

The 40th Anniversary of the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (1963 NTB)

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ABSTRACT

The Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water was opened for signature on 5 August 1963 and entered into force on 10 October of that same year. It was a great achievement for the United Nations in its efforts to prevent the new domain of activities of states - outer space from becoming an arena for the arms race and military confrontation. This paper will examine and analyze the provisions of the Treaty in order to demonstrate its continuous importance and relevance to the maintenance of international peace and security in the 21st century.

Introduction

Before commencing with the subject-matter of my paper, it will be useful to make a reflection briefly on the events that led to the atomic/nuclear arms race.

The atomic/nuclear era began with the first nuclear explosive test, conducted by the United States at Alamogordo, New Mexico, on 16 July 1945. This was followed by the explosion of two atomic bombs in August over Hiroshima and Nagasaki, Japan, as World War II neared an end. The Soviet Union conducted its first nuclear explosive test near Semipalatinsk, Kazakhstan, in 1949. In 1952, the United Kingdom conducted its first nuclear (explosive) test in the Monte Bello Islands off the Australian coast. France conducted its first nuclear (explosive) test near Reggane, in the Sahara, in 1960.

The United Nations (UN), prominent individuals and groups worldwide were very much concerned about radioactive fall-out from nuclear test explosions and the escalation of the arms race between the Superpowers. Albert Einstein, for example, was very sad when he learned of the destruction of Hiroshima and Nagasaki. Following World War II, he became an outspoken campaigner for a ban on nuclear weaponry.¹

Furthermore, in April 1954, almost 10 years after the first nuclear weapon test, Indian Prime Minister Nehru proposed that nuclear weapon testing should be suspended. His proposal was the first initiative of its kind. Awareness of the harmful effects of atmospheric nuclear tests prompted increasing demands for testing to end.

It should also be borne in mind that the beginning of the space era coincided with the escalation of the arms race. Thus, in the Preamble of Resolution 1348 (XIII) of 13 December 1958, the UN General Assembly recognized the common interest of mankind in outer space and that it was the common aim that outer space should be used for peaceful purposes only. A desire to avoid the extension of national rivalries into outer space was also expressed in the third paragraph of the Preamble.

In the Preamble of Resolution 1722 (XVI) of 20 December 1961, the UN General Assembly noted with concern that the continuing arms race was a heavy burden for humanity and was fraught with dangers for the cause of world peace. It endorsed the composition of a Disarmament Committee comprising the following membership: Brazil, Bulgaria, Burma, Canada, Czechoslovakia, Ethiopia, France, India, Italy, Mexico, Nigeria, Poland, Romania, Sweden, the Union of Soviet Socialist Republics, the United Arab Republic, the United Kingdom of Great Britain and Northern Ireland and the United States of America.

Furthermore, in Resolution 1801 (XVII) of 14 December 1962, the UN General Assembly requested the Secretary-General to consult further the Governments of the Member States to ascertain their views on the possibility of convening a special conference for signing a convention on the prohibition of the use of nuclear and thermo-nuclear weapons for war purposes, and to report on the the results of this consultation to the General Assembly at its eighteenth session.

The result of the indefatigable efforts of the United Nations in the field of nuclear weapons disarmament was the signing of the **Partial Test Ban Treaty (PTBT)** or the **Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water** in Moscow on 5 August 1963 by the United States, the United Kingdom and the Soviet Union. The entered into force on 10 October 1963.

At this juncture, it should be borne in mind that the PTBT was the first international nuclear arms limitation agreement. According to the information provided in a publication of the Comprehensive Nuclear Test Ban Treaty Organization (CTBTO PreCom), over 550 nuclear explosions were registered in the 18 years between the first nuclear explosive test on 16 July 1945 and the signing of the PTBT on 5 August 1963.

