

5. SECURITY STUDIES

NUCLEAR WEAPON AS A TOOL OF DETERRENCE STRATEGY OF THE SELECTED COUNTRIES

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ABSTRACT

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Nuclear weapons are a historically acknowledged factor of security development and maintenance of the strategic balance. Therefore, in spite of programs preventing its proliferation, most states having such weapons modernize and develop their nuclear arsenals, perceiving it as a sign of power and a guarantee of security. This paper presents an evaluation of circumstances inducing a state to possess nuclear weapons, in consideration of both the positive and negative consequences of their possession. In the author's view, studying this document should at least evoke a reflection on the development of nuclear weapons as a means of forming modern relations of security.

KEYWORDS

Nuclear weapons, legal restrictions of nuclear weapon use, modernization of the nuclear arsenal.

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Introduction

Although 70 years have passed since the first use of nuclear weapons, irrespective of the tragic consequences of this occurrence, they continue to play an important role in global politics. Moreover, there is a large group of states aspiring to possess them. North Korea – an insignificant totalitarian regime until quite recently – has become a political entity remaining in the center of attention of world powers: the United States, the Russian Federation, China, Japan and South Korea, because of its possession of a nuclear weapon. Although this state does not have much to offer, it drives a hard bargain. Its only expectations concern the price that the world is ready to pay for its denuclearization. The expectations are high. North Korea expects

the lifting of political and economic sanctions and, consequently, the coverage of all costs of social and political-economic transformation of the state. In the hands of North Korea's leader, the nuclear weapon is the only bargaining tool, but a very strong one. It is a kind of 'trump card' about which partners may not know everything, but with which they have to reckon. Is it not an enticing prospect for other quarrelsome states? Iran perceives nuclear technology issues in a similar way, presenting a new attitude in this matter¹. Today, nobody doubts the fact

¹ 'The government of Iran does not exclude the possibility of terminating the Nuclear Non-Proliferation Treaty (NPT) if stricter sanctions are imposed on Tehran,' stated the Iranian minister of foreign affairs, after: <http://wgospodarce.pl/informacje/62980-iran-juz-gotowy-na-bombe-atomowa>, access: 30/04/2019.

that the possession of a nuclear weapon is a guarantee of security. It does not matter whether these guarantees may sometimes be “fragile”. Here I will refer to the denuclearization of Ukraine. For the return of nuclear arsenals developed in the territory of Ukraine to the Russian Federation, the Budapest Memorandum having the force of a treaty was signed². It was supposed to guarantee the sovereignty and territorial integrity of Ukraine. It is worth noticing that in 2014, after its annexation of the Crimea, Russia refused consultation in this matter, and the signatories to the treaty did not show the determination expected by the Ukrainian party in spite of appeals by the Ukrainian Parliament³. Thus, we can ask a question: what has been left of international guarantees? Sadly, not much; the only available option is to make diplomatic attempts, but do they matter at all in the face of a real threat of using nuclear weapons being at the disposal of the endangered state? It is difficult to estimate what actions Russia would dare to undertake against Ukraine if it realized that its neighbor has a nuclear potential and is also driven to despair with the existing threat to its sovereignty. Only political speculations remain – there are no other examples indicating the conditions of possession and voluntary disposal of nuclear weapons and the impact of this act on further policy. However, the cases of North Korea and Iran are different from the situation of Ukraine, so there is no basis for considering them jointly.

² Budapest Memorandum (Budapest Memorandum on Security Assurances) – an international agreement not having the status of a treaty, signed in Budapest in December 1994, under which the United States, Russia and Great Britain have undertaken to respect the sovereignty and territorial integrity of Ukraine and to refrain from any threats of using force against its independence and territorial integrity, and Ukraine has undertaken to hand over its strategic nuclear weapons to Russia, after: https://pl.wikipedia.org/wiki/Memorandum_budapeszteńskie, access: 30/04/2019.

³ <https://www.defence24.pl/memorandum-budapesztanskie-pozorna-gwarancja-bezpieczenstwa-dla-ukrainy>, access: 30/04/2019.

