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The nuclear factor in international relations: war and peace dimensions

Abstract

Nuclear weapons undoubtedly shape international relations; they have done so throughout the Cold War and will continue to do so in the future. Efforts by the international community, mainly in the framework of the United Nations, to regularise and even eliminate these weapons have helped shape the current international system but have not succeeded in eradicating them. The most provocative question addressed in this paper, though not the only one, is whether their elimination would be conducive to peace between states or to more conventional conflicts, even between the world's major powers, which are currently far from being on friendly terms.

Keywords

Deterrence, Mutually Assured Destruction, UN, NPT, IAEA.

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Introduction

A question mark hangs over nuclear energy, in particular nuclear weapons, and their impact on international relations. On this issue we could question the usefulness of atomic energy, its contribution to the development of humanity, its impact on stability and even its contribution to peace between nations, the role of nuclear weapons in today's world, or the interest of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the benefits it brings to the non-nuclear-weapon State parties to this Treaty and to international security.

The aim of this paper is to analyse the reality of 'the nuclear' in International Relations, and taking into account that the nuclear military capability of states serves mainly as an instrument of deterrence, but is also useful to underline their international relevance by granting a status that makes them the object of particular consideration (or perhaps rather concern) by the rest of the international community

We will defend that in the framework of international relations, dialogue, treaties and agreements between the main states of the world have been and are essential to preserve peace. A peace with a greater or lesser degree of stability, but in which the nuclear capability of the powers that possess it has an important role to play.

The genesis of the atomic bomb. A bit of history

It all began scientifically in the 19th century and militarily in the course of World War II. Studies on the atom and radioactivity had been ongoing since the late 19th century, but it was in the first third of the 20th century that research made a decisive breakthrough, and it is safe to say that most studies, experiments and scientists were concentrated in Germany. Hitler's rise to power, with his progressive persecution of Jews, marked a before and after for atomic research in Germany at the time. Many German scientists of Jewish descent, increasingly harassed and persecuted, fled to other countries. Most of those who chose to leave Germany looked for opportunities to continue their research activity and found them mainly in the United States and England, where they continued their work in universities, specialised facilities and government programmes.

Apart from the terrible cost in human lives, wars spur research and discovery. World War II was no exception, and research into the use of nuclear fission, recently discovered in Germany, to produce an 'ultimate' weapon intensified in the countries involved in the conflict. Despite being a recurring theme, it has never been clear how Germany's nuclear programme developed during the war, nor whether Germany ever came close to obtaining the atomic bomb, which it would undoubtedly have used against England. How far off was it from achieving this? In any case, it is known that research on atomic energy and nuclear weapons continued in Germany during the war, and that the flight of scientists of Jewish descent had a negative impact.

According to Natividad Carpintero Santamaría, these flights 'were going to upset the balance of science, which from that moment on would irreversibly tilt in favour of the United States of America' (Carpintero, 2007: 9). In the same vein, Sean Coughlan argues that 'German refugees played a key role in ensuring that, when it came to atomic weapons, the United States was at the forefront' (Coughlan, 2013).

Germany did not get the bomb, but the United States did with its Manhattan Project, in which, along with American scientists, many of the German Jewish scientists who had previously emigrated to the country played an important role. The origin of this project even involved Albert Einstein, who signed and addressed a letter to US President Franklin Roosevelt, prepared by Hungarian physicist Leo Szilard, on 2 August 1939 before the outbreak of World War II. In the letter, he informed him of the capabilities of nuclear weapons, suggesting that he was interested in pursuing them, and alerted him to German activity in this field. In her book *La bomba atómica. El factor humano en la Segunda Guerra Mundial*, Natividad Carpintero includes the text of Einstein's letter, from which we include here three very significant paragraphs:

> 'Sir,
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> Some recent work by E. Fermi and L. Szilard, which has been communicated to me in manuscript, leads me to expect that the element uranium may be turned into a new and important source of energy in the immediate future. Certain aspects of the situation which has arisen seem to call for watchfulness and, if necessary, quick action on the part of the Administration. I believe therefore that it is my duty to bring to your attention the following facts and recommendations:
>
> In the course of the last four months it has been made probable—through the work of Joliot in France as well as Fermi and Szilard in America—that it may become possible to set up a nuclear chain reaction in a large mass of uranium by which vast amounts of power and large quantities of new radium-like elements would be generated. Now it appears almost certain that this could be achieved in the immediate future.
>
> This phenomenon would also lead to the construction of bombs, and it is conceivable—though much less certain—that extremely powerful bombs of a new type may thus be constructed. A single bomb of this type, carried by boat and exploded in a port, might very well destroy the whole port together with some of the surrounding territory' (Carpintero, 2007: 93-94).

The gauntlet, if it was, was picked up; and the result was the Manhattan Project, in which a large number of scientists from several countries collaborated. In particular, the UK intervened by sending some 60 scientists to the United States in those years who were already working on a similar British project, called *Tube Alloys*, to develop the atomic bomb (Cathcart, 2006). This project was integrated into the Manhattan Project following the 1943 Quebec Agreement between the United States, the United Kingdom and Canada.

This agreement established a nuclear alliance between the United Kingdom and the United States, which in one form or another is still in force today. On the British side, the Manhattan Project came to be seen as a joint project of the United States, Great Britain and Canada. According to the text, signed on 19 August 1943, the United States and the United Kingdom agreed that 'we will not use it against third parties without each other's consent' (Quebec Agreement. The Manhattan Project). And it was British Field Marshal Henry Maitland Wilson, his country's representative on the Combined Policy Committee, which dealt with the development, production and testing of the atomic bomb, who signed the UK's consent to its use against Japan on 4 July 1945 (Wilson).

The British perception that the Manhattan Project was a joint project would not last long. The Quebec Agreement was amended by the *United States Atomic Energy Act* of 1946, which prohibited providing confidential information on military nuclear matters to its allies on pain of death. This obviously could not have been to the liking of the British, undoing their idea of a more or less equal agreement. Thereafter, the United Kingdom resumed its own efforts (*High Explosive Research* programme) to acquire the atomic bomb.

Despite the situation brought about by the *United States Atomic Energy Act*, cooperation between the two countries in the nuclear field continued, leading to the signing in London on 3 June 1958 of an important agreement on cooperation 'in the use of atomic energy for mutual defence'[1]. Under this agreement, the United States supplied the British with nuclear weapons, and the two countries shared radioactive materials and nuclear technology. They later signed the Nassau agreements in December 1962, which facilitated the UK's acquisition of Polaris missiles to deliver its nuclear warheads, and later Trident missiles.

