Pokhran 2 refers to second series of nuclear tests which included the series of five nuclear bomb test explosions conducted by India at the Indian Army's Pokhran Test Range in month of May 1998. First test was also a great success it was code named as Smiling Buddha, it was conducted in May 1974.Pokhran 2 also consisted about five detonations, among which the first one was a fusion bomb and the rest four were fission bombs. All these nuclear tests resulted in a variety of economic and technology sanctions against India by a number of major nations, including Japan and the U S. The India has a very long history of undertaking domestic research and efforts in the nuclear and related technology. The history of the Indian nuclear programme goes back to 1944, when the renowned physicist Homi Jahangir Bhabha submitted a special report on the potentials of nuclear energy to the Indian Congress. After a year he established the Tata Institute of Fundamental Research (TIFR) which is still a pioneer organization in the nuclear field. As from early as the year of 1950s, there were several preliminary studies that were conducted at the Bhabha Atomic Research Centre (BARC), and the plans of BARC were developed to produce plutonium and other nuclear bomb components. In the year of 1962, India was irritated by China when it lost some of its northern territory to china, and in 1964 the Chinese nuclear test made India into militarizing its civilian nuclear programme. After the death of Nehru and Bhabha, the whole nuclear programme became more intensified and advancements were properly revived and transferred under the chairmanship of Vikram Sarabhai, who in the year 1965 was made director of the Indian Space Research Organization (ISRO) by the then Prime Minister Lal Bahadur Shastri. After the death of Lal Bahadur Shastri, the nuclear programme got momentum under the leadership of Prime Minister Indira Gandhi and delegated to Raja Ramanna in 1967. The Prime Minister Indira Gandhi took firm decision to develop high powered nuclear weapons after learning of another test by China.(Sublette Carey:2011)
5.1 Pokhran II background

After the creation of the Nuclear Suppliers Group (NSG), Indian nuclear programs were severely affected due to the test in 1974. The world's major nuclear nations began to impose nuclear embargo on both India, and Pakistan which was technologically competing to meet with India's challenge. After Pokhran 1, the nuclear program of India had to struggle for many years, in order to gain credibility and its progress was shunted by the lack of indigenous nuclear resources and it's too much dependence on imported nuclear technology and technical assistance. But Indira Gandhi had already declared that India's nuclear program was not militarizing purpose, and at the same time she did authorize preliminary work on developing a fusion boosted fission design. But, even after the 1975 state emergency declared by her and the ouster of Indira Gandhi in 1977, there was a gap in the national leadership of India and even in the basic democratic management of the nuclear programme. The new work group that was set up to work on the new fusion boosted design was headed by M. Srinivasan but under him the work’s progress was too slow. The main Indian peace activist and one of the anti-nuclear weapon advocates, Morarji Desai, took over the office as the Prime Minister of India. On June 1978, Desai removed deliberately Ramanna from the nuclear development programme and he then posted him at the Ministry of Defence. Desai government was not at all concerned with much progress in the field but even after that without much progress in nuclear programme and nuclear program began to grow at a desirable rate. The most Disturbing news at that time came from Pakistan when the world began to discover the Pakistani clandestine atomic bomb projects which were ongoing for several years. In contrast to India's hardcore nuclear development programme, Pakistan's atomic bomb programme was completely under military supervision. Pakistan's atomic bomb programme was relatively huge; it was lavishly funded, but discreet and well organized. India began to realise that Pakistan was likely to succeed in this project in matter of two years and this will adversely affect Indian strategic interest in the region. The 1980 general elections in India marked the return back of Prime minister Indira Gandhi who again initiated the Indian nuclear programme. In the year of 1981, Ramanna was appointed back as a director to the
nuclear programme and he accelerated the whole program. In the year 1983–85, Prime Minister Indira Gandhi denied the nuclear test option when she saw that the Pakistan exercising the Brinkmanship, though the Indian nuclear programme continued to advance. It was then 1980s that the work about hydrogen bombs and the missile delivery programs were started, and Dr. APJ Abdul Kalam, an aerospace engineer, who later became Indian president, who developed the launch vehicles for ISRO space missions, and he was made the director of the missile programme.(The Momentum builds:2011)

5.2 Pressure on India

The US government under the supervision of President Bill Clinton tried to impose enormous amount of pressures on Rao, in order to stop the preparations. The Prime Minister Benazir Bhutto tried to issue harsh and very severe statements against India on Pakistani news channels. Thus she jeopardized the relationship between two nations. Tension amounted when the Premier Benazir Bhutto intensified her policy on Kashmir in the year of 1995. In a speech that delivered by Yousaf Raza Gillani, stressed that the "Kashmir issue" is really endangering the peace and security in the whole south Asian region. The then Indian delegation that were headed by Atal Behari Vajpayee, reiterated that the "UN resolutions only call upon Pakistan the occupying force to vacate the "Jammu and Kashmir Area."