The aim of this work is to analyze political and military relations with regard to nuclear weapons. In the course of studying materials, the author observed already at the beginning of the analysis that nuclear weapons have been an essential element of adopted policy, a component of military doctrines and strategies and, most of all, a strategic element of deterrence. Therefore, the natural consequence of the author’s reflections was the adoption of selected research issues, including: 1) What is the place and role of nuclear weapons in doctrines of “nuclear” states? 2) How are nuclear weapons perceived in NATO’s strategic conceptions? 3) What are legal restrictions with regard to the use of nuclear weapons?

Nuclear policy general assumptions

At the NATO summit in Prague in 2009, the President of the United States of America made this significant statement: “...we will reduce the role of nuclear weapons in our national security strategy, and urge others to do the same”⁴. The aim of these words was to suggest that the period of the perception of security in terms of possession of nuclear weapons was coming to an end. As one could assume, the world without nuclear weapons is a world free of all kinds of dangers arising from their very existence. When making this historical declaration, President Barack Obama may have had doubts about its likelihood himself, adding immediately that the implementation of this vision might take a few decades, but it is feasible. Unfortunately, this vision was an illusion – or maybe only a PR trick of the newly elected president aspiring for a Peace Nobel Prize?

⁴ After: S. Zarychta, *Broń jądrowa w kształtowaniu bezpieczeństwa 1945-2015 [Nuclear weapons in the formation of security in the years 1945-2015]*, Bellona, Warszawa, 2016, see also: <http://www.politykaglobalna.pl>, access: 20/03/2018.

Ten years have passed, and little has changed in the nuclear policy of NATO, the United States and the Russian Federation. As during the Cold War period, it is again used as a political deterrent and for the reinforcement of diplomatic efforts in international relations. Is a new arms race beginning to form? Probably yes – at least many military analysts think so. This is confirmed by the unilateral suspension of the INF treaty by the United States since February 2nd, 2019; as a consequence, Russia did the same. This means the beginning of the end of the treaty establishing the international control of the proliferation of nuclear weapons deployed on intermediate-range ballistic missiles (500-5,500 km) in Europe⁵.

In his address to both houses of the Russian parliament in January 2018, Vladimir Putin used the words that leave no doubt any more: *“Russia has started an active phase of testing a new intercontinental Sar-*

*mat ballistic rocket. The new missile is to replace Voivode – currently the most powerful Russian intercontinental ballistic missile.”*⁶ Putin stated that Russia would take further steps in response to the growth of the American anti-rocket defence system. This did not escape the attention of NATO's leaders. At his meeting with the President of Poland Andrzej Duda, Jens Stoltenberg stated that Russia is ready and wants to use force to change borders within Europe. In the arms race that has already started, Russia seems to be winning. In response to any kind of presence – even a symbolic one – of NATO forces in Baltic states and Central & Eastern Europe, Russia builds strike forces close to the external borders of the Alliance. In spite of the apparent political dialogue (John Kerry's talks with Sergei Lavrov and Vladimir Putin), security relations have not been so tense since the mid 1980s. In the military rhetoric of the Russian Federation, the NATO states and the United States have become a “very probable opponent”.⁷ It seemed that after the Cuban crisis in 1962, when the real threat of a nuclear conflict existed, the world came to its senses and that ‘nuclear states are not at war with one another’. Did that really happen? No. The nuclear threat is still very real. Having joined a group of states with a nuclear potential, North Korea does not intend to resign from exposing its power due to the possession of nuclear weapons. As the leader of North Korea, Kim Dzong Un, has recently remarked that his state will use nuclear weapons against the United States (or any other enemy) only for the defense

⁵ The Intermediate-Range Nuclear Forces Treaty (INF) signed by the US President Ronald Reagan and General Secretary of the Communist Party of the USSR Mikhail Gorbachev in 1987 allowed for the elimination of over 2,600 missiles and ended the years-long arms race in Europe. The United States initially announced its intention to terminate the INF treaty in 2014, when it criticised Russia for violating its terms. Negotiations with Russia failed, because the United States demanded the destruction of 9M729 cruise missiles (capable of carrying nuclear and conventional warheads) and their launchers in a transparent manner. Russia claimed that this system was consistent with the treaty, since its range was below 500 km. However, Russia refused to present the missile for evaluation by a team of experts. On January 23rd, 2019, before the lapse of the American ultimatum, launchers, starter containers and functional schemes were demonstrated, but without a missile. The Americans regarded these actions as unreliable and propaganda-oriented, particularly because their objections had already been known at the end of 2017. Another argument for the suspension of the treaty by the United States was the fact that the treaty itself was ineffective because it limited the USA's possibility of reacting to the threat from China, which is not a party to the treaty and is expanding the arsenal prohibited by it, thus constituting a growing threat to the USA. Therefore, the suspension of the treaty would accelerate the modification of the existing missiles and the development of new missiles that have been prohibited by the valid treaty so far, after: <http://www.pism.pl/publikacje/komentarz/nr-10-2019>, access: 3/05/2019.