It is encouraging to note that, during the Cold War, two bilateral agreements on the limitation of nuclear explosions were signed by the

Soviet Union and the United States - the Treaty on the Limitation of Underground Weapons Tests (Threshold Test-Ban Treaty), limiting the yield of such tests to 150 kilotons of 3 July 1974² and the Treaty on Underground Nuclear Explosions for Peaceful Purposes (Peaceful Nuclear Explosions Treaty), limiting the yield of individual nuclear explosions conducted outside nuclear weapon test sites to 150 kilotons.³

As we celebrate the 40th Anniversary of the PTBT of 1963, it is important to bear in mind that much has been achieved by the UN with the co-operation of its Member States, including Non-governmental organizations and prominent world leaders, to make all the environments of our Mother Earth nuclear weapons free. In this respect, four nuclear-weapon-free zone treaties have been signed during this period, namely, (i) the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (the Treaty of Tlatelolcol, Mexico) of 14 February 1967,⁴ (ii) the South Pacific Nuclear Free Zone Treaty (the Treaty of Paratonga) of 1985,⁵ (iii) the Treaty on the Southeast Asia Nuclear-Weapon-Free Zone (the Treaty of Bangkok) of 15 December 1995,⁶ and (iv) the African Nuclear-Weapon-Free Zone Treaty (the Treaty of Pelindaba) of 11 April 1996.⁷

It should be pointed out, however, that the first nuclear-weapon-free zone was the Antarctic continent which was demilitarized and

denuclearized under the Washington Antarctic Treaty of 1959. The five zones established in the treaties are considered as zones of peace, cooperation and friendship.

Furthermore, it is noteworthy to mention that the post Cold War years of the 1990s created the foundation for the building of more confidence, mutual trust, good faith and mutual understanding between the Parties to the PTBT to announce moratoria and cessations of nuclear testing. This paved the way for intensive negotiations between States and adoption of the final draft text of the Comprehensive Nuclear Test Ban Treaty (CTBT) on 10 September 1996 by 158 to 3 with 5 abstentions. The Treaty was opened for signature in New York on 24 September 1996 signed on that same day by 71 States, including the five States with nuclear weapons. As at 9 September 2003, 168 States have signed the CTBT, and a total of 104 States have ratified it.

This was a great achievement under aegis of the UN in the field of disarmament toward the end of the 20th century. It consolidated the provisions of the PTBT of 1963. Nevertheless, it is very disappointing to observe that among the Permanent Members of the UN Security Council, China and the United States have signed but have not ratified the CTBT.

The Treaty Banning Nuclear
Weapon Tests in the Atmosphere,
in Outer Space and under Water
(PTBT)

In the foregoing paragraphs, I have tried to reflect on events which have had a substantial impact on the safety, peace and security of the human race. It should be recalled that the Partial Test Ban Treaty (PTBT) of 1963 was a great achievement in the midst of antagonism, bitterness, hatred and mistrust between the super powers. It was an important legal instrument, particularly during the early stage of the law-making process in the regulation of the activities of states in outer space. It declared outer space as a demilitarized and denuclearized zone. As at 29 August 2003, the PTBT had been signed by 108 States, ratified by 94 States and 23 have acceded to it. I would now like to briefly examine and analyse some of the provisions of the 1963 PTBT.

The PTBT consists of a Preamble and five articles. In the Preamble, the Governments of the United States, the United Kingdom and the Soviet Union proclaim as their principal aim "the speediest possible achievement of an agreement on general and complete disarmament under strict international control in accordance with the objectives of the United Nations which would put an end to the armament race and eliminate the incentive to the production and testing of all kinds of weapons, including nuclear weapons."

Similar wordings are also embodied in the Preambles of other instruments, for example, the 1974 US-Soviet Treaty on the Limitation of Underground Nuclear Weapon Tests. In the fourth paragraph of the Preamble, the Parties reaffirm their adherence to the objects of the 1963 PTBT. Furthermore, in the tenth paragraph of the Preamble of the 1996 CTBT, reference is also made to the 1963 PTBT as follows: "Noting the aspirations expressed by the Parties to the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water to seek the discontinuance of all test explosions of nuclear weapons for all time."

