CHAPTER 12

NUCLEAR SHARING ARRANGEMENTS: MILITARY-TECHNICAL ASPECTS AND CONTROVERSIES

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As discussed in Chapter 1, the debate on the NATO nuclear sharing arrangements reemerged after the end of the Cold War. Judging by the bilateral exchanges between 2014 and 2021, first and foremost, Russia and the United States disagree on the history of the issue. While the official U.S. stance is that the Soviet Union explicitly agreed to the U.S. interpretation of Articles I and II compatibility with nuclear sharing arrangements, available archival documents and literature do not support such assertions and suggest that there was only a tacit agreement that questioning the U.S. interpretation in public would hinder the deal.

One of the ways to move forward is to analyze the military-technical aspects of nuclear sharing. This chapter regards nuclear sharing as a multi-layered phenomenon comprised of six major elements: the deployment of U.S. nuclear weapons in Europe, the availability of the U.S. nuclear stockpile to support NATO operations, the provision of appropriate training and information to the allies` servicemen, relevant decision making and consultative procedures within the NATO Nuclear Planning Group (NPG), SNOWCAT missions, and appropriate interpretations of the relevant NPT provisions.

The chapter seeks to answer three questions. Did the Soviet Union or other signatories of the NPT agree to all of the aforementioned elements? Did the USSR have its own nuclear sharing within the Warsaw Pact, which was in line with the U.S. understanding? Finally, if there indeed was a tacit understanding between Moscow and Washington, what prompted Russia to change its stance on the issue in the 2010s?

NATO Nuclear Sharing Arrangements: A Primer

Since 1954, the United States has been deploying its nuclear weapons in Europe. Initially, the nuclear weapons were to be employed only by U.S. military personnel and there was no clear concept of how the United States would coordinate nuclear policy with other NATO allies. The allies, in return, were not completely assured that the United States would use nuclear weapons in defense of Europe. These concerns gave rise to discussions within the U.S. policymaking circles on how to better engage NATO allies in regard to nuclear policymaking. In 1956, the United States started the deliberations on making nuclear capabilities, including means of delivery and appropriate training, available to NATO allies other than the United Kingdom. Such a move was intended to advance the objectives of MC.48 and achieve greater dispersal of nuclear forces[1]. At the same time, the Department of Defense made a more far-reaching proposal envisaging the transfer of custody over nuclear weapons to a multilateral body — a concept that later became known as multilateral nuclear forces (MLF).[2]

Conventionally, the nuclear sharing arrangements are analyzed as a reduced version of the MLF. However, in hindsight, the MLF proposal served as a political cover-up for the development of military-technical aspects of nuclear sharing. Relevant arrangements began to be made in 1955 when an Agreement for cooperation on atomic information was concluded between NATO members. Under the agreement, the United States would provide information necessary for (a) the development of defense plans; (b) the training of personnel in the employment of and defense against atomic weapons; and (c) the evaluation of the capabilities of potential enemies in the employment of atomic weapons.[3] In 1964 the agreement was

[1] [Assistant Secretary for European Affairs Burke] Elbrick to the Acting Secretary, "Program to Increase NATO Nuclear Capability and Secure Certain Base Rights," 7 November 1956, with attached memoranda and cover memorandum, including undated memorandum to President Eisenhower, Secret https://nsarchive.gwu.edu/dc.html?doc=6990045-National-Security-Archive-Doc-07-Assistant

[2] "Memorandum from the Secretary of State and the Secretary of Defense to the President, "Provision of Nuclear Capability to U. S. Allies," Draft, 7 November 1956," National Security Archive, accessed, May 26, 2021, https://nsarchive.gwu.edu/dc.html?doc=6990046-National-Security-Archive-Doc-08-Memorandum-from.

[3] "Tractatenblad van het Koninkrijk der Nederlanden," Ministerie van Buitenlandse Zaken, accessed May 26, 2021, https://zoek.officielebekendmakingen.nl/trb-1955-139

modified. The classified technical annex to the agreement envisaged that the United States would provide information on:

- Effects of nuclear weapons use;
- Information concerning the numbers, locations, types, yields, arming, safing, command, and control of atomic weapons which can be made available in support of NATO;
- Information regarding delivery systems.[4]

In 1957, the United States began to provide non-nuclear-weapons NATO members with dual-capable missiles (Honest John, Matador, etc) as well as conversion kits 'enabling fighter bombers to carry atomic bombs'[5] as well as to train the allies` military personnel to employ those weapons. In furtherance of the sharing arrangements, the United States concluded several stockpile agreements with the allies (the Netherlands, Italy, West Germany, etc) envisaging that nuclear weapons would remain under U.S. custody, yet be made available to non-nuclear allies in support of NATO operations.[6] It was at that time that the United States began to conclude agreements under the Atomic Energy Act Article 144b to allow for the sharing of restricted data and training equipment.[7][8]

The developments 'on the ground' were paralleled by the public discussion of the NATO Multi-Lateral Force (MLF) announced in December 1960. It was suggested that submarines with nuclear missiles on board would be manned by multinational crews from different NATO nations (see Chapter 1 for more details). The Soviet Union was

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[4] "Nuclear Planning Group," NATO, accessed May 26, 2021, https://www.nato.int/nato_static_fl2014/assets/pdf/2020/3/pdf/200305-50Years_NPG.pdf, p.55

[5] "C. Burke Elbrick to the Secretary, "NATO Atomic Stockpile," 3 September 1957, Secret," National Security Archive, accessed, May 26, 2021, https://nsarchive.gwu.edu/dc.html?doc=6990048-National-Security-Archive-Doc-10-C-Burke-Elbrick

[6] "Assistant Secretary of State for Congressional Affairs William Macomber to Thomas E. Morgan, Chairman of the House Foreign Affairs Committee, 24 August 1960, Secret," National Security Archive, accessed, May 26, 2021, https://nsarchive.gwu.edu/dc.html?doc=6990059-National-Security-Archive-Doc-21-Assistant

[7] "Acting Secretary of State Christian Herter to President Eisenhower, "Bilateral Agreements Under the Atomic Energy Act in Implementation of the NATO Atomic Stockpile Concept," 8 April 1959, Top Secret," National Security Archive, accessed, May 26, 2021, https://nsarchive.gwu.edu/dc.html?doc=6990054-National-Security-Archive-Doc-16-Acting