(Masood Haider:2011)

5.3 Respect on world stage

Pakistan, there is a conservative force, the Pakistan Muslim League (PML), which was also in power at that time with an exclusive mandate which was headed by the then Prime Minister Nawaz Sharif who was defeated by the left wing forces headed by Benazir Bhutto in the year of 1997 general Elections in Pakistan. During the BJP campaign in India, Atal Behari Vajpayee opened up that his government would "take back that part of Kashmir that is under Pakistan's control." When this declaration, was made the BJP platform cleared their intention to "exercise the option to induct nuclear weapons" and "India should have become an open nuclear power which was to garner the respect on the world stage that it deserved." In the
month of 18 March 1998, Vajpayee had publicly started his lobbying for nuclear explosion and he even went a step ahead and declared that "there is no compromise on national security; all options including the nuclear options will be exercised to protect security and sovereignty." In the month of March, A B Vajpayee began to consult Abdul Kalam, R. Chidambaram and officials of the Indian Department of Atomic Energy on the nuclear options that they can exercise. Chidambaram already briefed A B Vajpayee extensively about the nuclear programme and Abdul Kalam began to present the status of the missile programme. On the month of March 28, 1998, the A B Vajpayee administration took advises from the scientists about the matter of preparations within the shortest time possible, and the preparations were quickly made. It was this time that the most tense atmosphere aroused when the Pakistan, at a Conference on Nuclear Disarmament, offered a peace rhetoric agreement with India for "an equal and mutual restraint in conventional, missile and nuclear fields." (Kheli:1997)

5.4 Extensive planning

There was an Extensive planning which done by a very small group of scientists, senior military officers and senior politicians made to ensure that all the test preparations would remain in absolute secret and even the senior most members of the Indian government did not know the things that were going on. The chief scientific adviser and the director of Defence Research and Development Organization, DR. A P J Abdul Kalam, and Dr. R. Chidambaram, the director of the Department of Atomic Energy DAE, were the chief coordinators of this test planning. The scientists and engineers of the BARC, the AMDER, and the DRDO were involved in the nuclear weapon assemble, layout, detonation and obtaining test data. A very small group of senior scientists who were involved in the detonation process, scientists were all asked to wear the Indian army uniforms in order to preserve the secrecy of the nuclear tests. Since the 1995, the 58th Engineer Regiment had learned a lot about to avoid satellite detection. Their Work was carried out mostly during night, and all the equipment were returned to the original place At morning to give the impression that those things were never moved. There
were a total of Five nuclear devices that were detonated during the Operation Shakti. (Times of India:2012)

They were:

- **Shakti I** – A thermonuclear device yielding 45 kt, but designed for up to 200 kt.

- **Shakti II** – A plutonium implosion design yielding 15 kt and intended as a warhead that could be delivered by bomber or missile. It was an improvement of the device detonated in the 1974 Smiling Buddha (Pokhran-I) test of 1974, developed using simulations on the PARAM supercomputer.

- **Shakti III** – An experimental boosted fission design that used "non-weapon grade" plutonium, but which likely omitted the material required for fusion, yielding 0.3 kt.

- **Shakti IV** – A 0.5 kt experimental device.

- **Shakti V** – A 0.2 kt experimental device that used uranium-233. (Nuclear weapon archive:2012)

### 5.5 Reactions in India

India after the tests became the sixth country that have tested nuclear bomb in 1998 and thus India joined the elite nuclear club. After the tests, immediately a press meet was convened at the prime minister A B Vajpayee’s residence in New Delhi and he made the following statement: “India conducted three underground nuclear tests in the Pokhran range. All The tests conducted today were with a fission device, a low yield device and a thermonuclear device. The measured yields are in line with expected values. Measurements have also confirmed that there was no release of radioactivity into the atmosphere. These were contained explosions like the experiment conducted in May 1974. I warmly congratulate the scientists and engineers who have carried out these successful tests”. News of the tests were greeted with great celebration and great approval by the Indian citizens. The Bombay Stock Exchange (BSE) even registered a huge significant gains and it led to great leap in the stock markets in the following days. Newspapers and television
channels began to praise the government for its strong decision on the matter; even the editorials of all newspapers were full of praise for the country's top men leadership and also advocated the development of an operational nuclear arsenal for the country's armed forces. But, on the other hand, the Opposition, which was led by Congress Party criticized the Vajpayee government for carrying out nuclear tests. (BBC Economic Review:2013)