It should be emphasized that the provisions of Article I are the main core of the PTBT of 1963. Pursuant to the provisions of paragraph 1 of Article I, "each of the Parties to the Treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control: (i) in the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or (ii) in any other environment if such explosion causes radioactive debris to be present outside the territorial limits of the state under whose jurisdiction or control such explosion is conducted. It is understood in this connection that the provisions of this subparagraph are without prejudice to the conclusion of a Treaty resulting in the permanent banning of all

nuclear test explosions, including all such explosions underground, the conclusion which, as the Parties have stated in the Preamble to the Treaty, they seek to achieve."

Furthermore, according to the provisions of paragraph 2 of Article I, each of the Parties to the Treaty also undertakes furthermore to refrain from causing, encouraging, or in any other way participating in, the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described, or have the effect referred to, in paragraph 1 of Article I.

It is interesting to note that by extending these provisions of the PTBT to outer space, binding legal force is being given to the provisions of UN General Assembly Resolution 1884 (XVIII) of 17 October 1963. In this resolution, the UN General Assembly welcomed the expressions of the Soviet Union and the United States of their intention not to station in outer space any objects carrying nuclear weapons or other kinds of weapons of mass destruction (WMD). All States are solemnly called upon: (a) To refrain from placing in orbit around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, installing such weapons on celestial bodies, or stationing such weapons in outer space in any other manner; (b) To refrain from causing, encouraging or in any way participating in the conduct of

the foregoing activities. The provisions of this resolution were further consolidated in Article IV of the Outer Space Treaty of 1967 (OST 1967).

Although underground nuclear explosive tests are not mentioned in the provisions of Article I of the PTBT of 1963, it should be pointed out that the subterranean environment is part and parcel of the earth environment (biosphere). I believe that any underground nuclear explosions will surely have devastating effects on the people living on the surface of the earth sooner or later. Thus, it is submitted that underground nuclear explosions tests and the testing of weapons of mass destruction (WMD) fall within the legal prohibitions mentioned in these provisions.

However, it is encouraging to note that the obligations stipulated in the provisions of Article I of the PTBT of 1963 have been more elaborated and consolidated in the provisions of Articles I and III of the Comprehensive Nuclear Test Ban Treaty of 1996 (CTBT 1996).

Let us take a brief overview of their provisions. Pursuant to the provisions of Article I of the CTBT, (i) Each State Party undertakes not to carry out any nuclear weapon test explosion or any other nuclear explosion, and to prohibit and prevent any such nuclear explosion at any place under its jurisdiction or control. (ii) Each State Party undertakes, furthermore, to refrain from causing, encouraging, or in any way participating in the carrying

out of any nuclear test explosion or any nuclear explosion.

Article III stipulates the following national implementation measures:

1. Each State Party shall, in accordance with its constitutional processes, take any necessary measures to implement its obligations under this Treaty, In particular, it shall take any necessary measures: (a) To prohibit natural and legal persons anywhere on its territory or in any other place under its jurisdiction as recognized by international law from undertaking any activity prohibited to a State Party under this Treaty; (b) To prohibit natural and legal persons from undertaking any such activity anywhere under its control; and (c) To prohibit, in conformity with international law, natural persons possessing its nationality from undertaking any such activity anywhere.

2. Each State Party shall cooperate with other State Parties and afford the appropriate form of legal assistance to facilitate the implementation of the obligations under paragraph 1.

3. Each State Party shall inform the CTBT Organization of the measures taken pursuant to this Article.

4. In order to fulfil its obligations under the Treaty, each State Party shall designate or set up a national Authority and shall so inform the Organization upon entry

into force of the Treaty for it. The National Authority shall serve as the national local liaison with the Organization and with other States Parties.

It could be seen from the provisions of Article III that the CTBT prohibits States to use their nationals (natural and juridicals persons) to carry out research studies on the development and use of nuclear energy and materials for military purposes.

This leads me once again to reflect on the legality of the on-going development of the various national defence systems by the United States, particularly under President George W. Bush. In previous sessions of the IISL Colloquia on the Law of Outer Space, I have pointed out that the US National Missile Defence Systems contravene contemporary international law, including the Charter of the United Nations, the Outer Space Treaty of 1967 and other SALT bilateral agreements.