Going back to the time of World War II, the world's first nuclear explosion took place in Alamogordo, New Mexico, on 16 July 1945 as part of the Manhattan Project and as the culmination of the project. Less than a month later, on 6 August, the first atomic bomb dropped in the context of war, with an approximate power of 16 kilotons, destroyed Hiroshima. The effects were terrible: 'of the more than 320,000 Japanese who were in the city between civilian inhabitants and garrison soldiers, almost 80,000 died instantly and more than 50,000 died in just a few months as a result of radiation from the bomb' (Montoto, 2013: 291).

Three days later, on 9 August, another atomic bomb —this time with a power of 22 kilotons— exploded over Nagasaki. The result of these two explosions was approximately 120,000 casualties due to the immediate effect of the explosions. According to a United Nations report on the 75th anniversary of the explosions, 'the two atomic weapons left more than 200,000 people dead from radiation and

1 Agreement between the Government of the United States of America and the Government of the United Kingdom of Great Britain and Northern Ireland for Cooperation on the uses of Atomic Energy for Mutual Defense Purposes. 3 July 1958.

in subsequent decades claimed 400,000 victims from bomb-related health problems' (United Nations, 2020).

The Japanese government surrendered just one week after the bombing of Nagasaki (Powasky, 2011: 90). If Japan had had the nuclear weapon at that critical time for the future of its country, when kamikazes were immolating themselves to defend it, would the United States have launched its attack on Hiroshima and Nagasaki? Would a situation similar to that which later, during the Cold War, was called *Mutual Assured Destruction*not have arisen? What is certain is that the use of the atomic weapon marked a turning point in international relations.

The start of the nuclear race: the first nuclear states

World War II ended, and in the first years after the end of the war the United States was the sole possessor of the atomic weapon. This was of great use in dealing with the delicate situation created by Soviet forces being maintained in the countries they had occupied and the establishment of communist regimes in those countries. Meanwhile, American, British and French forces were demobilising, and the situation created by the Soviet Union was destabilising the entire continent.

In these years, and in order to understand the origins of the nuclear arms race, US National Security Council reports submitted to the president and, after his approval, served to establish the US position in the international arena, were of particular relevance.

Of these reports, NSC-68, issued on 7 April 1950 and presented to US President Truman, estimated that the Soviet Union already had between 10 and 20 atomic bombs and that by 1954 it would have about 200 (National Security Council, 1950: 19 and 60). Three years later, a new National Security Council report, perhaps the most significant of them all, NCS 162/2, approved by Eisenhower on 30 October 1953, stated:

> 'The capability of the USSR to attack the United States with atomic weapons has been continuously growing and will be materially enhanced by hydrogen weapons. The USSR has sufficient bombs and aircraft, using one-way missions, to inflict serious damage on the United States, especially by surprise attack. The USSR soon may have the capability of dealing a crippling blow to our industrial base and our continued ability to prosecute a war' (National Security Council, 1953: point 4).

The report also argued that 'the risk of Soviet aggression will be minimized by maintaining a strong security posture, with emphasis on adequate offensive retaliatory strength and defensive strength. This must be based on massive atomic capability'.

The nuclear arms race between the United States and the Soviet Union had thus begun. In reality, it had begun not when the USSR carried out its first nuclear test on

29 August 1949, but already before the end of World War II when the USSR decided to invest all possible resources (including espionage in Great Britain and the United States) in order to get hold of the atomic bomb.

Events followed in a chain reaction: the British had detonated their first nuclear fission device on 3 October 1952 in the Porto Bello Islands (Australia) and the Americans their first hydrogen bomb (nuclear fusion) on 1 November 1952 on an atoll in the Pacific. Just ten months later, on 12 August 1953, the USSR also exploded its first hydrogen bomb. The United Kingdom would do so in 1957. France would test its first atomic bomb on 13 February 1960 in the Sahara desert, while the hydrogen bomb would have to wait until 24 August 1968. The nuclear arms race was already in full swing. To complete what would become colloquially known as 'the atomic club', we cannot forget China, which had tested its first bomb on 16 October 1964 and the hydrogen bomb on 17 June 1967. With the entry of the People's Republic of China, the club (the United States, the Soviet Union, the United Kingdom, France and China), which would be accepted internationally as having the right to possess such armaments by the UN in the NPT, was definitively formed. Since the entry into force of this Treaty in 1970, the United Nations and all club members have united their efforts to prevent its enlargement, with a result that can be considered positive although four countries, of which we will speak later, have managed to acquire a limited number of nuclear bombs without being part of the NPT.

Since those years, the nuclear arms race has kept the world's attention focused on the nuclear threat. In the Cold War, all states possessing these weapons jealously guarded their capabilities in this field and kept them ready for use. Some of the non-NPT countries that have managed to acquire them are perhaps currently the most likely to use them. Of these countries, India, Pakistan and North Korea pose a greater risk —if not greater in size at least in probability— of a conflict with a nuclear component than Russia and the United States. The two superpowers have already had time to learn to live with a capability they know they must never use. Let us hope that they continue to think so, especially in these times of veiled, or not so veiled, Russian warnings of the possibility of its use in conflict caused by its invasion of Ukraine.

Nuclear states outside international law

A number of countries currently possess nuclear weapons without being States Parties to the Non-Proliferation Treaty; they pose varying degrees of serious concern to the international community. These countries are certainly India, Pakistan and North Korea. With regard to Israel, although there has been no explicit acknowledgement on its part, all analyses and studies on this issue consider that it possesses it. Iran's attempts to acquire such weapons are also of particular concern in the international community. All these cases will be discussed below.

The nuclear programmes of India, Pakistan and Israel

With regard to India and Pakistan, the former conducted its first atomic test in 1974, and five more tests on 11 May 1998 (Rosas, 2017). Just two weeks later, on 28 May, Pakistan responded politically to India's defiance by conducting five more nuclear tests, adding another two days later *(Nuclear Weapons Archive*, 1998). With these explosions, the conflict over Kashmir, a territory whose possession had for decades been and still puts the two countries at odds, causing three wars and a situation of permanent conflict, potentially took on a new dimension and greater complexity with the risk of the use of the atomic weapons both countries possess. Unsurprisingly, a few days later, on 3 June 1998, the UN General Assembly issued a Resolution condemning the nuclear tests by both countries and urging them to refrain from future nuclear testing[2].

One might ask whether in this case, possessing atomic weapons has prevented so far this century not only a new conflict between India and China like the one that took place in 1962 over border issues, but more recently the violence in Kashmir from escalating into an all-out war between India and Pakistan. On the latter issue, what is currently a territorial border conflict could be in danger of turning into an all-out war between the two countries, whose cultures and religious conceptions (Islam and Hinduism) have always been at loggerheads. Given the case, recourse to atomic weapons could not be ruled out. However, since there has been no significant escalation of the conflict since the nuclear tests mentioned above, we can safely assume for the time being that the nuclear weapon is fulfilling its role as a deterrent.