[8] Dmitry Treshchanin, Tetiana Iarmoshchuk, "The Last Mystery of Occupation. Did the Soviet Union Deploy Its Nukes in Czechoslovakia," *Current Time*, https://www.currenttime.tv/a/nuclear-weapons-czechoslovakia-ussr/29444985.html

strongly opposed to this concept, considering it as a potential form of proliferation of nuclear weapons by the United States because military personnel from non-nuclear states would have direct access to nuclear weapons.[9]

While the MLF concept never materialized, the *de facto* nuclear sharing continued to evolve. An important part of that process was the conclusion of stockpile agreements, formalizing the deployment of U.S. nuclear weapons on the national territories of its European allies. It was at that time that the relevant decision-making procedures started to be discussed. This issue first popped up during negotiations with Italy, when the Italian government requested assurances that it would be consulted before the actual use of nuclear weapons.[10]

After the Kennedy administration came into power, the United States realized that its custody over nuclear weapons deployed in Europe and mounted upon allied delivery vehicles was virtual: a scenario under which nuclear weapons could be used without U.S. approval was more than real. At that juncture the dispersal of nuclear capabilities to NATO allies was temporarily suspended to introduce permissive action links (PAL) incorporated into U.S. warheads, thus ensuring that those would not be launched without explicit U.S. order. After the PALs were installed, the deployment of such weapons continued.

The process was crowned in 1967 with the establishment of the Nuclear Planning Group coordinating the Alliance`s nuclear activities. The NPG is the senior body on nuclear matters in NATO and discusses 'specific policy issues associated with nuclear forces'. It reviews NATO nuclear policy and adapts it to changing security environments and new security developments, as well as corrects planning and consultation procedures. The NPG is responsible for discussions of policy issues related to nuclear forces, arms control,

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[9] Dmitry Treshchanin, Tetiana Iarmoshchuk, Robert Coalson, "The Unsolved Mystery Of Soviet Nukes In Czechoslovakia," Radio Free Europe/Radio Liberty, September 2, 2018, https://www.rferl.org/a/the-unsolved-mystery-of-soviet-nukes-in-czechoslovakia-/29466252.html; Marco De Andreis and Francesco Caloger. The Soviet Nuclear Weapon Legacy // Stockholm International Peace Research Institute. 1995. URL: https://www.sipri.org/sites/default/files/files/RR/SIPRIRR10.pdf. P. 4.; Mindy Weisberger, "Secret Soviet Bunkers in Poland Hid Nuclear Weapons," Live Science, https://www.livescience.com/64553-soviet-nuclear-bunkers-poland.html

[10] 'The U.S. Nuclear Presence in Western Europe, 1954-1962, Part II,' National Security Archive, accessed, May 26, 2021, https://nsarchive.gwu.edu/briefing-book/nuclear-vault/2020-09-16/us-nuclear-presence-western-europe-1954-1962-part-ii

and nuclear nonproliferation, including the discussion of the efficacy of NATO`s nuclear deterrence, 'the safety, security, and survivability of nuclear weapons, and communications and information systems'. In the past, the NPG consisted of a limited number of states, but as of 1979, all NATO state members participate in this group (with the exception of France that has no desire to participate). They use the NPG as a forum where countries without division into nuclear and non-nuclear countries develop NATO nuclear policy and make decisions on nuclear posture. The policies agreed in the NPG are the common position of all member states since all decisions here are made on the basis of consensus. Although previously all NPG proposals needed approval from the NDAC, since 1973, the NPG has taken over the NDAC`s functions and become the only official NATO organ working on nuclear issues. At the same time, the NDAC never officially ended.[11]

As discussed by various researchers, the nuclear sharing arrangements still provide for proliferation in times of war. As Adrian Fischer, the deputy director of the U.S. Arms Control and Disarmament Agency noted in 1966,

> the purpose of such a treaty would be to prevent the spread of nuclear weapons and, by this measure among others, to avoid the outbreak of nuclear war anywhere in the world. Once general hostilities have occurred, however, the point of prevention has been long passed, and the purpose of the treaty can no longer be served. In such circumstances the treaty would not apply, and a nuclear power would be free to transfer nuclear weapons to an ally for the use in the conflict.

The Tacit Understanding

On September 9, 1966, George Bunn, a legal counselor at the ACDA, informed Yuli Vorontsov, a counselor at the Soviet Embassy, that the U.S. side would not accept a nonproliferation treaty that would alter the existing arrangements on the deployment of nuclear weapons within NATO or would prohibit consultations on nuclear defense.[12] As recalled by Amb. Roland Timerbaev, the Soviet Ministry of Foreign

[11] Ibid.
[12] Timerbaev. P. 254

Affairs proceeded from the premise that consultations on nuclear matters would not be an obstacle to concluding a nonproliferation treaty, with the treaty omitting such activities.

This understanding was further confirmed by Gromyko and Rusk. The diplomats agreed that the existing arrangements within military alliances, including nuclear planning matters, would not be prohibited.

When recommending Articles I and II to NATO allies the United States made an interpretative statement that these provisions do not apply to means of delivery and do not outlaw consultations on nuclear defense. In addition, they do not foreclose the deployment of nuclear weapons on the territories of NATO allies if the 'two keys' principle applies to the decision-making on their deployment. According to Timerbaev, the details of what was meant by 'control' were never formally clarified during the bilateral or ENDC negotiations. The United States only informed the Soviet Union of its interpretations, with the issue of public Soviet acquiescence never raised. As Deputy Director of the ACDA Adrian Fisher states in his testimony to Congress, 'they [the Soviet Union] can`t be asked to agree about certain arrangements that we keep secret'.[13]

The United States, however, was informed that the Soviet Union did not consider itself bound by 'unilateral interpretations'. A statement to that effect was delivered on May 27, 1967, by the Soviet representative Roschin. At the same time, the Soviet Union indeed did not openly object to the essence of the U.S. interpretation. According to Timerbaev, such interpretation reflected the existing reality and had relevance for the interests of the Warsaw Pact, given that the Soviet nuclear weapons were deployed there.

The Soviet Union probably knew about the extent to which nuclear sharing had been elaborated. While the archives of the Soviet intelligence are currently unavailable for research, such information could have been accessed by Soviet diplomats, military, and intelligence officials from open sources. For instance, in 1965, an article detailing the already existing nuclear sharing arrangements within NATO was published in the *New York Times*.[14]

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[13] William Alberque, "The NPT and the Origins of NATO's Nuclear Sharing Arrangements," VCDNP, accessed May 26, 2021, http://vcdnp.org/wp-content/uploads/2017/05/Alberque-Briefing-NPT-Nuclear-Sharing-Arrangements.pdf

[14] John W. Finneyspecial, "We Are Already Sharing the Bomb," New York Times, November 28, 1965, https://www.nytimes.com/1965/11/28/archives/we-are-already-

Did the Soviet Union Have Its Own Nuclear Sharing?