Furthermore, an objective analysis of the **TIME Magazine Report** of May 14, 2001 with refernce to the provisions of the articles of the **PTBT** of 1963 and the **CTBT** of 1996 illustrates that the US Governments have not been fulfilling in good faith their international obligations under those treaties.⁸

It is also disheartening to read in one of the Finnish national newspapers that enriched uranium was used by the US and Britain during the

wars in Iraq.⁹

Bearing in mind the foregoing, let us continue with our reflection on the PTBT of 1963.

Article II deals with amendments to the Treaty. Paragraph 2 provides that amendments to the Treaty must be approved by a majority of the votes of all Parties, including those of the all the Original Parties. The Treaty is open to all States (Art. III). It is of unlimited duration and each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty (Art. IV). Similar provisions are embodied in Article IX of the CTBT of 1996.

Concluding Observations and Remarks

In the foregoing pages I have tried to reflect on the events prior to the signing and the entering into force of the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water of 5 August 1963 (or Partial Test Ban Treaty (PTBT)). Although there were some irregularities in the strict implementation of its provisions by the Original Parties, it has played and shall continue to play a major role in the general and complete disarmament process during the 21st century. As has been observed earlier, the Treaty provided the momentum for the conclusion of treaties for the establishment of Nuclear Weapon Free Zones in Africa, Asia/Pacific and Latin America. We hope that this

momentum of establishing nuclear weapon free zones will be extended to the territories of states in the northern hemisphere during the 21st century.

It should also be noted that the provisions of the PTBT were supplemented by the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968 (NPT).¹⁰ The latter has greatly contributed to the reduction of the nuclear arms race during the past 35 years.

Since the beginning of the new millennium, particularly after the sad events of 11 September 2001, peoples all over the world are now living in fear and anxiety about the future. This has been used as a pretext for the development and improvement in the manufacture of new nuclear weapons and other dangerous weapons of mass destruction. The events in Iraq in spring 2003 are a clear illustration of this. It should be pointed out that peace and security cannot be preserved or maintained through military might but instead require mutual trust, understanding, cooperation, mutual respect and transparency among States and peoples of the world, based on the strict observance of the "Golden Rule".

Furthermore, the strict observance and implementation of the purposes and principles, as embodied in the Charter of the United Nations, is a **must** for all the Member States. All states and peoples must comply with the spirit and letter of the UN Charter, as well as that of all international treaties

and agreements. This also includes the subject-matter of the paper, together with those treaties referred to therein.

It should, moreover, be borne in mind that the Comprehensive Nuclear Test Ban Treaty of 1996 as an improved version of the PTBT of 1963 must be implemented by all States, because it provides a solid basis or foundation for making our mother Earth nuclear weapon free throughout the 21st century. Nevertheless, they should remember that they have an international obligation to comply with all the provisions of UN Resolution 1884 (XVIII) of 17 October 1963.¹¹

Looking back at history, I am very convinced that nuclear weapons and other weapons of mass destruction are objects created through fear and hatred amongst peoples and nations, particularly by those who want to assert their superiority and domination over others. St. James in his Epistle in this respect correctly states: **"From whence come wars and fighting among you? come they not hence, even of your lusts that war in your members? (James 4:1).** And St. Paul advises us that: **"..God has not given us the spirit of fear; but of power, and of love, and of a sound mind."** (II Tim. 1:7). It should be pointed out that peace is one of the attributes of having those qualities in every human being. It is very essential for the progress of the human race in the 21st century. Everyone needs it at all time. Sri Chinmoy, commenting on the importance of peace in the human life states:

"Peace itself is strength. If you have inner peace, you will have joy and delight when you enter into the outer world. The outer world can be under your control when you have peace of mind. Wherever you go, you will make your own peace.

In great power there is quietude. One who is outwardly strong, like a great boxer or a sovereign, has great peace and confidence inside him. If a person is not very strong, he clenches his fists and gets ready to defend himself. He has to show that he can fight. But when someone has boundless inner strength, he does not have to display it outwardly. He is relaxed because his inner strength has given him inner confidence. He is like divine hero. At any moment, he can defeat the enemy or surmount any obstacle."¹²

I would like to conclude this paper with a quotation of Albert Einstein, the great German-born physicist and originator of the theory of relativity: "The unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe".¹³ This is true! It has been reported that over 2000 nuclear explosion were registered world wide in the

51 years between the first nuclear explosive test on 16 July 1945 and the adoption on CTBT on 24 September 1996. (Department of Disarmament Affairs, UN Secretariat and SIPRI).