⁶ The Russians revealed a new intercontinental fifth-generation rocket: RS-28 “Sarmat”. The new ballistic missile is to replace old-generation missiles R-36M2 “Voivode”, known as SS-18 Satan in NATO, after: <http://www.space24.pl>, access: 20/03/2018.

⁷ After: *Rosja gotowa do wojny nuklearnej. Putin straszy świat [Russia ready for nuclear war. Putin scares the world]*, www.geopolityka.pl, access: 20/03/2018.

of its own territory.⁸ Thus, contrary to what President Obama envisaged a few years ago, the world without nuclear weapons does not exist.

Legal restrictions

The world came to know the consequences of the use of nuclear weapons after the United States had launched attacks on two Japanese cities: Hiroshima and Nagasaki in 1945. These accidents did not stop the nuclearization of the world; just the opposite, they stimulated this process, leading to a global arms race in this field. This is reflected by the number of states in possession of nuclear weapons; there are also many states whose ambition or even dream is to have their own nuclear weapons. The nuclear non-proliferation policy proves ineffective. North Korea has acquired such weapons in the eyes of the global public opinion, thereby permanently destabilizing the strategic situation in the Far East region.

There are no legal limitations imposed on the research, development or modernization of nuclear warheads being held. In general, the nuclear non-proliferation treaty divides states into two groups: nuclear and non-nuclear states. This allows policymakers to employ the idea that there is a certain group of privileged states – “nuclear” states – that possess nuclear weapons lawfully and the remaining states that do not have such weapons. Is it the right distinction? No – it would be more appropriate to divide states according to their technological capacities. Otherwise, according to the aforementioned treaty, only the USA, Russia, Great Britain, France and China would be lawful nuclear powers. States like India,

Pakistan or Israel would not be among them, because they are not a party to the adopted Treaty; the same goes for states such as North Korea (which withdrew in 2003) and South Africa, which acceded to the treaty in 1992 and destroyed its nuclear arsenals⁹. Nuclearly subthreshold countries, if such a term can be used, include the states standing at the border of nuclear technologies opening the road to their production. These states include Argentina, Australia, Belgium, Brazil, Germany, Italy, Japan, Netherlands, New Zealand, Sweden, Switzerland, Taiwan, and many other states, such as Algeria or South Korea.

In the course of further reflections on the legality of possession of nuclear weapons, it would be possible to conclude that since the aforementioned states hold their nuclear weapons lawfully, why would they not be entitled to use them in certain situations? This issue is settled to a certain extent by an opinion issued by the International Court of Justice (ICJ)¹⁰ in 1996 in connection with a question asked by the General Assembly of the United Nations: *Is the threat or use of nuclear weapons in any circumstance permitted under international law?* The ICJ replied that there was no clear prohibition or norm in international law that would allow or strictly ban the use of nuclear weapons or a threat of such use. Opposite views on that subject were presented, for example,

⁹ J. Bryła, *Rozwój i znaczenie reżimów międzynarodowych na przykładzie reżimu nieproliferaacji broni jądrowej [The development and significance of international regimes on the example of the regime of non-proliferation of nuclear weapons]*, SCHOLAR, Warszawa 2006, p. 88.

¹⁰ In its advisory opinion issued in 1996, the International Court of Justice stated that there is no comprehensive and universal prohibition of the threat or use of nuclear weapons as such either in customary law or in international law, after: Patryk Gacka, *Użycie broni nuklearnej jako zbrodnia ludobójstwa, zbrodnia przeciwko ludzkości i zbrodnia wojenna? Zarys problematyki [The use of nuclear weapons as a crime of genocide, crime against humanity and war crime? An outline of the subject area]*, <https://repozytorium.amu.edu.pl>, access: 20/03/2018.