In order to better apprehend if the Soviet Union had accepted the logic underlying the nuclear sharing arrangements, it is useful to analyze the Soviet policy on the deployment of its nuclear weapons outside of its national territory. The Soviet Union indeed deployed nuclear weapons in Europe, though its military planning put a premium upon Soviet-based medium-range ballistic missiles (MRBMs). Available evidence suggests that at least a dozen nuclear weapons storage facilities had been constructed in Poland, Czechoslovakia, and East Germany[15].

However, the host countries did not have access to the facilities. Moreover, the existence of such assets had been a strictly guarded secret known only to the highest military-political leadership of the host country. For the rest, the facilities were portrayed as 'communications nods'.[16]

There are allegations that the warheads would have been made available to the allies if the war was considered inevitable. However, no proof exists that nuclear warheads had ever been actually transferred to the allies. Moreover, nuclear information sharing within the Warsaw Pact never achieved the same degree of intensity as within NATO. For instance, the Bulgarian Armed Forces units trained for transporting nuclear weapons did not actually know the dimensions of the warheads.

The information available on the patterns of training is sporadic and based on limited sources. According to the oral history interviews with Czechoslovak generals,[17] the country`s air force had been trained to employ nuclear weapons. The U.S. CIA estimated

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sharing-the-bomb.html; Chuprin, Konstantin, "Yadernoe Bratstvo: «Visla» gotovilas` viyty iz beregov," Voenno-Promushenny Courier, July 18, 2016, https://vpk-news.ru/articles/31490

[15] "Soviet Depots for Nuclear Warheads in the GDR," Sightraider, accessed May 26, 2021, https://www.sightraider.com/soviet-depots-for-nuclear-warheads-in-the-gdr/

[16] Jan Richter, Olga Kalinina, "Soviet nuclear arsenal in Czechoslovakia," Radio Prague International, May 27, 2008, https://english.radio.cz/soviet-nuclear-arsenal-czechoslovakia-8595720#:~:text=The%20Soviet%20Army%20had%20nuclear,1970s%2C%20at%20the%20latest.%E2%80%9D

[17] "Oral History Interviews with Czechoslovak Generals: Soviet-Czechoslovak Military Planning in the Cold War," Parallel History Project On NATO And The Warsaw Pact, accessed May 26, 2021, https://www.files.ethz.ch/isn/108640/doc_10532_290_en.pdf

the prospects for actual deployment of Soviet nuclear warheads on the allies` missiles and dual-capable aircraft as 'possible, but unlikely'.[18]

From 1967 to 1991: Decline In Numbers Of U.S. Nuclear Warheads And Systems Deployed In Europe

In 1971, the deployment of U.S. nuclear weapons peaked with approximately 7,300 nuclear warheads deployed in Europe. In total, 11 nuclear systems were deployed in Europe: mines, Nike Hercules surface-to-air missiles (SAM), Honest John surface-to-surface missiles (SSM), Lance SSM, Sergeant SSM, Pershing IA, 155mm Howitzer, 8-inch Howitzer, Walleye air-to-surface missiles (ASM), anti-submarine warfare depth bombs, and gravity bombs delivered by dual-capable aircraft.[19] After 1971, the decline in the number of U.S. nuclear weapons began. From 1975 to 1980, the U.S. nuclear arsenal decreased by more than one thousand nuclear warheads and about 5,800 warheads. This decrease in the arsenal occurred after long debates in Pentagon between 1973 and 1974, as well as per a directive by the Secretary of Defense James Schlesinger. This decision was the first major revision of nuclear posture in Europe since 1954. The reason behind this decrease was due to a few different concerns: the debate over the physical security of the huge arsenal, the acknowledgment that the arsenal in Europe was excessive, a war between Greece and Turkey on which territories U.S. nuclear weapons were deployed, and a series of terrorist attacks in Europe.

By 1976, all U.S. tactical nuclear weapons were equipped with Permission Action Links (PALs)[20] to prevent unauthorized use of nuclear weapons. In 1985, the number of warheads slightly increased

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[18] "Soviet Planning for Front Nuclear Operations in Central Europe," National Archives, accessed May 26, 2021, https://www.archives.gov/files/declassification/iscap/pdf/2012-090-doc1.pdf

[19] "NATO's Nuclear Forces in the New Security Environment," North Atlantic Treaty Organization, accessed February 1, 2021, https://www.nato.int/nato_static/assets/pdf/pdf_topics/20091022_Nuclear_Forces_in_the_New_Security_Environment-eng.pdf, p. 2.

[20] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning," February 2005, https://www.nrdc.org/sites/default/files/euro.pdf, p. 24-26.

to 6,000 during the continuing Euromissile Crisis, and then the numbers continued to decline.

At the beginning of the 1980s, Sergeant SSM and Walleye ASM were withdrawn. So, there were 9 nuclear systems left. In 1983, two new systems were deployed in Europe: Pershing II and BGM-109G Gryphon ground-launched cruise missiles (GLCMs). In 1984, Canada removed U.S. nuclear weapons (Bomarc nuclear-armed anti-aircraft missiles and AIR-2 Genie nuclear-armed air-to-air missile[21]) from its territory, thus leaving NATO`s club of hosts of U.S. nuclear weapons.[22] By 1987, two more systems were withdrawn: mines and Honest John SSM. At the end of the 1980s, after the Intermediate-Range Nuclear Forces (INF) Treaty entered into force in 1988, all deployed Pershing IA, Pershing II, and GLCMs in Europe since 1983 were withdrawn and dismantled. What is more, NATO still conducted the retirement process of Nike Hercules and artillery warheads.

After the Cold War: In Search of Raison d`être

The unification of Germany, withdrawal of Soviet troops from Central and Eastern Europe, negotiations of the Treaty on Conventional Armed Forces in Europe, and domestic political changes in the Soviet Union led to changes in NATO planning and strategy. In July 1990, the London Declaration, adopted after the meeting of the North Atlantic Council, stated that there was a need to alter the way of thinking about defense, including the state of U.S. conventional and nuclear forces in Europe. It was decided that modifying the size and tasks of nuclear forces significantly reduced the 'role for sub-strategic nuclear systems of the shortest range,' eliminated 'all its nuclear artillery shells from Europe,' reduced NATO`s reliance on nuclear weapons, and made 'nuclear forces truly weapons of last resort'.[23]

However, at an NPG meeting in December 1990, it was stated that the nuclear weapons still played 'a key role in the prevention

[21] Thomas Nichols, Douglas Stuart, and Jeffrey McCausland, eds., "Tactical Nuclear Weapons and NATO," April 2012, https://www.jstor.org/stable/resrep12088.