Israel is also considered by all studies and analyses consulted to be a nuclear-weapon state, and will be treated as such here. It reportedly developed its first nuclear device in 1968 (IISS, 2008: 122). The aim of its nuclear programme would be purely defensive, which can be deduced from the lack of publicity and threatening statements about the use of these weapons on its part. Consistent with this stance, Israel, totally surrounded by hostile countries, would have relied on nuclear weapons as a last resort to counter a mass assault by the surrounding Arab countries. In any case, Israel has carried out targeted air strikes against its neighbours' nuclear reactors, thus disrupting their efforts to develop military nuclear programmes that it believes could have resulted in the development of a nuclear weapon. The first of these attacks is known to have taken place on 7 June 1981, when the Israeli air force attacked Iraq's Osirak nuclear reactor (Operation Opera) located at Iraq's Al Tuwaitha nuclear site south east of Baghdad. This attack was 'strongly condemned' by the United Nations Security Council on 19 June of the same year, which in point 5 of its communiqué 'calls upon Israel urgently to place its nuclear facilities under the safeguards of the International Atomic Energy Agency'[3].

2 United Nations General Assembly Resolution AG/RES 1600 (XXVIII-O/98). 03 June 1998.

3 United Nations Security Council Resolution 487 of 18 June 1981.

Years later, on 6 September 2007, the Israeli air force carried out another such attack on the Syrian nuclear power plant at Al Kibar. There has been much controversy over the outcome of the attack and Israel's acknowledgement of its authorship[4].

North Korea's nuclear programme. Its influence on international relations

Of particular interest and topicality is the case of North Korea, which is why we will deal with it in a little more detail. This country signed the Non-Proliferation Treaty in 1985, a year in which the United States had maintained a notable nuclear capability in the area (since 1958 and mainly in South Korea), which it gradually reduced to approximately one hundred weapons of this type in 1991, the year it withdrew them in the context of the first Nuclear Arms Limitation Treaty (START I) (Bohigas and Fortuny). The two Korea had signed a Joint Declaration on the denuclearisation of the entire Korean peninsula that year, and inspections by the International Atomic Energy Agency (IAEA) began in May 1992. One of them considered the existence of a military nuclear programme in North Korea, which then rejected IAEA inspections and threatened in 1993 to withdraw from the Non-Proliferation Treaty. Following negotiations in Washington that led to a Framework Agreement between the two countries in 1994, it suspended its threat to withdraw from the NPT and IAEA safeguards, and inspections were resumed.

However, in 1997, North Korea began a uranium enrichment programme that would enable it to manufacture a nuclear device, announced that it would restart its shutdown facilities, expelled IAEA inspectors and, on 10 January 2003, withdrew from the NPT.

The UN Security Council reacted with a Resolution 'urging it to reconsider its announcement, and to reaffirm its adherence to the Treaty'[5]. The matter was taken up directly with the North Korean authorities by a group consisting of the United States, South Korea, Japan, Russia and China. Compensation was offered, but North Korea went ahead and carried out its first atomic explosion on 9 October 2006. The United Nations condemned the nuclear test and demanded that it not conduct any further tests or ballistic missile launches.

Although the United Nations enacted a series of sanctions that initially appeared to be successful, the situation worsened again when in April 2009 North Korea publicly announced its definitive withdrawal from the Treaty and, a month later on 25 May,

4 Confirmation of responsibility for the attack is definitively accepted by the BBC on 21 March 2018 in an article entitled 'Por qué Israel reconoce por primera vez que destruyó una central nuclear en Siria hace once años'. Link: bbc.com/world/international-news-43486931

5 United Nations Security Council Resolution 825 of 11 May 1993.

exploded its second nuclear device[6]. The UN Security Council again condemned this nuclear test[7], but on 12 February 2013, North Korea conducted a new test. The UN Security Council again issued a new statement calling the test a provocative act, and again demanded that North Korea 'return to the NPT as soon as possible'[8].

More recently, on 6 January 2016, North Korea conducted a fourth nuclear test that it claimed was a hydrogen bomb explosion, which was considered more than doubtful due to its limited power. On 9 September of that same year, it was estimated to have conducted another nuclear test and on 3 September 2017 the last one to date.

A series of contacts with North Korea began in 2018 that failed at the 2019 Hanoi Summit and have since stalled. In January 2022, the North Korean state news agency reported that North Korea has left the door open to 'resume all temporarily suspended actions', which has been interpreted to mean that it will continue to develop its nuclear military programme (*El País*, January 2022).

In the context of this issue, we must bear in mind that a nuclear weapon has no military utility without a delivery vehicle, which can be a carrier aircraft or a missile capable of reaching its targets. North Korea has been producing and developing missiles of ever greater range and capability since 1998, an activity that has been confirmed by the large number of launches it has carried out in 2022.

According to media reports, the country has conducted around 70 ballistic missile test launches in 2022 (*El País*, December 2022), most of which are expected to be capable of carrying nuclear loads, the latest in response to US military exercises with South Korea called *Vigilant Storm* that have been underway since 31 October (*Reuters*, October 2022). The launch of a North Korean missile that reportedly flew over north west Japan on 4 October has been of particular interest (Pérez, 2022).

Taken together, all these tests obviously give North Korea the visibility that its authorities want their country to have in the world of international relations. For its part, the North Korean government maintains that its entire programme is aimed at strengthening its defence against possible US aggression, an argument that its president no doubt demagogically uses domestically to rally the population around him.

The main problem in this country is political and to a large extent internal. Internationally, the greatest danger is that North Korea will decide, or has already decided, to sell its nuclear weapons abroad. In any case, if more consideration has been given here to the North Korean nuclear situation, it is because it offers a very interesting interpretation of the influence of the nuclear factor in international relations. The threat of the use of its nuclear weapons, although very small compared to those of

6 House of Commons Foreign Affairs Committee Report No. 4 of the 2008-2009 session: Global Security: Non Proliferation. Page 48. London, 2009.

7 United Nations Security Council Resolution 1874 of 12 June 2009.

8 United Nations Security Council Resolution 2094 of 07 March 2013.

India, Pakistan or Israel, and certainly very small compared to Russia or the United States, has political connotations that go beyond the defensive or dissuasive. North Korea knows that if it were to launch a nuclear attack on any other country with nuclear weapons (particularly the United States), its response would wipe out the country, but the mere possibility that Kim-Jong-un might do something crazy causes concern among his neighbours, gives his regime and his person international prominence and visibility, and allows him to blackmail and try to obtain not inconsiderable economic benefits in any kind of international negotiation.

