstances require them. The exercises should be operationally useful, politically visible and non-escalatory. They should also signal the cohesion of the Alliance as a whole.

While there is no need to engage in tit-for-tat nuclear messaging with Russia or to respond to every provocative Russian action, non-standard forms of nuclear messaging sent by NATO as a whole during a crisis could send a clear signal that the Alliance is prepared to challenge nuclear intimidation. An additional exercise could be conducted at a time chosen by NATO, though not necessarily immediately after some Russian provocation. Also, it might take place in different NATO states, including those in Central and Eastern Europe. The message could be tailored to the circumstances, from very low-profile to a more unequivocal demonstration of the effectiveness of NATO’s deterrence capabilities.

The additional activities could involve joint training involving U.S. and European DCAs as well as the capabilities of other member states providing non-nuclear support. The participation of French aircraft could also make exercises more visible. Joint NATO exercises involving DCAs would show the tangible engagement of a wide range of Allies in the nuclear mission.

New forms of NATO “collective” nuclear exercises could also involve U.S. strategic bombers. A unique benefit of such exercises would be that they could provide NATO with a proportional response to Russia’s bomber activities. Bomber presence is more visible to the public and outside world than DCA. Its nuclear dimension, while it cannot be overlooked, can be denied by NATO, which in some circumstances could be a preferable option for NATO Allies.

An Alliance decision on joint exercises with the participation of U.S. nuclear bombers would probably require a change in NATO’s nuclear consultation process. So far, U.S. strategic bomber exercises with NATO Allies have been conducted solely on a bilateral or multilateral

¹⁴⁷ *Ibidem*, p. 89.

basis. New forms of consultation would enable the presence of U.S. bombers in Europe without necessarily tying the United States and the NATO Allies to bilateral discussions (neither would they preclude them). While strengthening NATO's "collective" nuclear deterrence messaging, the extension of the scope of consultations at NATO headquarters could be of interest to NATO states advocating a diminished reliance on U.S. nuclear weapons in Europe. Broad Alliance consultations on the role of U.S. strategic bombers could make changes in current NATO nuclear policy easier in the future because NATO would have already tested consultation arrangements on the use of U.S. strategic forces. The European NATO Allies also would be able to directly communicate with the U.S. if, in their view, the bomber presence in Europe in specific circumstances was seen as unnecessary or counter-productive, or timely and appropriate.

NATO's readiness to conduct additional exercises, including those involving U.S. strategic bombers, would decrease the risk of the "bilateralisation" or "multilateralisation" of NATO nuclear policy—a situation in which the NATO Allies would prefer to send implicit nuclear messages through the U.S. alone rather than by consensus of the Alliance as a whole.

Refreshing Declaratory Policy

To renew the message of a cohesive and effective deterrence posture, the NATO Allies should create and publicise a commonly agreed narrative on the role of non-strategic nuclear weapons for the Alliance. This is because the dominant perception that nuclear weapons divide the Allies is to a great extent created by controversies about the continued presence of U.S. non-strategic weapons in Europe. The controversies were not resolved by the 2010 Strategic Concept or 2012 DDPR. Even though Russia's aggression against Ukraine has strengthened the case that U.S. weapons should remain in Europe, the U.S. should pursue a life-extension programme for the B-61, and that Europeans should maintain their DCA fleets, the perception of a lack of consensus on the usefulness of these weapons remains.¹⁴⁸ With the new narrative, the NATO members should explain the political role of U.S. nuclear weapons and should reinforce the message that they perceive these weapons to be credible. While the new narrative would be perceived as a setback by those who would like to further reduce (or eliminate) the presence of U.S. B-61 bombs in Europe, it could be used to respond to proposals to base U.S. nuclear weapons in Central and Eastern Europe or to qualitatively upgrade NATO's nuclear posture with new capabilities, such as air-launched cruise missiles.

At this point, there are no compelling arguments for basing U.S. nuclear weapons in Central and Eastern Europe. That they are in Europe demonstrate not only the U.S. commitment to America's NATO Allies on the continent but, which is equally important, also that a nuclear threat or attack against one ally would evoke a response by the Alliance as a whole, not only by the United States, the UK or France. So far, there has been no better way to demonstrate this joint commitment. However, while stationing U.S. weapons in Europe is important, changing their basing configuration to include deploying them in Central and Eastern Europe is not. For the foreseeable future, the current arrangements are sufficient. Placing U.S. nuclear weapons in Central and Eastern Europe might undermine NATO cohesion because it might be perceived as a reflection of doubts about the commitment of some of the Allies.

An examination of NATO's nuclear declaratory policy and broader adaptation to the new nuclear realities can be conducted within the framework of regular consultations within the Alliance. However, it also could be undertaken within the framework of a re-examination of the conclusions of the 2012 DDPR. It stated that "the review has shown that the Alliance's nuclear force

¹⁴⁸ See: K.-H. Kamp, *Nuclear Implications of the Russian–Ukrainian Conflict*, NDC Research Report, 03/15, April 2015, p. 5, www.ndc.nato.int/news/current_news.php?icode=789.

posture currently meets the criteria for an effective deterrence and defence posture” and that “in the current circumstances, the existing mix of capabilities and the plans for their development are sound.”¹⁴⁹ Russia’s aggressive actions against Ukraine and accompanying nuclear messaging have, however, marked a change in circumstances. The need for adaptation of NATO’s conventional capabilities has also demonstrated that “the existing mix of capabilities,” consisting of nuclear forces alongside conventional forces and missile defence, is only adequate if seen as identifying the three necessary elements but not on their particular importance in light of the new realities.