[22] "Canada and NATO," North Atlantic Treaty Organization, accessed February 2, 2021, https://www.nato.int/cps/en/natohq/declassified_161511.htm%3FselectedLocale%3Den.

[23] "Declaration on a Transformed North Atlantic Alliance," North Atlantic Treaty Organization, accessed January 21, 2021, https://www.nato.int/cps/en/natohq/official_texts_23693.htm?selectedLocale=en.

of war and the maintenance of stability; European-based nuclear forces provided the necessary linkage to NATO`s strategic forces; and widespread participation in nuclear roles and policy formulation demonstrated Alliance cohesion and the sharing of responsibilities, and made an important contribution' to NATO nuclear posture.[24] So, the goal of NATO's nuclear policy was actually not altered significantly, and U.S. nuclear weapons were still going to stay on European soil to contribute to NATO`s strategy of preventing wars.

In the summer of 1991, 2,500 U.S. nuclear weapons were still deployed in Europe, and more than half of the arsenal were air-delivered bombs.[25] The five deployed nuclear systems in Europe included: Lance SSMs, 155mm Howitzers, 8-inch Howitzers, anti-submarine warfare depth bombs, and gravity bombs delivered by dual-capable aircraft.[26]

After the collapse of the Soviet Union, things changed. Mainly, the threat of Soviet invasion diminished. NATO officials publicly declared that the number and role of nuclear weapons in Europe were 'unprecedently' reduced. The United States modernized its nuclear war planning. U.S. nuclear weapons based on national territory were capable of covering all potential targets, which were covered by the U.S. nuclear weapons deployed in Europe. However, U.S. nuclear weapons were not fully withdrawn, and NATO nuclear planning and strategy were maintained. What is more, from the end of the 1990s to the beginning of the 2000s, many countries, which in the past were NATO`s potential targets, became NATO members.[27]

After the end of the Cold War, NATO declared that its nuclear forces did not target any specific countries. 'With the end of the Cold War, NATO terminated the practice of maintaining standing peacetime nuclear contingency plans and associated targets for its sub-strategic nuclear forces. As a result, NATO`s nuclear forces no longer target any country'.[28] However, it did not look as great as it sounded. Although aircraft capable of delivering nuclear weapons

[24] "Defence Planning Committee and Nuclear Planning Group, Brussels, 6–7 Dec. 1990, Final Communiqué," North Atlantic Treaty Organization, accessed January 21, 2021, https://www.nato.int/docu/comm/49-95/c901207a.htm.

[25] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning," p. 28.

[26] "NATO's Nuclear Forces in the New Security Environment", p. 2.

[27] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning," p. 5.

[28] "NATO's Nuclear Forces in the New Security Environment," p. 3.

was de-alerted (until 1995 readiness of dual-capable aircraft was measured in weeks, from 2002 — in months), NATO continued to have detailed nuclear strike plans 'for potential strikes... against specific countries'.

NATO also faced the issue of justifying the presence of U.S. weapons in Europe. One of the official explanations provided was that they deterred war. However, that deterrence was not enough. NATO nuclear planners started to search for a justification for the remaining nuclear weapons in Europe. The U.S. European Command (EUCOM) and U.S. Strategic Command considered the possible use of nuclear weapons 'outside of the EUCOM`s area of responsibility'.[29]

In the mid-1990s, the U.S. withdrew its nuclear weapons from two German air bases (Memmingen Air Base and Nörvenich Air Base), two Turkish bases (Akinci Air Base and Balikesir Air Base), and one Italian base (Rimini Air Base). However, the number of nuclear weapons was not reduced, they were only transfered to other European air bases with U.S. nuclear weapons (Ramstein Air Base in Germany, Incirlik Air Base in Turkey, Ghedi Torre Air Base in Italy). Moreover, the weapons were still supposed to be used and delivered by the host nation.

Justification of the remaining U.S. nuclear weapons in Europe was found in 1991 thanks to the Gulf War. The Gulf War raised concerns that rogue states could proliferate ballistic missiles and WMD against European states. This link between the proliferation of WMD by rogue states and U.S. forward-deployed nuclear weapons in Europe has gradually received more attention over the years.

At the same time, the reduction of U.S. nuclear weapons continued. In September 1991, U.S. President George H. Bush announced the withdrawal of all U.S. ground-launched short-range weapons deployed overseas and their destruction along with existing U.S. stockpiles of the same type and cease of 'deployment of tactical nuclear weapons on surface ships, attack submarines, and land-based naval aircraft during "normal circumstances"'.[30] There were only 1,400 air-delivered bombs left in Europe. Due to this number of bombs seeming excessive, the NPG decided to decrease the quantity

[29] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning", p. 6.

[30] "The Presidential Nuclear Initiatives (PNIs) on Tactical Nuclear Weapons at a Glance," Arms Control Association, accessed January 21, 2021, https://www.armscontrol.org/factsheets/pniglance.

to approximately 700 bombs. From this point forward, the NPG communique stated that only tactical weapons delivered by dual-capable aircraft would stay in Europe. Although the number of nuclear weapons declined, they were still considered as an essential part of NATO strategy for preventing war. Thus, conventional forces could not ensure that this goal was met.[31]

The Alliance`s 1991 Strategic Concept also reflected the importance of nuclear weapons. This concept stated that 'the presence of North American conventional and U.S. nuclear forces in Europe remains vital to the security of Europe, which is inseparably linked to that of North America'; 'nuclear weapons make a unique contribution in rendering the risks of any aggression incalculable and unacceptable. Thus, they remain essential to preserve peace'. It also mentioned that 'the fundamental purpose of the nuclear forces of the Allies is political' and their deployment in Europe provides 'an essential political and military link between the European and the North American members of the Alliance'. That is why it is important to 'maintain adequate nuclear forces in Europe'. Besides, the Strategic Concept also repeated the NPG communique`s idea about tactical nuclear weapons.[32] However, no clear explanation was provided for U.S. forward-deployment of nuclear weapons in Europe, nor why the nuclear weapons of Britain and France could not play a role in U.S. forward-deployed nuclear weapons.