Thus, it is the duty of the policy-makers and leaders of the world to start thinking of the coming generations by using this the power of the atom for peaceful purposes under the strict supervision of the International Atomic Energy Agency (IAEA). They should always remember that they have a duty to comply with the vision of the Founding Fathers of the United Nations as expressed in the Preamble of the Charter: "We the peoples of the United Nations, determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind....and for these ends..to practice tolerance and live together in peace with one another as good neighbours..."

Thus, taking into consideration what has been reflected upon in this paper, it is submitted that the human, financial and materials resources currently invested in developing new weapons, should be used in alleviating the sufferings and hardships facing billions of peoples all over the world.

Finally, may I seize this opportunity to wish you all a Merry Christmas 2003 and a very Successful and Prosperous 2004. Thank you all for your kind attention.

NOTES

1. **TIME 100: Heroes & Inspirational Persons of the Century**, Time Books, New York (2000), p. 93.
2. For more details, see International Legal Materials, Vol. XV, Number 4 (July 1974), pp. 906-909.
3. For more details, see International Legal Materials, Vol. XV, Number 4 (July 1976), pp. 891-900.
4. For more details, see UNTS Vol. 634, No. 9068, p. 326 et seq.
5. For more details, see International Legal Material, Vol. XXIV Number 5 (September 1985), pp. 1442-1463.
6. For more details, see International Legal Materials, Vol. XXXV, Number 3 (May 1996), pp. 635-650.
7. For more details, see International Legal Materials, Vol. XXXV, Number 3 (May 1996), pp. 698-723.
8. See pp. 27-31.
9. For details, see, **Helsingin Sanomat (H.S)**, 25. 5. 2003. Source used: **AP**. The article title in Finnish "**Irakin sodassa käytettiin runsaasti köyhydytettyä urania**". The main points were as follows:
 - Enriched uranium was used in both Iraqi wars by the US and Britain
 - A large amount was used
 - 375 tons used in 1991
 - between 1,100-2,200 tons used in 2003
 - Only 11 tons used in Kosovo in 1999
 - UNEP has encouraged a thorough scientific study of the possible effects of the use of depleted uranium in Iraq
 - The sources of the depleted uranium are missiles fired from A-10 planes and Apache helicopters; if inhaled or ingested, the dust which results from the explosions of these missiles is believed to cause that harmful symptoms such as poisoning, tumors, fetal deformation and childhood cancer.
 - Both Britain and the US deny the danger associated with the depleted uranium.
10. For more detail, see, **THE INTERNATIONAL LAW OF NUCLEAR ENERGY** Basic Documents, Part 2, Edited by ElBaradel. Mohamed M., Nwogugu, Edwin I. and Rames, John M., Martinus Nijhoff Publishers, Dordrecht, The Netherlands (1993), pp. 1479-1492. For a brief comments on the NPT, see, e.g., Amdem, M.N., **International Legal Problems in the Peaceful Exploration and Use of Outer Space**, University of Lapland publications in Law, Series B20, Rovaniemi (1992), pp. 198-199.

11. For the legal status of that resolution, see, e.g., Jenks, C. Wilfred, **Space Law**, Stevens & Sons, London (1965), pp. 303-394; Andem, Maurice N., **op.cit.**, pp.53-62; Cheng, Bin, **Studies in International Space Law**, Clarendon Press, Oxford (1997), pp.125-149.

12. Chinmoy, Sri, **The Wings of Joy**, FIRESIDE, Rockefeller Centre, New York (1997), pp.171-172.

13. Telegram to prominent Americans, 24 May 1946, in **Nwe York Times**, 25 May 1945. Reproduced in **The Oxford Dictionary of Quotations**, 4th Edition OUP (1992), p. 268.