Iran's nuclear programme: the world's most serious nuclear threat

Despite North Korea's stubborn pursuit of its nuclear programme, the case of Iran is even more worrying in the long term, which is why we will also devote special attention to it here. Iran's nuclear programme is considered 'one of the main security concerns affecting international security' (Zunzunegui, 2015), not only because of the clear Western perception that Iran's goal is to acquire nuclear weapons, and the country has the means to do so both technically and economically, but also because of political tensions between Iran and its neighbours in the Middle East. Furthermore, if the international community were to fail to stop or control its nuclear programme, Iran would have demonstrated that the international community does not have sufficient capacity to prevent nuclear proliferation, and this could set an example for other countries in the region to follow, especially some that also have sufficient economic resources from oil to develop a nuclear programme. If a radical Islamist regime were to take power in one or more countries in the region and the new governments were to support terrorist organisations, as is, in fact, the case today, the situation would become extremely complicated.

Iran began its nuclear research with the help of the United States in 1957 (Martí Sempere, 2013) under the Atoms for Peace programme, and signed the Non-Proliferation Treaty from the time it was established. It subsequently received Western technological assistance, which was interrupted in 1979 by the Khomeini-led revolution that overthrew the Shah. The Iran-Iraq war subsequently interrupted the new regime's nuclear programme, but after the war the programme was restarted in the late 1980s with Soviet and later Chinese assistance.

The Iranian government has since claimed that its nuclear programme is only for peaceful purposes, but the international community does not believe this to be the case. Further complicating the situation is the fact that the country has developed significant ballistic missile activity at the same time.

Relations between the IAEA and Iran have been, and are, very complicated. In some cases, the Iranian authorities have allowed a visit to a nuclear facility, but have not accepted the Additional Protocol that would allow the IAEA to carry out more clarifying inspections. The tug-of-war between the IAEA and Iran has continued over the years, and in 2009 Iran rejected a joint proposal by the US, France and Russia to clarify the situation.

In 2013, the P3+3 group (the United States, Russia, China, the United Kingdom, France, Germany and Iran) reached an agreement with Iran that entered into force on 20 January 2014, and the following year the Joint Comprehensive Plan of Action (JCPOA) was finally agreed. This plan involved the United States, France, Germany, the United Kingdom, Russia, China, the European Union as such and, of course, Iran, and was driven by President Barack Obama and the European Union. According to the Plan, the number of Iranian super centrifuges —essential for uranium enrichment— would be reduced, the stock of enriched uranium would be reduced, highly enriched uranium needed for the manufacture of atomic bombs would be eliminated, and the Additional Safeguards Protocol, which would allow the IAEA to carry out unannounced inspections of facilities it deems appropriate, would be signed with all its consequences[9].

As it was, on 8 May 2018, President Donald Trump, who was seeking a renegotiation of the Joint Comprehensive Plan of Action on more favourable terms, announced that the United States was withdrawing from it as insufficient and unfulfilled by Iran, and reinstated pre-Joint Comprehensive Plan of Action sanctions on the US side. 'Faced with this situation, Iran declared that it was withdrawing from the agreement although it would continue to cooperate with the IAEA' (Campos, 2021).

With the arrival of the new President Joe Biden, the State Department recently announced on 18 February 2021 that the US would be ready to resume JCPOA negotiations, and similarly Iran has also done so seven months later, on 27 September 2021. In any case, Iran wants all post JCPOA sanctions lifted, but Western suspicions about the ultimate goals of its nuclear programme remain well-founded.

All in all, a long and complicated story that still needs, at best, a few years to be resolved. If this is not resolved and Iran ends up with a nuclear weapon, however limited in quantity, the greatest risk would be that Saudi Arabia would respond to the geostrategic imbalance that would ensue in the area with a decision to pursue a similar nuclear capability, and perhaps even President Erdogan's Türkiye could follow suit. If all this were to happen, and it could happen if the current Iranian aspirations are not cut off in time, the already complicated situation in the Middle East would become unmanageable and tenuous international stability in this part of the world would become a mere memory.

The international legal framework for disarmament and non-proliferation.

The Nuclear Non-Proliferation Treaty: nuclear disarmament efforts

As early as the end of World War II, nuclear weapon proliferation was seen as likely, which could eventually lead countries involved in crises or conflicts to resort to

9 The European Council/Council of the European Union has produced the Joint Comprehensive Plan of Action and restrictive measures document, which deals in detail with this issue. Link: consilium.europa.eu/en/policies/sanctions/iran/jcpoa-restrictive-measures

nuclear weapons. On 24 January 1946, the UN General Assembly passed a resolution establishing 'a Commission to deal with the problems raised by the discovery of atomic energy'[10]. This Commission, which was renamed the United Nations Atomic Energy Commission, 'shall submit its reports and recommendations to the Security Council'[11], and 'shall in particular make specific proposals for control of atomic energy to the extent necessary to ensure its use only for peaceful purposes'[12] as well as for 'the elimination from national armaments of atomic weapons'[13]. The only country that possessed such weapons at the time was the United States, but many nations were interested in having them or in preventing them from being used against them. The Commission was established and worked as best it could until 1952 when it was dissolved without having achieved the expected results. The main outcome would have been the elimination of atomic weapons from national arsenals, but this was obviously too ambitious a goal.

Nevertheless, an attempt was made. A couple of months after its creation, on 14 June 1946, the US delegate to the Commission, Bernard Baruch, presented a plan that seemed respectable: it called for the elimination of nuclear bombs from national arsenals, and the establishment of a High International Authority that could impose sanctions on countries that did not comply with their commitments under the plan, without such sanctions being vetoed by the permanent members of the Security Council. The attempt failed, among other reasons, because of the Soviet position against the elimination of its veto power, and because, while the American position was to reduce its atomic weapons in stages as negotiations to establish an international agreement for their control progressed, the Soviets demanded that atomic weapons should be banned before negotiations on atomic weapons could begin[14].

As a counter-proposal, Soviet ambassador to the UN, Andrei Gromyko, proposed an alternative plan under which violations would be judged internally in each country alleged to have committed an offence. This left it up to the governments of the states that wanted to obtain nuclear weapons whether or not to comply with the agreements made at the United Nations. Consequently, the Soviet proposal was not accepted.

In the context of the situation in those years, Eisenhower's famous 'Atoms for Peace' speech was made on 8 December 1953. The US President proposed the establishment

10 UN General Assembly Resolution A/RES/1/1 of 24 January 1946. Link: documents-dds-ny.un.org/doc/UNDOC/GEN/NL4/603/33/PDF/NL460333.pdf?OpenElement

11 *Ibid*. Point 2.a).

12 *Ibid*. Point 5.b).