In 1994, when the first U.S. nuclear posture review (NPR) was presented, John Deutch, the Deputy Secretary of Defense, stated that dual-capable aircraft to deliver nuclear weapons were maintained in Europe and acknowledged that the threat of Soviet conventional military superiority had disappeared. Nonetheless, he raised the issue of the large quantity of Russian tactical nuclear weapons.[33] The disparity in numbers of tactical nuclear weapons between the U.S. and Russia and the potential possibility of using these weapons against European targets, he alleged, concerned the U.S. He also mentioned the political role of U.S. nuclear weapons in Europe in maintaining

[31] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning", p. 30-32.

[32] "Towards the new Strategic Concept: A selection of background documents," North Atlantic Treaty Organization, accessed January 21, 2021, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_publications/20120412_Towards_the_new_strategic_concept-eng.pdf, p. 27, 31.

[33] The Russian tactical nuclear weapons will continue to be an issue trough 2000s and 2010s.

the cohesion within NATO.[34] At the same time, Deutch reluctantly recognized that NATO had no clear basis for the presence of nuclear weapons in Europe and that it was hard to make a decision on the proper level of readiness of nuclear forces within NATO.[35]

In December 1997, the argument about Russian tactical nuclear weapons was directly raised again by the United States Commander in Chief, European Command (USCINCEUR), claiming that they remained a threat to NATO. He emphasized that Russia had a great advantage in tactical nuclear weapons and associated delivery systems and tended to have a greater reliance on this type of nuclear weapons by Russia. Furthermore, the proliferation of weapons of mass destruction within the area of responsibility, the area of interest of the EUCOM, and the ability by potential proliferators to target European capitals were a growing concern and, thus, a reason for keeping U.S. nuclear weapons in Europe.[36]

The Alliance`s Strategic Concept, officially approved in 1999, cemented the status quo, reaffirming the role of U.S. nuclear weapons in Europe and highlighted the involvement of non-nuclear NATO States 'in collective defense planning in nuclear roles, in peacetime basing of nuclear forces on their territory and in command, control, and consultation arrangements'. Nuclear forces deployed in Europe were seen as 'an essential political and military link between the European and the North American members of the Alliance' and 'an essential link with strategic nuclear forces [of the United States first of all]'.[37]

One event, however, undermines the whole idea of 'NATO nuclear burden-sharing,' or 'an essential link'. This event was the removal of U.S. B61 bombs from the Greek Araxos Air Base in 2001, thus ending the 40-year-old deployment of U.S. nuclear weapons on the territory of Greece. The concrete reason for the withdrawal is unknown. Maybe it was a great financial burden for Greece to buy

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[34] "Briefing on Results of the Nuclear Posture Review, September 22, 1994," Federation of American Scientists, accessed January 21, 2021, https://fas.org/wp-content/uploads/media/Briefing-on-the-Results-of-the-Nuclear-Posture-Review.pdf, p. 15–16.

[35] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning," p. 45-46.

[36] "Msg (S/DECL x4), 121705Z Dec 97," Nukestrat, accessed February 1, 2021, http://www.nukestrat.com/us/afn/99-97_CINCEUR121297.pdf.

[37] "Towards the new Strategic Concept: A selection of background documents," p. 41, 46.

and maintain dual-capable aircraft to deliver B61 bombs.[38] The case of Greece and the fact that the number of host nation air bases that store U.S. nuclear bombs has declined from 12 bases in 1990 to only six on the territory of five host nations now puts the NATO argument about nuclear burden-sharing and maintenance of B61 in Europe under question.

During the 1990s and the 2000s, NATO modernized its nuclear war planning. This modernization gave NATO 'a capability to design and execute nuclear strike options that is greater than at any time during the Cold War'. At the same time, nuclear weapons were declared to be a weapon of last resort, along with the intention to reduce the role of nuclear weapons in NATO.[39]

All of the nuclear weapons that remained were gravity bombs B61-3, B61-4, and B61-10. At the beginning of the 2000s, there were the same number of approximately 480 U.S. nuclear weapons in Belgium, Germany, Italy, Netherlands, Turkey, United Kingdom (110 of these bombs were stored in the United Kingdom, a nuclear-weapon-state). 300 out of the 480 bombs were supposed to be delivered by U.S. F-15E and F16C/D aircraft while the other 180 bombs could be delivered by Belgian, Dutch, and Turkish F-16s, as well as by German and Italian PA-200 Tornados. Each F-15E is capable of delivering up to five bombs. The delivery capability of F-16C/D and PA-200 is up to two bombs.

It is worth noting that there are bases (Nörvenich Air Base in Germany, Akinci Air Base and Balikesir Air Base in Turkey, Araxos Air Base in Greece) from which U.S. nuclear weapons were withdrawn, but the weapons storage and security systems (WS3) were not dismantled and are in caretaker status. Theoretically, U.S. nuclear weapons can be brought back to these bases.

The B61 bombs in Europe have been modified and equipped with new capabilities several times after the end of the Cold War. In 1995, the alteration of all B61 deployed in Europe started.[40]

By 2002, the safety, use control, and reliability of the B61s were improved.[41] The purpose of these changes was to upgrade, refurbish,

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[38] "Towards the new Strategic Concept: A selection of background documents," p. 55–56.

[39] Ibid, P. 41–42.

[40] Ibid, P. 15–20.

[41] "Nuclear Weapons," *Lab News*, Vol. 55 (February 2003), https://www.sandia.gov/LabNews/LN03-07-03/LA2003/la03/nuclear_story.htm.

or replace components of the weapons to keep them safe and reliable. An important part of the B61s` alteration is the provision of the Code Management System (CMS) for these bombs. The CMS provided greater flexibility and speed of the weapons` use-control code management capabilities and equipment. As it was pointed out in Sandia National Laboratory`s news, '... maintenance and logistic burdens will be eased, with personnel training and operation simplified'.[42]

Apart from the storage and such modernization activity, from the 1960s till 2021, NATO has conducted nuclear strike training to have a credible wartime nuclear strike mission. Pilots of non-nuclear NATO States also practice their skills in dropping nuclear bombs. In 1994, the United States Air Forces in Europe (USAFE) maintained 15 locations for nuclear weapon drills in eight countries: Belgium, France, Germany, Italy, Netherlands, Turkey, Tunisia, and the United Kingdom.[43] At least until 1997, these drills were conducted with real nuclear weapons on board. An example of such exercises is the annual Steadfast Noon exercises or the training of NATO States on defending themselves with nuclear weapons. These exercises include many objectives. One of them is training with the use of nuclear-capable fighter bombers, which can be armed with the B61 nuclear gravity bomb. Military personal is trained on how to safely transport B61 bombs from underground storage to the aircraft and mount them under the fighter bombers. The last exercise was conducted in October 2020 on German soil with the participation of Belgian, Dutch, and Italian fighter planes.[44]

Now, according to the Nuclear Threat Initiative, there are about 150 American B61 tactical bombs in Europe. Six facilities with U.S. nuclear weapons are located in five countries: Belgium (10—20) (Kleine Brogel Air Base), Germany (10—20) (Büchel Air Base), Italy (60—70) (Aviano Air Base and Ghedi Torre Air Base), The Netherlands (10—20) (Volkel Air Base) and Turkey (60—70) (Incirlik Air Base).[45]

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[42] Ken Frazier, "Modernized System to Manage Codes for Nation's Nuclear Weapons Complete," *Lab News*, Vol. 54, no. 1 (January 11, 2002), https://www.sandia.gov/LabNews/LN01-11-02/key01-11-02_stories.html.