⁸ After: On November 28th, North Korea tested the Hwasong-15 ballistic missile. Its range is estimated at 13,000 km. This would mean the possibility of reaching any destination in the continental part of the USA, but also in Europe, www.independent.co.uk/us, access: 20/03/2018.

by Professor Remigiusz Bierzanek, who argued that since the possibilities of using suffocating or similar gases are forbidden, this very fact is a sufficient basis for assuming that it would be unreasonable to think that each new weapon will be prohibited only when a special convention is concluded¹¹. This matter had also been examined by the United Nations General Assembly, which even adopted the relevant resolution 1653/XVI questioning the legality of the use of nuclear weapons in 1961. However, it was not adopted unanimously. The main nuclear states, such as France, Great Britain and the United States, voted against it.¹² This gave rise to the legal situation of substantive indeterminacy. Thus, it is assumed that, in the light of the ICJ's opinion, every use of nuclear weapons, or only a threat of using them, will be prohibited if any rules of Hague Convention of 1907 will be violated.

Nevertheless, there may be a factual state that will "justify", or rather constitute an extraordinary circumstance, e.g., a threat to the existence of the state concerned that will force them by means of circumstances to exercise the right to self-defense using all available means, theoretically going "as far as" the use of nuclear weapons. It is worth adding that the right to self-defense arises directly from Article 51 of the Charter of the United Nations, which applies both to individual and collective self-defense.

Nuclear weapons vs. the sense of collective security

During World War II, both Nazi Germany and the United States did intensive research on the construction of a nuclear bomb. There was a peculiar race against time that led the United States to construct the world's first nuclear bomb under the

Manhattan programme. It was successfully tested on July 16th, 1945, but used against Japan shortly afterwards on August 6th, when Hiroshima was bombed; three days later, on August 9th, the same happened to Nagasaki. One can wonder whether two attacks were necessary, whether these attacks had a military character, or rather they were a political demonstration of power aimed at intimidating the Soviet Union. We can also speculate what would have happened if the Germans had been the first to build a nuclear weapon? Obviously, we can assume with a high degree of likelihood that they would have used this weapon against the allies or the USSR in the last phase of the war.

The nuclear bombs dropped on Japanese cities confirmed their destructive power. Thus, they became an object of desire, which triggered a series of nuclear programs in various states. The most advanced party in this race was the Soviet Union, which carried out the first successful nuclear test in 1949. In this way, it became the second nuclear state in the world. The "nuclear states' club" was joined by Great Britain in 1952 and by France in 1960. In 1964, China joined this group. In the course of further work on the development of nuclear weapons, a thermonuclear (hydrogen) weapon was designed in 1952; subsequently, a neutron weapon was constructed in 1962.

NATO's nuclear policy

The arms race that started in the 1960s was one of the main elements of the Cold War. Armament programs were developed with a view to the production of intercontinental missiles, land-based and marine-based ballistic missiles and tactical missiles. Also, the deployment of American tactical nuclear weapons in Europe started. These actions were aimed at the potential

¹¹ R. Bierzanek, *Wojna a prawo międzynarodowe [War vs. International law]*, MON, Warszawa 1982, p. 220.

¹² W. Góralczyk, S. Sawicki, *Prawo międzynarodowe publiczne [Public International Law]*, Lexis Nexis, Warszawa 2009, p. 429.

use of nuclear weapons during a subsequent global conflict, if any. Nuclear weapons were also supposed to improve the security of the United States and NATO's allied countries.

In the 1960s, the "balance of fear" arose between the USA and the USSR, based on the balanced nuclear potential, which meant that nuclear weapons became the main means of deterrence. The negative consequence of this balance was the continuous arms race, which led to the development of new forces and means within the scope of new strategic conceptions being introduced. Obviously, nuclear weapons and means of carrying them played a fundamental role. This was reflected by the formulation of the deterrence strategy, which was based on simple principles that made it necessary to create an appropriate nuclear arsenal that would be equal to or preferably stronger than the enemy's potential.

The 1970s brought a temporary detente in relations between the USA and the USSR, which resulted in an attempt to build means of trust aimed at creating an effective international security system. In 1968, the Nuclear Non-Proliferation Treaty (NPT) was signed, being a milestone in building mutual trust and obliging signatory states to refrain from transferring nuclear weapons and from helping other states to obtain them. In the subsequent years, bilateral talks were continued, resulting in the conclusion of important international treaties concerning the control, restriction and reduction of strategic armaments. The Conference on Security and Co-operation in Europe in 1973 and the adoption of the Helsinki Final Act on August 1st. 1975 were the signs of this detente.