13 *Ibid*. Point 5.c).

14 The Manhattan Project: Making the Atomic Bomb. Part VI: The Manhattan District in Peace Time. The Baruch Plan-Atomic Archive. https://www.atomicarchive.com/history/manhattan-proyect/p6s5.html

of an international atomic energy agency[15], as occurred. After a couple of years of work, the creation of the International Atomic Energy Agency (IAEA) was approved within the UN framework and entered into force on 29 July 1957 'a specialised government agency belonging to the United Nations system, with the mission of acting as a forum for scientific and technical cooperation to strengthen the contribution of nuclear energy to world peace, health and prosperity. This mission revolves around three pillars or areas of work, which are technological and physical safety, science and technology and safeguards'[16]. Indeed, for the first time, an organisation had been created not just to deal with the threat of nuclear weapons, but to promote and share the peaceful use of atomic energy. The IAEA is still fully active today, promotes peaceful international relations and is the main instrument for ensuring compliance with the NPT.

As mentioned above, in the 1950s, the United States, the Soviet Union and the United Kingdom obtained the hydrogen bomb. China in 1967 and France a year later. The nuclear arms race was already unstoppable and the Cold War was entering a particularly worrying moment. Kennedy became President of the United States in 1961 and relations with the Soviet Union appeared to be improving, but in October 1962 Khrushchev decided to install nuclear-capable missiles in Cuba in response to the US deployment of Jupiter missiles in Türkiye. Never has a conflict between the two great superpowers been so close; a conflict that would obviously be nuclear. This crisis prompted an increase in the Soviet nuclear arsenal that led it to reach strategic nuclear arms parity with the United States in 1969 (Powasky, 2011: 182 and 204) despite the fact that they also heavily boosted their production of such weapons.

In December 1962, just after the Cuban missile crisis ended, Khrushchev invited Kennedy to negotiate a nuclear test ban treaty, but negotiations failed. Kennedy then took the initiative: on 10 June 1963 he announced that he would 'give new impetus to disarmament negotiations in Geneva and work to stop the proliferation of nuclear weapons' (Leffler, 2007, 235). He would also establish a 'hotline' with the Kremlin to avoid situations that could lead to a nuclear confrontation, and stated that he would 'stop nuclear testing in the atmosphere if and when other nations follow suit' (ibid., 235).

The Comprehensive Nuclear Test Ban Treaty was not agreed, but the Partial Test Ban Treaty was signed in Moscow on 5 August of the same year by the United States, the United Kingdom and the Soviet Union, and entered into force in October 1963. From then on, the nuclear tests of the signatory states were conducted underground. Neither China nor France signed the Treaty, and continued to conduct nuclear tests in the atmosphere.

This was the situation in 1965, when negotiations leading to the Treaty on the Non-Proliferation of Nuclear Weapons began. On 19 November of that year the

15 International Atomic Energy Agency. Eisenhower's Atoms for Peace. The speech that inspired the creation of the IAEA. Link: iaea.org/sites/default/files/publications/magazines/bulletin/bull54-4/54401210304_es.pdf

16 Spanish Nuclear Safety Council. Link: csn.es/organismos-nucleares-internacionales/oiea

United Nations General Assembly issued a Resolution calling on all States 'to take all necessary steps for the speedy conclusion of a treaty to prevent the proliferation of nuclear weapons'. The treaty was to 'be a step towards the achievement of general and complete disarmament and, more particularly, nuclear disarmament'[17]. Neither France nor China participated in this Disarmament Committee, but the United States, the Soviet Union and the United Kingdom, which were further advanced in their nuclear programme, did.

While negotiations were taking place, the five permanent Security Council members supported the signing of the Treaty of Tlatelolco on 14 February 1967, whereby the signatory states committed themselves in Article 1:

> 'use exclusively for peaceful purposes the nuclear material and facilities which are under their jurisdiction, and to prohibit and prevent in their respective territories the testing, use, manufacture, production or acquisition by any means whatsoever of any nuclear weapons [...] and the receipt, storage, installation, deployment and any form of possession of any nuclear weapons, [...]'.

From this quotation, we can underline the prohibition of 'the deployment and an form of possession of any nuclear weapons', a formulation which in my opinion is directly aimed at avoiding a repetition of what happened in Cuba a few years earlier. The Treaty entered into force in 1969 and was eventually ratified by all Latin American countries except Guyana and Cuba[18].

Returning to the process of establishing the NPT, as a result of the work of the Eighteen-Nation Disarmament Committee, the Nuclear Non-Proliferation Treaty was finally adopted by the General Assembly on 12 June 1968, submitted for ratification and entered into force in 1970 for an initial period of 25 years. In 1995, it was agreed to extend it indefinitely. Although initially signed by 43 countries, membership has now risen to 191, making the NPT the Treaty with the largest number of member countries after the United Nations. Only India, Pakistan, Israel, North Korea and South Sudan (which until 2011 was part of the Republic of Sudan) are not part of it.

The NPT[19] encompasses three objectives: non-proliferation of nuclear weapons, disarmament, and the peaceful use of nuclear energy. The most difficult goal to achieve was nuclear disarmament. The following are some of what I consider to be the most relevant points of the Treaty.

Article I of the Treaty provides that 'each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other

17 UN General Assembly Resolution A/RES/2028 (XX) of 19 November 1965.

18 *Ibid*., p. 204.

19 Treaty on the Non-Proliferation of Nuclear Weapons. https://iaea.org/sites/default/files/10403501117_es.pdf

nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly'.

Article V provides that:

> 'Each Party to the Treaty undertakes to take appropriate measures to ensure that potential benefits from any peaceful applications of nuclear explosions will be made available to non-nuclear-weapon States Party to the Treaty on a non-discriminatory basis and that the charge to such Parties for the explosive devices used will be as low as possible and exclude any charge for research and development'.

Article VI commits all Parties to the Treaty to 'pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control'. This crucial objective, and not only in the framework of the NPT, has been repeatedly attempted, but no definitive result has been achieved.

In Article IX, the Treaty provides that 'a nuclear-weapon State is one which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967'. This legally limits nuclear power status to the five permanent members of the UN Security Council.

Finally, Article X dictates that each Party shall have the right to withdraw from the Treaty, but with a wording that makes it very difficult to comply with, given that this article, legally accepted by all signatories to the Treaty, provides that a state that has signed the Treaty may withdraw 'if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country' and that its notice 'shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests'. Obviously, a country that wants to withdraw from the Treaty is because it wants to get what the Treaty denies it: nuclear armament, and getting it on its own would mean going against the Treaty that it had previously signed with a commitment to respect it.