[43] Hans Kristensen, "U.S. Nuclear Weapons in Europe: A Review of Post-Cold War Policy, Force Levels, and War Planning," p. 42.

[44] "Deutsche Luftwaffe Trainiert Für Atomkrieg," *Bild*, October 13, 2020, https://www.bild.de/regional/koeln/koeln-aktuell/geheime-nato-uebung-deutsche-luftwaffe-trainiert-fuer-atomkrieg-73393040.bild.html.

[45] "Nuclear Disarmament NATO," The Nuclear Threat Initiative, accessed February 5, 2021, https://www.nti.org/analysis/articles/nato-nuclear-disarmament/.

The B61 bombs are designed to be delivered by American F-15 E, F-16 C / D, Belgian, Dutch, and Turkish F-16s, as well as the German and Italian PA-200 Tornado.[46] It is important to understand that although U.S. nuclear weapons are located in the national territories of five NATO States, the responsibility for maintaining and protecting U.S. nuclear bombs stored in Europe lies with the U.S. Air Force. Moreover, although this arsenal can be installed on the aircraft of the country in which it is stored in the event of a war, these nuclear weapons remain under the command and control of the United States. Only the United States, as officially stated, decides whether to use it or not. The B61 bomb includes several security mechanisms designed to prevent unauthorized use:

1) an aircraft is equipped with Aircraft Monitoring and Control (AMAC) computers that provide safing, arming, and fusing functions of the bomb;
2) a pilot can input the Permissive Action Links code arming the bomb only through the AMAC system;
3) activation codes consist of a 6-12-digit number with a limited number of attempts to enter and come directly from Washington DC.[47]

Although the United States cooperates with NATO members in developing NATO nuclear policy, holds meetings and joint nuclear military exercises, and stores B61 bombs in European countries, in the end, the United States makes the decision to use the nuclear weapons.

In 2017, the United States announced plans to upgrade its existing B61 bombs to modification 12 as part of the Life extension program. The program allows keeping these bombs in the arsenal for the next 20-30 years.[48] The first production unit of the weapon will be completed in the fiscal year 2022.[49] The modernization will be fully

[46] "Nuclear Disarmament NATO," The Nuclear Threat Initiative, accessed February 5, 2021, https://www.nti.org/analysis/articles/nato-nuclear-disarmament/.

[47] Kyle Mizokami, "America Built 3,155 B61 Nuclear Bombs. Around 50 Are Still in Turkey," *The National Interest*, October 19, 2019, https://nationalinterest.org/blog/buzz/america-built-3155-b61-nuclear-bombs-around-50-are-still-turkey-89526.

[48] "U.S. Nuclear Modernization Programs," Arms Control Association, accessed February 5, 2021, https://www.armscontrol.org/factsheets/USNuclearModernization#snapshot.

[49] Ankit Panda, "U.S. Air Force's F-15E Completes Certification to Deliver B61-12 Nuclear Weapon," *The Diplomat*, June 9, 2020, https://thediplomat.com/

completed in 2025.[50] The B61-12 will have new combat characteristics, updated security and radar components, modified power supplies, etc.[51] One of the key points is the modernization of the tail section of the aerial bomb (removal of the parachute, installation of an improved GPS and inertial guidance system), which actually makes it a high-precision weapon, and also allows the bomb to be equipped with a nuclear warhead of lower yield. The accuracy can reach 30 meters. Also, due to the new modification, carrier aircraft do not need to fly in close proximity to the target, thereby increasing the chance of avoiding falling into the enemy`s air defense range.

Reemergence of Russian-U.S. Debate on Nuclear Sharing

The Soviet Union did not openly criticize nuclear sharing after entry into force of the NPT. Neither did the Russian Federation in the 1990s-2000s. However, in 2014 the Russian approach to this question changed, and Russia started to speak out against NATO nuclear sharing arrangements by pointing out that such arrangements violate Articles I and II of the NPT.[52]

Under Article I of the NPT, 'each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly'. In the Russian view, nuclear sharing is not compatible with this obligation since the United States gives indirect control over nuclear weapons and direct control in case of real war. In addition, Article II, which specifies that NNWS undertake 'not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive

2020/06/us-air-forces-f-15e-completes-certification-to-deliver-b61-12-nuclear-weapon/#:~:text=The%20B61%20mod%2012%2C%20or,completion%20in%20fiscal%20year%202022.

[50] "B61-12 Life Extension Program," U.S. Department of Energy, accessed February 5, 2021, https://www.energy.gov/sites/prod/files/2020/06/f76/B61-12-20200622.pdf.

[51] "U.S. Nuclear Modernization Programs."

[52] Statement by Mikhail I.Uliyanov, Acting Head of the Delegation of the Russian Federation at the 2015 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (General debate) // Reaching Critical Will. 2015. URL: https://reachingcriticalwill.org/images/documents/Disarmament-fora/npt/revcon2015/statements/27April_Russia.pdf.

devices or of control over such weapons or explosive devices directly, or indirectly' is violated. In this case, NATO NNWS violate it by participating in nuclear sharing.