As a result of the disintegration of the bipolar system, the likelihood of a large-scale military conflict with the use of nuclear weapons decreased considerably at

the beginning of the 1990s. However, the states did not resign from the expansion of their nuclear arsenals. After the end of the Cold War, the role of nuclear weapons as a means of deterrence ceased to match the new reality. Previously, both the United States and the USSR had treated nuclear weapons as a special opportunity to gain global dominance. The United States also perceived nuclear weapons as a counter-balance for Soviet conventional forces deployed in Eastern European countries and as a means of suppressing its expansionist plans. Over many years, the security and war strategy of Western states was based mainly on the deterring role of nuclear weapons and the possibility of using them. However, it was assumed that every attempt to use nuclear weapons would immediately result in retaliatory action. It would lead to a total unlimited long-term nuclear war that, apart from terrible destructions on both sides of the conflict, would bring annihilation to millions of lives. Of course, there was a question who would win this war? The winner's losses in the nuclear war might prove so huge that the benefits of this victory would be questionable. It was asked whether the use of nuclear weapons was the only means of achieving the goal, because none of the goals of the war seemed important enough to risk the destruction of the population and the ruin of one's own country.

Nuclear weapon resources

The countries that have nuclear weapons are intensively modernizing their arsenals. In the current geopolitical reality, it is difficult to imagine the possibility of their reduction. In other words, the vision of the world without nuclear weapons is practically vanishing. The success of the 1990s – the time of successful implementation of disarmament programs of the United States and Russia

that led to the reduction of the number of strategic warheads (Start I and II¹³) and the tactical reduction of nuclear weapons in Europe – is unlikely to occur again. These actions encompassed also French and British nuclear potentials. After the collapse of the Soviet Union, Ukraine, Belarus and Kazakhstan voluntarily resigned from the possession of nuclear weapons. South Africa's nuclear program came to an end, too, and the nuclear potential was liquidated.

We can assume that the successful disarmament gave a significant impulse to American and Russian leaders to formulate political declarations on the possibility of withdrawing nuclear weapons completely as a thing of the past – a sort of relic left after the Cold War period that did not match the contemporary geopolitical reality. Successful disarmaments took place in Europe. On the other hand, a nuclear arms race began in the Far East in 1998. In 2003, North Korea withdrew from the nuclear non-proliferation treaty. At the same time, Iran continued its work on nuclear weapons, too. This made it difficult to work on global disarmament. The United States was not blameless, either – in 2001, it unilaterally withdrew from the treaty on the limitation of antiballistic systems. During this politically difficult time, a vision of the world without nuclear weapons appeared. It was presented by Barack Obama first in Berlin in July 2008, and then in Prague in April 2009 during the celebration of the 60th anniversary of NATO. It is estimated that these plans were one of the main reasons for which Barack Obama, already as President of the USA, received a Peace Nobel Prize. This changed his negotiating position and helped finalize talks concerning

the New Start treaty concluded with Russia in Prague in April 2010. The treaty limited the number of strategic nuclear warheads to 1,550 on each side. That was generally the end of successful disarmament actions. The negotiations concerning the reduction of tactical missiles were not even undertaken. The main reason was the lack of interest on the part of Russia. In spite of Russia's reserved reaction to further nuclear disarmament, the United States independently withdrew Tomahawk missiles armed with nuclear warheads from service, thus depriving its navy of tactical nuclear weapons. The President of the United States unilaterally announced the further reduction of the number of strategic warheads to 1,000-1,100 by 2023. These plans were confirmed in the Nuclear Weapons Employment Strategy prepared in 2013. What has been left of it? Not much. All states having nuclear weapons at their disposal invest in their modernization and the modernization of means of their delivery. None of the nuclear powers, excluding the United States, is announcing the reduction of these weapons.