Although it may be argued that DDPR is flexible enough to accommodate any changes and NATO’s nuclear posture probably would not require change as radical as those needed for conventional forces, a re-examination of DDPR could play a role as a public policy tool to reinforce a message of confidence and credibility within NATO of being able to deliver deterrence to the public and to the outside world.

Re-opening this debate in the run-up to the NATO summit in Warsaw in 2016 likely would create a distraction from the other adaptation work underway. The Warsaw Summit declaration, though, could play a role as an important launching-point for a reconsideration of this review.

Re-designing Nuclear Communication Strategy

One of the most important questions that NATO faces today, and which was difficult even during the Cold War, is how to handle the problem of the public presentation of its nuclear policy. The NATO dilemma has been whether to “keep quiet” or “explain” its position.¹⁵⁰ The “keep quiet” approach has dominated in recent years.

The new nuclear landscape in Europe requires NATO to take an “explain” approach to the role of its nuclear deterrence posture, with a clear understanding that it “may have a decisive role in sustaining such policies or in undermining them if they are maladroit and unpersuasive.”¹⁵¹ In the new circumstances, as David Yost suggested in 1990 (and still relevant today), the NATO Allies are: “... increasingly obliged to articulate and defend more general security rationales for nuclear capabilities (such as war prevention and political stabilization) and to participate in far-reaching dialogues regarding the ethical, operational, arms-control, and international political-order issues associated with nuclear deterrence policies.”¹⁵²

NATO should return to the practice of regularly communicating to the public and outside world its thinking on nuclear matters. For this purpose, it should consider re-instituting the procedure of issuing official communiqués after the regular meetings of the Nuclear Planning Group. This would strengthen high-level political interest and public awareness about NATO’s nuclear deterrence role. Their routine nature would make the NATO Allies more disposed not only to talk about nuclear issues but also to keep the public informed about developments in the broader security environment that affects NATO members.

At the same time, NATO should continue to clearly indicate that it perceives Russia’s nuclear sabre-rattling as a matter of extreme concern. In addition, it should inform the public about the most provocative forms of Russian behaviour and explain why specific Russian actions are regarded as such. NATO members should not shy away from informing the public and governments about Russia’s provocative acts in part because it could lead to increasing international pressure

¹⁴⁹ “The criteria for an effective deterrence and defence posture” were, however, never publicly defined. “Deterrence and Defence Posture Review,” *op. cit.*, par. 31.

¹⁵⁰ D.S. Yost, “The Delegitimization of Nuclear Deterrence?,” *Armed Forces & Society*, vol. 16, no. 4, 1990, p. 505.

¹⁵¹ *Ibidem.*

¹⁵² *Ibidem.*

against Russia. Most likely, Russia will not care about any of NATO's critiques. However, only by going public can NATO provide a clear signal that Russia's nuclear posturing is unacceptable. Only public opprobrium can in the long term contribute to strengthening the norm against using nuclear weapons as a tool for coercive actions. Transparency about NATO's own activities could strengthen the Alliance's credibility in denouncing Russia's steps because it would provide a point of reference.

This public diplomacy approach has another added benefit in the context of the Nuclear Non-Proliferation Treaty and the widely supported Humanitarian Pledge to make nuclear weapons illegal.¹⁵³ Clearly, NATO nuclear policy is not aggressive, expansionary, or dangerous, especially in comparison with Russia. Still, during the NPT Review Conference in May 2015, many nations sought to put pressure on NATO to continue to disarm or change its nuclear policy. Very little attention was paid to the complete modernisation of Russia's nuclear arsenal, the increased role of nuclear weapons in Russia's defence policy and war planning, or Russia's dangerous nuclear messaging. By putting Russia's policy in sharp relief, the Allies could demonstrate that the real obstacle to reducing the role of nuclear weapons in Europe is not NATO's but Russia's policy. In the context of global disarmament, Russia's refusal to engage with the U.S. on further nuclear reductions could be seen as Russia's renouncement of its disarmament obligations under NPT. Far more could be done to direct the public, particularly those in NATO states, to gaze eastward to focus their efforts towards a world free of nuclear weapons.

NATO public statements about challenges posed by the increasing role of nuclear weapons in Russia's foreign policy might not alter the position of those who oppose any reliance of NATO on nuclear weapons. However, it can make their judgement about the context of NATO nuclear policy more informed, and, perhaps, would make them better understand the sensitivities of societies that feel most exposed to Russia's nuclear threats.

¹⁵³See: "Humanitarian Pledge. List of states that have pledged to fill the legal gap for the prohibition and elimination of nuclear weapons," www.icanw.org/pledge.

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