An analysis of the documents from the three PrepComs shows that Russia is not the only country that has concerns about U.S. nuclear weapons in Europe and the deployment of nuclear weapons outside its national territories. Moreover, the concerns regarding nuclear sharing in the NPT Review Process data back to the 1985 Review Conference. All concerned countries can be divided into two groups: those that directly accuse the United States of the existing practice and those that speak about the problems in disarmament in general. The main countries from the first group are China, Cuba, Iran, Non-Aligned Movement. They believe that U.S. nuclear weapons, as well as NATO nuclear sharing arrangements, seriously violate the NPT, leading to proliferation, and U.S. nuclear weapons need to be returned to the national territory of the country. Special attention should be paid to the Non-Aligned Movement in view of the fact that this organization represents the opinion of 120 countries, where decisions are made by consensus. The second group of countries, which includes the Philippines, Kazakhstan, Republic of South Africa, Syria, opposes the modernization of nuclear weapons in general.[53]

The fact that nuclear sharing has existed for more than 40 years, and references to certain 'understandings' that were reached during the negotiation of the NPT text, do not make it more acceptable for Russia.[54] Russia also rejects the argument that the Soviet Union and the United States, before the conclusion of the NPT, reached a mutual understanding, according to which Moscow decided not to object to NATO nuclear sharing arrangements. In addition to Russia and the United States, more than 180 states are parties to treaty. In addition to Russia, many other states (the Non-Aligned Movement,

[53] Nikita Degtyarev, Vladimir Orlov. NATO nuclear sharing arrangements and the issue of compliance with the obligations of the Member States of the Treaty on the Non-Proliferation of Nuclear Weapons // PIR Center. 2020. (In Russian) URL: https://www.pircenter.org/articles/2224-880793.

[54] Respond of the official representative of the Russian Foreign Ministry Lukashevich A.K. to a media question regarding the implementation of NATO "joint nuclear missions" // The Ministry of Foreign Affairs of the Russian Federation. 2015. (In Russian) URL: https://www.mid.ru/web/guest/adernoe-nerasprostranenie/-/asset_publisher/JrcRGi5UdnBO/content/id/1108907.

China, Iran, etc.) criticize NATO nuclear policy as incompatible with the NPT.[55]

Currently, the United States keeps a low profile on the nuclear sharing issue within the NPT Review Process, reiterating that the practice predates the NPT and is fully consistent with the Treaty. Moreover, the United States maintains that the arrangements benefited the nuclear nonproliferation regime, since the existing U.S. nuclear umbrella and U.S. nuclear weapons in Europe prevented the states involved in this policy to refuse to create their own nuclear weapons.[56]

What Prompted the Reappraisal of the Russian Position?

Several factors may account for the reappraisal of the implicit understandings on NATO nuclear sharing.

Under Presidential Nuclear Initiatives of the early 90s, the Russian Federation withdrew its remaining tactical nuclear weapons (TNWs) from operational service. TNWs were 'removed from service and concentrated in centralized storage facilities in the Russian territory,' and were de-alerted.[57] Although Russia eliminated a significant part of its TNWs arsenal, removed the rest from their delivery vehicles, and stored at the central storage facilities in the national territory, the United States, as discussed above, did not stop forward deployment of the B61. On the contrary, these bombs were and are still being modernized and deployed in direct proximity to Russian

[55] Interview of Mikhail Ulyanov, Director of the Department for Nonproliferation and Arms Control of the Russian Ministry of Foreign Affairs, to the Kommersant newspaper, published on October 19, 2015 // The Ministry of Foreign Affairs of the Russian Federation. 2015. (In Russian) URL: https://www.mid.ru/web/guest/predotvrasenie-gonki-vooruzenij-v-kosmose/-/asset_publisher/wD2rNsftQhho/content/id/1878994.

[56] Comment by the Information and Press Department on the U.S. Report on Adherence to and Compliance with Arms Control, Non-Proliferation, and Disarmament Agreements and Commitments // The Ministry of Foreign Affairs of the Russian Federation. 2019. URL: https://www.mid.ru/web/guest/situacia-vokrug-dogovora-o-rsmd/-/asset_publisher/ckorjLVIkS61/content/id/3633105#0.

[57] Statement by Mikhail I. Uliyanov, Head of the Delegation of the Russian Federation to the Preparatory Committee for the 2015 Review Conference of the Parties to the Treaty on the Nuclear Non-Proliferation of Nuclear Weapons // Reaching Critical Will. 2014. URL: https://www.reachingcriticalwill.org/images/documents/Disarmament-fora/npt/prepcom14/statements/30April_RussianFederation.pdf.

borders.[58] This creates imbalances affecting Russian national security. U.S. B61 bombs in Europe are not just a political symbol that proves U.S. commitment to NATO, they are not just means of deterrence, they are real battlefield weapons that can be employed against Russia.[59]

Moreover, the United States is modernizing B61 bombs by adding variable yield option and increasing their accuracy. This design modernization indicates the U.S. willingness to use it against military targets in heavily populated areas since this weapon is more 'ethical' and more 'usable'. All this lowers the nuclear threshold which can lead to catastrophic consequences. Russia has to take this into account when planning measures to ensure its national security[60] because Russia`s security is determined not only by the balance of the strategic nuclear arsenals of two countries (Russia and the United States) but also by other factors, including the deployed American TNW in Europe.[61] The issue seems to be all the more important for Russia since in fact there is an erasure of the rather conditional border between strategic and non-strategic nuclear weapons in the doctrinal guidelines of the United States and NATO.[62]

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[58] Comment by the Information and Press Department on the new U.S. Nuclear Posture Review // The Ministry of Foreign Affairs of the Russian Federation. 2018. URL: https://www.mid.ru/kommentarii/-/asset_publisher/2MrVt3CzL5sw/content/id/3054726?p_p_id=101_INSTANCE_2MrVt3CzL5sw&_101_INSTANCE_2MrVt3CzL5sw_languageId=en_GB.

59 Speech by Deputy Minister of Foreign Affairs of Russia Sergei Ryabkov on the topic "Issues of military security in Russia-NATO relations" at the Civic Chamber, September 22, 2016 // The Ministry of Foreign Affairs of the Russian Federation. 2016. (In Russian) URL: https://www.mid.ru/web/guest/ukraine/-/asset_publisher/HfLxJk5I2xvu/content/id/2461787.

[60] Director of the Foreign Ministry Department for Non-Proliferation and Arms Control Mikhail Ulyanov's interview with the Interfax news agency, December 19, 2017 // The Ministry of Foreign Affairs of the Russian Federation. 2017. URL: https://www.mid.ru/web/guest/ukraine/-/asset_publisher/HfLxJk5I2xvu/content/id/2998923.

61 INF, New START and the Crisis in U.S.-Russian Arms Control // The Ministry of Foreign Affairs of the Russian Federation. 2019. URL: https://www.mid.ru/web/guest/maps/us/-/asset_publisher/unVXBbj4Z6e8/content/id/3624875.