Taken together, the Treaty is the best element available to the international community to prevent a nuclear conflict and brings together two groups of nations in one forum, those that possess nuclear weapons and those that pledge never to possess them. On the other hand, non-nuclear-weapon States parties to the Treaty make commitments, but receive significant support for the development of peaceful nuclear energy in their countries, with the benefits that this entails. This support should be provided by possessor States, which undertake in the Treaty to transfer nuclear technology necessary for peaceful uses to the other States Party to the Treaty.

The main instrument for nuclear proliferation control under the NPT is the IAEA and its main tool is safeguards agreements, which are bilateral in nature between the IAEA and NPT member nations. The safeguards contained in these agreements involve inspections of countries to verify that the nuclear facilities they possess and

the activities they carry out there are indeed aimed at the peaceful use of nuclear technology. These inspections are based on the IAEA statute, which provides that the IAEA may

> 'to send into the territory of the recipient State or States inspectors, designated by the Agency after consultation with the State or States concerned, who shall have access at all times to all places and data and to any person who by reason of his occupation deals with materials, equipment, or facilities which are required by this Statute to be safeguarded... and to determine whether there is compliance with the undertaking against use in furtherance of any military purpose'[20].

Initially, these inspections, 'after consultation with the State or States concerned', were oriented towards those facilities declared as nuclear by the country itself, but subsequently, since May 1997 and with the nations that have signed the 'Additional Protocol to the Agreements between States and the IAEA for the Application of Safeguards', the IAEA can inspect all existing facilities in the country that has signed this additional protocol practically without prior notice[21]. Literally, the Protocol states that 'the period of advance notice shall, if the Agency so requests, be at least two hours but, in exceptional circumstances, it may be less than two hours'[22].

As for the impact of the NPT on international relations, and in particular its contribution to peace, this Treaty has been in force since 1970 and more than 50 years have passed since then. If we were to take stock, the positives could include that there has not been a single nuclear conflict on the international scene. We should also consider it a triumph that no less than 191 states are party to the Treaty, many have benefited from transfers of nuclear technologies for peaceful uses, and this benefit remains open to all member nations through the IAEA. Consequently, the Treaty has undoubtedly made a decisive contribution to global security and stability.

If the Non-Proliferation Treaty did not exist, there would now be a larger number of countries that could be described as 'middle powers' with nuclear weapons, and even others of more modest status that would have managed, with an economic effort disproportionate to their means, to possess the atomic weapon individually. In relation to this possibility, we can bring here some of John Mearsheimer's opinions from 1993, in the context of the demise of the Soviet Union, set out in his article 'The case for a Ukrainian nuclear deterrent', which we will return to later in more detail (Mearsheimer, 1993: 50). In his article, Mearsheimer argued that the multipolarity brought about by the demise of the Soviet Union would favour nuclear proliferation in Europe, and that this would make our continent more likely to remain at peace.

20 IAEA Statute as amended up to 28 December 1989, Article XII, Paragraph A, Item 6.

21 Document INFCIRC/540 (corrected). Link: iaea.org/topics/additional-protocol

22 Additional Protocol to Agreements between States and the IAEA for the Application of Safeguards, Article 4(b)(ii). Link: iaea.org/sites/default/files/infcirc540c_sp.pdf

He also stated at the time that it was unwise for Ukraine to transfer its nuclear arsenal from Soviet times to Russia, a transfer that was subsequently agreed and finalised in 1996 with all Soviet nuclear weapons, tactical and strategic, stationed until then in Ukraine being transferred to Russia. Success did not go the way of the famous professor on this occasion.

However, we can consider that with more countries possessing nuclear weapons, there would also be a greater likelihood that some would opt to use them in the event of a conflict. The world would be less safe.

Considering the worst-case scenario, and taking into account the hatred and the situation in the Middle East between Arabs and Israelis, or between Shiites and Sunnis, if the Nuclear Non-Proliferation Treaty did not exist, it is not difficult to imagine that some country in the region that had managed to acquire an atomic weapon would launch a nuclear attack on a neighbouring country in a moment of crisis (so frequent in that area), and a monumental disaster would ensue throughout the region, which at best would take decades to repair.

Of course, we know that some non-treaty countries currently possess atomic weapons and overshadow the international scene with dangerous positions, but they are few. The success is precisely that: that there are very few countries, and that the remaining countries, the vast majority, reject the use of such weapons.

To sum up, three ideas: the NPT is essential to promote prudence in international relations and is a very important element in averting the danger of a nuclear confrontation; the fact that a large number of NPT member countries have committed to not possessing nuclear weapons and a few are able to do so is intrinsically good for international relations because of the moderating role these powers can play on the international stage; and, finally, it should not be forgotten that the greatest medium- and long-term danger to be faced in the coming years lies in the Middle East, with Tehran as its capital.

The Treaty on the Prohibition of Nuclear Weapons

To complete the current picture in the nuclear field, an issue that has had an undeniable impact on international relations since the discovery of the possible military use of atomic energy, we will devote a few lines to the recent international attempt within the framework of the United Nations to eliminate all nuclear weapons from the planet. The goal could not be more ambitious or more difficult.

It is the Treaty on the Prohibition of Nuclear Weapons. This Treaty entered into force on 22 January 2021, having already been ratified by 51 nations out of the 86 that had signed it in 2017. This group of nations does not include, as might be expected, the states accepted as nuclear-weapon states by the NPT, and even less so the countries known to possess nuclear weapons without being members of the NPT (India, Pakistan, North Korea and Israel). Finally, NATO member states are not among the

parties to the Treaty either, as they see their ultimate security guarantee in the support they receive from US nuclear capability.

The content of the treaty is certainly very ambitious. Article 1 clears up any doubt of interpretation: 'Each State Party undertakes never under any circumstance to develop, test, produce, manufacture, otherwise acquire, possess or stockpile nuclear weapons or other nuclear explosives'. The same article in point (d) also prohibits to 'use or threaten to use nuclear weapons'. These formulations are complemented by Article 4.2, which literally requires that 'each State Party that owns, possesses or controls nuclear weapons or other nuclear explosive devices shall immediately remove them from operational status, and destroy them as soon as possible'[23].

As for the duration of the Treaty, Article 17 states that it is of 'unlimited duration', and that to withdraw from it, a state that decides to do so must wait one year: 'shall only take effect 12 months after the date of the receipt of the notification of withdrawal'.

As we have seen a couple of paragraphs ago, many countries are currently participating in this Treaty, and with regard to its future it must be borne in mind that the current international order is based on a distribution of powers in which the nuclear military capability of the countries that possess it plays a role of the utmost importance, and that changing an already consolidated competitive international order through a voluntary and generous agreement without a conflict or a crisis of sufficient magnitude to impose it is something that seems impossible to achieve in the short- and medium-term.