The advanced plans of the expansion of the United States' nuclear potential encompass the air force in the first place. A new LRS-B (Long Range Strategic Bomber) is going to be put into service around 2024; in further years, it will successively replace B-52H and B-1B models. Altogether, the introduction of around 80-100 aircrafts is planned¹⁴. The new machines can optionally be unmanned. This may stir a discussion on the possibility of arming unmanned aircraft with nuclear weapons. The Americans are also conducting studies on a new category of ballistic missiles. The new missiles would enter into service in stationary and

¹³ Strategic Arms Reduction Treaty (START II) – the second treaty on the reduction of strategic arms (the first one was START I concluded on 31st July 1991), signed in Moscow on 3rd January 1993 by the President of the United States of America George Bush and the President of Russia Boris Yeltsin.

¹⁴ The Secretary of the Air Force of the USA Deborah Lee James officially announced the full name of the new strategic bomber being developed under the Long Range Strike-Bomber (LRS-B) programme, after: Northrop Grumman B-21 Raider, <http://www.nowastrategia.org.pl>, access: 21/03/2018.

mobile versions (intended, among others, for submarines) at the end of the third decade. The plans include also the expansion of ballistic missile defense, because the existing system is not capable of resisting an all-out nuclear attack, which the American government openly admits.

The United States' nuclear disarmament policy is confronted with growing nuclear weapon expenses in China and, primarily, the Russian Federation, whose armament budget is approaching 14% of the GNP. In this situation, the USA is not likely to make another disarmament step. According to the arrangements of the New Start treaty, the United States will reduce its potential to the assumed level of 1,550 warheads by 2018. The experts say that, as a consequence of this, the United States has lost their advantage in the number of strategic nuclear warheads being held for the first time in many years. Russia's arsenal has been a few times bigger than the American one for a long time. The American arsenal consists mainly of B-61 nuclear aircraft missiles modernized to the standard of a precision missile. Thus, the United States focuses on quality rather than quantity. Fifth-generation combat aircrafts (F-35) designed with the use of stealth technology are being prepared for the role of carrier vehicles; it is assumed that they would be ready to carry out nuclear strikes around 2024. The modernized B-61 missiles will also probably be made available to the European members of NATO under the Nuclear Sharing program.

Intensive armaments are also carried on by the Russian Federation, which plans to restore the production of Tu-160 strategic bombers in a new version; it has also started work on a new PAK-DA bomber that will be equipped with cruise missiles with hypersonic propulsion. The modernization of missile forces is in progress. New RS-24

Jars and RS-26 Rubezh systems are being entered into service. At the same time, work is continued on a new heavy RS-28 Sarmat missile weighing over 100 tons. The new missile that will enter into service in the third decade of the 21st century will be capable of carrying up to 15 warheads and flying over the South Pole, thus making it possible to attack the USA from the direction at which it does not have elaborate missile defense systems at its disposal¹⁵. After 2030, the Russian Navy is planning to enter into service fifth-generation submarines armed with RSM-26 Bulava missiles (the marine version of Topol-M missiles).

Russia does not neglect tactical nuclear weapons, either. It does not even hesitate to violate the INF Treaty of 1987 on the Elimination of Intermediate-Range and Shorter-Range Missiles¹⁶. Russia does this by deploying Kalibr-NK cruise missiles in the Kaliningrad region and the Caspian Sea region with a reach exceeding even 2,500 km and Iskander-K missiles with a R-500 cruise missile with a range of around 2,000 km. Apart from Kalibr-NK missiles capable of carrying nuclear weapons that were used during the Syrian War, the Russian Navy is also working on P-900 Alfa anti-ship missiles. The container version of these missiles that can be deployed, e.g., on civil ships is being tested. If these plans are confirmed, that would be a real curiosity. At that moment, it seems that we should begin to wonder whether Russian tactical nuclear weapons are merely a scarecrow or a real threat to NATO?

Similar plans are being made by the People's Republic of China, which has the world's third nuclear arsenal at its disposal. The only difference is that the mod-

¹⁵ After: <http://www.altair.com.pl>, access: 14/05/2015.