[62] Interview of the Director of the Foreign Ministry Department for Non-Proliferation and Arms Control Ermakov V. I. to the international news agency "Interfax", February 11, 2020 // The Ministry of Foreign Affairs of the Russian Federation. 2020. (In Russian) URL: https://www.mid.ru/web/guest/about/professional_holiday/news/-/asset_publisher/I5UF6lkPfgKO/content/id/4033688.

Another factor that may have prompted Russia to raise the issue of nuclear sharing in public is related to the considerations of arms control. Since 2010, the United States has put a priority on adding Russia`s TNWs in future arms control negotiations. Using the withdrawal of U.S. nuclear weapons as a prerequisite for any negotiations on TNW reinforces the Russian stance on the issue. In 2008, Russian Ambassador, Sergei Kislyak, admitted in an interview to Arms Control Today that the withdrawal of American TNW from Europe would be a serious force in changing the position of the Russian Federation on reducing or eliminating its TNW.[63]

Finally, the reappraisal of the stance on nuclear sharing may be considered as a Russian response to the U.S. accusing Russia of violating the Budapest memorandum and the INF Treaty.

Conclusions

The U.S.-Russian debate on U.S. nuclear weapons in Europe and on the deployment of nuclear weapons outside national territories is one of many issues in the sphere of arms control and nonproliferation between the two states. Although positions of NATO member states should be considered, it can be said that since U.S. nuclear weapons are involved, the United States is the country that makes the final decision on the issue. This problem is aggravated because of diametrically opposed views on the international situation, mutual mistrust, fear of each other, disinformation, and lack of political will to solve the problem.

In the 1950s and 1960s, the United States and NATO gradually developed and institutionalized nuclear sharing arrangements to as a counterweight against the military superiority of the socialist camp, to prevent proliferation of nuclear weapons among European states, as well as to strengthen the unity of NATO. The evolution of nuclear sharing altered from the U.S. monopoly on NATO nuclear planning in the 1950s to the creation of the NDAC and the NPG at

[63] Interview with Sergey Kislyak, Russian Ambassador to the United States // Arms Control Association. 2008. URL: https://www.armscontrol.org/interviews/2008-11/interview-sergey-kislyak-russian-ambassador-united-states.

the end of 1966, the platform where all NATO members started to actively participate in nuclear planning.

Reaching its peak in 1971, the number of U.S. nuclear weapons in Europe was drastically reduced. Also, the alert level of delivery systems was reduced, in addition to the number of host bases and host countries. At the same time, the maintained weapons and storage facilities, as well as nuclear planning, are still being modernized and improved even after the end of the Cold War. What is more, the goal of these weapons slightly changed — it moved from fighting the Soviet threat to fighting the proliferation of weapons of mass destruction by rogue states and the imbalance in the number of tactical nuclear weapons in Russia. NATO nuclear sharing arrangements have found a new raison d`être, with this position unlikely to change in the near future.

Russia and the U.S. have different perspectives on the history of the issue. While the United States posits that the Soviet Union agreed with the United States that NATO nuclear sharing arrangements were compatible with the NPT, Russia states that there was no mutual agreement on this issue. During the drafting of the NPT, the two countries discussed NATO nuclear policy frequently. The United States and the USSR had disagreements and concerns while making the text of the Treaty, but they needed a nonproliferation treaty, so both sides made concessions. The American side forwent the idea of the MLF, agreed to not give national control to any country of American nuclear weapons, and that U.S. nuclear weapons can be used only by the United States. The Soviet side softened its position on NATO nuclear sharing arrangements with the possibility of returning to the discussion of this topic later.[64]

In 1970 — 1991 the Soviet Union did not challenge the U.S. understanding of the agreement since Moscow was also deploying nuclear weapons on the territories of its allies. At that time, the differences and divergencies between the U.S. and Soviet approaches could be summarized as follows:

[64] William Alberque. The NPT and the Origins of NATO's Nuclear Sharing Arrangements. P. 39.

	Soviet Union	United States
Deployment of nuclear weapons outside of national territory	Yes	Yes
Actual deployment of nuclear weapons on allied delivery vehicles	No	Yes
Training	Probably yes	Yes
Nuclear information sharing	Extremely limited	Yes
Decision-making and consultations	Limited	Yes
Possibility of NW transfer to allies in a general war	Not excluded	Yes

After the end of the Cold War, the situation changed drastically. In the late 1980s, the Soviet Union withdrew its nuclear weapons from Europe and departed from the aforementioned practices. The United States, in its turn, retained the forward presence of its nuclear weapons in Europe. The motivations for that range from the alleged need to counter the Russian non-strategic nuclear arsenal to preserving the cohesion within NATO. Regardless of the specific motivation, the presence of deployed, combat-ready nuclear weapons in Europe created imbalances threatening Russian national security. That is why Russia had to depart from the previous understanding that the NPT interpretations underlying the nuclear sharing arrangements in public. Under new international conditions, Russia (and not only Russia) understands Articles I and II differently and more straightforwardly.

This dispute on whether nuclear sharing arrangements comply with or violate the NPT is currently unlikely to be resolved within the NPT Review Process since the debate deals with two gaps in the nuclear nonproliferation regime.

Gap 1: there is no clear-cut understanding in the NPT regulating the notion of control over nuclear weapons. That is why the United States has elaborated their interpretation of control as allowing for mounting nuclear weapons on aircraft or other delivery vehicles in possession of a non-nuclear-weapons state.

Gap 2: Unlike other disarmament treaties (Geneva protocol, CWC), the NPT does not deal with the notion of use of nuclear weapons. That is why within the nuclear sharing arrangements NNWS may technically employ nuclear weapons, which are not in their possession. The United States points out that even with nuclear weapons

on the combat aircraft the pilot of NNWS cannot activate it without permission codes from Washington, which means that the U.S. nuclear weapons are still under sole U.S. control and only the United States can decide whether to use the nuclear bomb or not. However, after getting the permission code from Washington there is only a pilot of NNWS and a nuclear bomb on the board. After all, a nuclear bomb is nuclear not due to the activation codes sent from Washington, but due to the fissile material inside it.

It would be idealistic and naïve to assume that the use of nuclear weapons could somehow be regulated within the NPT context. NWS would never agree to limit their right to employ nuclear weapons, while NNWS would never agree to introduce a clause, theoretically allowing NWS to use NW.

In the near term, only unilateral changes may help to break an impasse over the nuclear sharing issue. Oddly enough, the TPNW, if joined by Belgium or another nuclear sharing participant, may be helpful in this regard since it prohibits the deployment of nuclear weapons outside of national territories.