In short, this is a Treaty that reflects the feelings of a large part of humanity: the feeling of rejection of nuclear weapons because of their enormous destructive power, and for this reason, we could consider that perhaps when the international situation allows the establishment of an organisation that controls all nuclear weapons, and the nations that currently possess them have placed them under its authority, it will be possible to reach a general commitment by all States not to develop, acquire, stockpile, use or threaten to use nuclear weapons, as established in the current Treaty on the Prohibition of Nuclear Weapons, and in particular, to 'destroy those it already possesses'[24].

The magnitude of the nuclear threat. Considerations for the European Union

Prestigious Spanish scientist and Air Force General Guillermo Velarde estimated in an analysis published in 2011 that in the 1980s-90s there were around 80,000

23 United Nations 2017. Treaty on the Prohibition of Nuclear Weapons. Link: d3n8a8pro7vhmx.cloudfront.net/tectodevms/pages/2417/attachments/original/1571248128/English.pdf?1571248128

24 DW Actualidad. Tratado de Prohibición de Armas Nucleares entra en vigor. dw.com/es/tratado-de-prohibicion-de-armas-nucleares-entra-en-vigor/a-56308682

nuclear warheads in the world! The wise Spaniard also tells us that by the year 2010, the total number of nuclear warheads had decreased to around 22,000. The bulk of this reduction was almost entirely the responsibility of the United States and Russia, whose arsenals were reduced to 9,600 and 12,000 nuclear warheads respectively. These figures may not reflect the reality of those years with mathematical accuracy, which was obviously of a secret nature, but they can be estimated as important data taking into account the category and knowledge of Professor Velarde (2011).

At present, and after the cutbacks following the signing of the START III Treaty, we can estimate data provided by the *Federation of American Scientists* as very reliable. This federation was founded in 1945 by scientists who worked on the Manhattan Project and has been producing information on these issues ever since. In its 2022 report by Hans Kristensen and Matt Korda, they estimate that the US has 5,428 nuclear warheads, Russia has 5,977, China 350, France 290, the UK 225, Pakistan 165, India 160, Israel 90, and North Korea 20[25].

Data from the *Federation of American Scientists* is very closely aligned with data published by the prestigious *Stockholm International Peace Research Institute* (SIPRI) for January 2022, as total inventory 'includes stockpiled warheads plus retired warheads awaiting dismantlement'[26].

On the international scene, the situation between the two great superpowers in the nuclear field improved particularly in 2011 with the signing of the START III Treaty, also known as *New START*, which entailed the beginning of a new reduction, very substantially limiting the number of Russian and American nuclear warheads. The Treaty was to last for ten years and, although President Trump threatened in its final years to withdraw, the change in the US presidency finally meant it could be extended for five more years, until 5 February 2026.

According to the *Congressional Research Service* of the US Congress, among other things, the *New START* Treaty:

> 'limits each side to no more than 800 deployed and nondeployed land-based intercontinental ballistic missile (ICBM) and submarine-launched ballistic missile (SLBM) launchers and deployed and nondeployed heavy bombers equipped to carry nuclear armaments. Within that total, each side can retain no more than 700 deployed ICBMs, deployed SLBMs, and deployed heavy bombers equipped to carry nuclear armaments. The treaty also limits each side to no more than 1,550 deployed warheads; those are the actual number of warheads on deployed ICBMs and SLBMs, and one warhead for each deployed heavy bomber'[27].

25 FAS Status of World Nuclear Forces. fas.org/issues/nuclear-weapons/status-world-nuclear-forces/

26 Stockholm International Peace Research Institute SIPRI Press Release, 13 June 2022.

27 The New START Treaty: Central Limits and Key Provisions. Update July 30, 2021. Congressional Research Service Report. https://crsreports.congress.gov

A particularly interesting element to consider with respect to the nuclear threat is the report prepared by Professor Velarde in 1977 on the probabilities of a full-scale nuclear war between the Soviet Union and the United States, commissioned by then Chief Lieutenant General of the Air Defence Command of the Spanish Air Force.

His study considered two possible strategies: that the initiator of the attack would first target the adversary's nuclear facilities, or that it would target its cities and industrial centres. In the first case, and if the country initiating the attack were the Soviet Union, '62% of US ICBM launch silos would be destroyed, with the remaining 38%, or 380 ICBMs, surviving, as would 100% of the aircraft and submarines on their bases. Seven per cent of the inhabitants of the United States would die in a few weeks, or 16 million dead' (Velarde, 2016: 244). The US response would be to counter-attack with the surviving ICBMs, i.e. approximately 380 missiles each armed with several nuclear warheads, and with the bombers and submarines not destroyed because they were outside their bases at the time of the Soviet attack. The counter-attack would be directed at industrial centres and population centres, as Soviet silos and launch systems would be empty after the attack, and the result would be a mass destruction of the USSR in those years: 75% of its heavy industries would be destroyed and 45% of the population would be killed, some 115 million dead.

If the Soviet Union were to apply the city strategy, the USSR would launch its strategic nuclear weapons primarily against US cities and industrial centres, and as a result, 60% of the US population would be killed (130 million dead) and the country would be virtually destroyed, but not its missile silos, submarines or strategic bombers. The US response would be even more devastating using its full nuclear force, which would be little damaged as its missile silos and submarine and aircraft bases were not generally attacked. The response would mainly target Soviet cities and industrial centres, resulting, as we have seen in the case of the silo strategy, in 115 million dead and the virtual destruction of the Soviet Union. In his study, Velarde concludes that 'the nation initiating the attack would have the greatest chance of being massively destroyed, and no nation would want to initiate an all-out nuclear attack' (Velarde, 2016: 245).

According to the above reasoning, neither the Soviet Union nor the United States would initiate a mass nuclear strike against the other, and consequently the likelihood of an all-out nuclear war, according to Velarde, would be very small. If, on the other hand, the USSR had launched a nuclear weapon against a Western ally, how would the United States have reacted, knowing that whoever launched an all-out nuclear attack would be completely destroyed? This is the argument, Velarde continues, on which General de Gaulle's doctrine was based. He argued that 'the only effective nuclear umbrella was one's own nuclear deterrent' and asserted that in the nuclear war of the future, those nations with nuclear weapons would have the greatest chance of survival. This doctrine was put into practice, and on 3 November 1959 he announced at the *Ecole Militaire de Sait-Cyr* in Paris the creation of his own independent nuclear force, which he christened the *Force de Frappe* (De Gaulle, 1959).