¹⁶ The Russians broke the 1987 INF Treaty on the Elimination of Their Intermediate-Range and Shorter-Range Missiles by deploying cruise missiles with a range exceeding 500 km on its territory, after: <http://www.defence24.pl>, access: 12/12/2017.

ernization of China's nuclear potential is conducted in a more secret way. The most important Chinese development program is DF-41 ballistic missiles with a range of around 15,000 km. They are armed with a thermonuclear warhead with a power of 1 Mt or up to 10 MIRV (Multiple Independently Targetable Reentry Vehicle) warheads, or independently targetable warheads with an adjustable explosion power ranging from 20 to 250 kt. The Chinese air force plans to enter into service a new-generation Xian H-20 strategic bomber around 2025. Accord-

ing to unconfirmed available information, it can be an equivalent of the American B-2 vehicle. The navy is also being modernized; in the next few years, it plans to introduce second-generation ballistic missiles with a range up to 8,000 km capable of carrying a single nuclear warhead or 3-4 MIRV warheads. New submarines to be introduced will be equipped with eight missiles of this kind. China is also working on new-generation missiles for land troops. They are to be characterized by lower radar cross-section and a range of up to 4,000 km.

Table. Nuclear potential of various states around the world (as on July 2017)

No.	State	First test	Deployed warheads*	Other warheads**	Total
1.	USA	1945	1800	5000	6800
2.	Russian Federation	1949	1950	5050	7000
3.	United Kingdom	1952	120	95	215
4.	France	1960	280	20	300
5.	China	1964		270	270
6.	India	1974		120-130	120-130
7.	Pakistan	1998		130-140	130-140
8.	Israel			80	80
9.	North Korea	2006		10-20	10-20
Total			4150	10785	14935

* Deployed warheads are those mounted on missiles or located in bases of operational forces.

** Other warheads are those being stored, withdrawn or awaiting disassembly.

Source: Own work based on SIPRI Fact Sheet, Trends in world nuclear forces, 2017, after: <https://www.sipri.org>, access: 12/03/2018.

In a group of states having nuclear capacities, it is worth focusing on North Korea, which is working very intensively on intermediate-range and long-range ballistic missiles. The technology of construction of intermediate-range ballistic missile is probably based on missiles using the Soviet technology of the 1960s that are capable of hitting targets at a distance of up to 4,000 km.

According to the propaganda of Kim Dzong Un's regime, this country already has the missiles capable of hitting targets in the USA. This does not seem very proba-

ble, at least for the time being, but after the successful tests of Hawasong 15 missiles in 2017, this vision may soon prove quite real¹⁷. Can further nuclear powers arise? If North Korea can, others can do the same, too. Therefore, we can assume with full certainty that the group of nine existing nuclear powers will soon increase.

In 2015, the international community managed to conclude a nuclear treaty with Iran, which agreed to suspend its nuclear weapon construction program in return for

¹⁷ After: portal <https://www.tvn24.pl>, access: 20/01/2018.

the annulment of sanctions. For the time being, we do not see any other countries that would intend to develop nuclear technology at all costs. It must be noticed, however, that this is a consequence of political actions rather than technological barriers. For many countries, such as Germany, Japan, South Korea or Australia, building their own nuclear bomb is a question of maybe a few months, should they desire to have one. Therefore, the illusion of the world without nuclear weapons still remains an illusion (Nuclear forces – table).

Conclusion

The performed analyses show that nuclear weapons have been and still are an important means of deterrence. The construction of the nuclear weapon revolutionized the rules and methods of warfare. Its use had an impact on the contents of doctrines and concepts of use of armed forces and ensured the continuous development of the structures and equipment of armed forces. Because of their destructive force, nuclear weapons play the main role in the deterrence policy and are the primary means of maintaining security. In the Cold War period, they were an important element of the strategy of the balance of powers of NATO and the Warsaw Pact, using the “doctrine of fear”. The fear of the consequences of their comprehensive use ensured the stability of the bipolar system of powers for many decades. The signed treaties and disarmament agreements were a step forward aimed at increasing public security in the context of global challenges and preventing the proliferation of nuclear weapons. However, these actions were not fully effective, as politicians and experts realize more and more frequently today. There is no tendency to resign from nuclear weapons in the modern world. Quite the opposite – there are states that almost

dream of acquiring such weapons. In spite of ongoing negotiations on the subject of arms reduction, the biggest challenge for the modern world is still nuclear terrorism and the proliferation of mass destruction weapons, including nuclear weapons. Also, there is no significant difference in the doctrinal perception of nuclear weapons among “nuclear states”, which suggests that nuclear weapons are an equally important element of security for the United States and for the Russian Federation.

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