This French conception of the need to have its own nuclear capability, embodied in its *Force de Frappe*, is still valid in our neighbouring country. Indeed, French President

Jacques Chirac reaffirmed it in a statement on French defence policy and nuclear deterrence at the French missile submarine base at l'Ile Longue in Brest on 19 January 2006. There he stated that 'nuclear deterrence remains the fundamental guarantee of our security' (Chirac, 2006), and outlined a new concept for the use of its nuclear weapons aimed at their potential use against an attack by a lesser state. According to the French president, one could respond not only with the two alternatives of a conventional response or nuclear annihilation of the attacker, but by adapting a French nuclear response to the dimension (nuclear or otherwise) of the aggression received from a hostile state.

The current French president, Emmanuel Macron, delivered another major speech on 7 February 2020 at the French *Ecole de Guerre*. It had much in common with Chirac's in 2006, and he considered that, with today's nuclear proliferation and the development of delivery vehicles, attacks by regional middle powers that have developed nuclear weapons can directly reach European territory. In the face of such a threat, he called for European sovereignty and freedom of action, a rebalanced transatlantic relationship, and a greater capacity for autonomous European action. As for France's nuclear force, Macron said he was becoming more and more determined every day to embrace the value of nuclear deterrence.

Like Chirac, and in similar words, he argued that French nuclear forces 'play their own deterrent role, particularly in Europe. They strengthen Europe's security by their very existence and, in this respect, have a truly European dimension'.

If we have given importance here to these statements by the presidents of the French Republic, it is because they offer an alternative in the use of limited nuclear means in international relations to what we might consider 'classical' in the context of a mass nuclear confrontation. These interventions by Presidents Chirac and Macron speak of deterrence at European level with the possibility of limited use, including as a weapon against terrorism. This would be the case of a terrorist group with sufficient economic resources, for example Daesh, that manages to get hold of a nuclear fission device, whether or not under the protection of a country that is not a member of the Non-Proliferation Treaty.

Going deeper, one should ask in particular whether, in addition to considering its nuclear deterrent and its *Force de Frappe* as the ultimate guarantor of the nation's vital interests, France wishes, as De Gaulle intended during the Cold War, to play a role in Europe and the European Union similar to the one it has seen the United States play in the Atlantic Alliance. If so, it might be willing or able, subject to agreed limitations and conditions, to extend its nuclear umbrella of protection in some way over other European nations, within or outside the framework of the European Union. As for the latter, any rapprochement in this direction would give France de facto leadership of the Union, but would not be easily acceptable to the United States, and perhaps not even to those NATO countries that base their security on NATO membership, even though this 'Euro-French' deterrence would in any case be complementary to and coordinated with that of the Atlantic Alliance. We should not forget that in the nuclear field the United States' nuclear capability has been and continues to be the best

guarantee for Europe at all levels of conflict, although the decision to use its nuclear means will always be in American hands. At this stage, however, these ideas are only food for thought rather than a matter for negotiation, but one has to start somewhere.

We cannot forget the other ally, NATO member, and until recently a member of the European Union, the United Kingdom. Its interest in nuclear energy dates back to before the outbreak of World War II and its major involvement in the US Manhattan Project. With the latter, they have maintained close cooperation in all areas, the so-called *special relationship*, which has also been clearly manifested in the nuclear field with the Quebec agreements of 1943, the Mutual Defence Agreement of 1958, and the Nassau Agreement of 1962, and since then, they have been somewhat in the shadow of the United States, but with a performance, as we have already said, that is very satisfactory for the interests of both countries.

Since the end of the Cold War, its nuclear strategy has been to reduce its number of nuclear weapons, but always maintaining a sufficient capability to compensate for the decline in its conventional forces, which it nevertheless maintains at a high operational level, and to sustain its standing in the world as a global player and nuclear power. A new development in this behaviour has been a recent statement by Boris Johnson (in March 2021) to strengthen its nuclear weapons arsenal, which he will undoubtedly do once again in cooperation or at least coordination with the United States.

Conclusions

From all that has been seen here, it can be concluded that, although on a smaller scale than during the Cold War, there is a nuclear risk to our continent in our time which certainly influences international relations, and which must be taken into account at all times. We have recently been reminded of this by Vladimir Putin and his foreign minister with more than one warning of its possible materialisation in the context of the conflict provoked by Russia's invasion of Ukraine. In any case, the risk of a nuclear conflict in the world is different than it was during the Cold War, but it still exists and is potentially very important. Not only do we have to live with this risk, we have to confront it, mainly with the Non-Proliferation Treaty, but also with coordinated and strong European diplomacy, so that none of the crises that occur with some frequency on the international scene culminate in the use of atomic weapons of any kind. Indeed, this is the primary objective underlying the Non-Proliferation Treaty, and the agreements that have been reached between the United States and the Soviet Union, and later with Russia,

It is obvious that the nuclear factor in the international relations of our time has a dual dimension: military and peaceful. The latter has contributed to the development of peoples and understanding between states through technological aids for its use in its many facets. The military dimension, although it has been a primary element of deterrence among states possessing this type of weapon, and from this perspective has prevented conflicts that could have become enormous (as they would have been in

the context of the Cold War), is in itself a factor of instability that affects the security of states and their foreign relations. If nuclear means were used in the event of a bilateral conflict between medium-sized powers, the consequences would already be catastrophic, but in the case of a conflict between the major powers, the consequences would be unpredictable and would seriously affect the entire planet.

For all the above reasons, the nuclear factor is and must be permanently taken into account as a major element in the international relations of our time and in the foreign policy of states. Overall, we could say that it is true that nuclear weapons have helped to control crisis situations or potential conflicts, and therefore peace, but they have made the world globally a more insecure place than it was before.

Among those who have studied this dilemma in depth is the famous American professor and international relations theorist John J. Mearsheimer, who believes in an article published in 1993 that 'nuclear proliferation sometimes promotes peace' and that 'overall, the best formula for maintaining stability in post-Cold War Europe is for all the great powers —including Germany and Ukraine— to have secure nuclear deterrents and for all the minor powers to be non-nuclear' (Mearsheimer, 1953: 50). Mearsheimer also tells us that 'in fact, nuclear weapons often diminish international violence, and Ukrainian nuclear weapons would be an effective deterrent against a Russian conventional attack or nuclear blackmail' (Ibid.: 57).

His article suggests a debate on a very delicate issue: the right balance between peace with insecurity, versus an increased risk of conventional warfare, which can also take a heavy toll. This dilemma raises the question of what would have happened if, in the process of the dissolution of the Soviet Union, the strategic nuclear weapons that were deployed in Ukraine in 1994 (the American author puts the number at 1,656) had not been transferred to Russia. An unanswered question, but one that, as we said in the opening lines of this article, is worth asking. Would the Russian invasion have taken place? Would Moscow have used nuclear blackmail? Would there have been a nuclear conflict?

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