U.N. Sanctions

On the month of 6 June, the United Nations Security Council (UNSC) began to start the process and it adopted Resolution 1172 condemning the nuclear test of India and that of Pakistan. China even issued a vociferous condemnation calling for the international community to put high pressure on India to sign the Non Proliferation Treaty and they urged India to eliminate its nuclear arsenal. When India joined the group of countries possessing nuclear weapons, a new era of strategic dimension began to emerge in Asian continent, particularly South Asian continent.(Dittmer,L:2005)

United States

By keeping with its preferred attitude to the foreign policy in the adjacent decades, and also in compliance with a 1994 anti nuclear weapons proliferation law, the US imposed highly valid economic sanctions on India. The economic sanctions even consisted about cutting off all the economic assistance to India except that for the humanitarian aid, it also did banning over the export of certain defence material and technologies, by ending American credit and credit guarantees to India, and also made requiring the US to oppose lending by international financial institutions to India. The US even issued a strong statement condemning India and promised they promised that the sanctions would follow. (BBC Release:2015)

Japan

Japan also began to impose heavy economic sanctions on India. The economic sanctions by consisted of freezing all the new loans and grants that were given to India except for humanitarian aid. Even Some other nations also imposed same types of economic sanctions on India; primarily it was in the form of
suspension of foreign aid and other credit lines. However, during this period the overall effect on India's economy and its technological progress was marginal. (CMM News:2011)

**China**

In the month of May 12, the Chinese Foreign Ministry stated in a press release that “The Chinese government is seriously concerned about the nuclear tests conducted by India," and that the tests "run counter to the current international trend and are not conducive to peace and stability in South Asia.". The very next day the Chinese Foreign Ministry issued another statement by clearly stating that "it shocked and strongly condemned" the Indian nuclear tests and called for the international community to "adopt a unified stand and strongly demand that India immediate stop development of nuclear weapons". (CNS Report:2012)

**Pakistan**

The most biggest and strong reaction to Indian nuclear explosion came from the Pakistan. With Great protest Pakistan began blaming India for initiating a total nuclear arms race in the south Asian region. Then Pakistan Premier Nawaz Sharif vowed that his countries will definitely give back a suitable reply to the Indians. The day after the first tests, the Pakistan Minister of Foreign Affairs Gohar Ayub said that Pakistan is ready to conduct a nuclear test of its own. As he said: 

"[Pakistan] is prepared to match India, we have the capability.... We in Pakistan will maintain a balance with India in all fields", he said in an interview. "We are in a headlong arms race on the subcontinent." On 13 May 1998, Pakistan bitterly condemned the tests, and Foreign minister Gohar Ayub by quoting that Indian leadership seemed to 'have gone berserk and was acting in a totally unrestrained way.' (BBC Report:2013)

**5.6 U.S Response to Pokhran**

After the series of nuclear tests, which were known as Pokhran II, which was conducted by India, the burgeoning economic and security ties between India and the U S have been punctuated and the major political ambience in the bilateral relationship between both countries came to a point of defiance. After the tests nuclear tests by India surprised all and even the powerful intelligence community of
the U S was intelligently fooled by India. The U S Deputy Secretary of State Strobe Talbot had characterized the nuclear tests by India and then by Pakistan as a path leading to a "dead end" and he advised others not to "follow down that path" (Economic Times:1998)

**Official stance**

The United States State Department officials and the American diplomats had an impression that India should have to be spelled out its nuclear programme. To them, India and U S were in the process of conducting a massive "strategic dialogue" in the new context of the post Cold War era. The U S Ambassador to the United Nations, Bill Richardson was in Delhi not a long time before the Pokhran II nuclear tests and he felt unattended that his Indian counterparts didn’t have any signs to him about their plans. There was a massive lobbying activity done by the Bill Clinton Administration which eventually led to the enactment of the Brown Amendment by the U.S Congress. Interestingly, the bill Clinton Administration, which claims to have put the Non Proliferation Treaty on top of its agenda in U S foreign policy, it was instrumental in diluting the Pressler Amendment. And the U.S inaction over the Sino-Pakistan nuclear and missile cooperation, in addition, sets shows another example of U.S soft policy towards Pakistan's nuclear activities.(Chintamani Mahapathra:1998)

**5.7 Nuclear history**

Moreover, these events are now part of the nuclear history of the whole world that India's nuclear test explosion in 1974 had already triggered the U S and international efforts of a series of dialogues to control the regimes and also the mechanisms that are to be checked for nuclear proliferation. This was an indication that even when in the midst of the Cold War, the U S was not even prepared to accept India's emerging role as a powerful country in the region. It was the U S which had led several crusades against Non Proliferation Treaty and it was the Bill Clinton’s Administration in particular that which had instituted a series of conservative measures known as "Counter-Proliferation Initiatives." Which were carried out against the Non Proliferation Treaty. In the backdrop of all these developments in the
international arena, it was totally natural that the New Delhi Did not wanted to inform Washington about its nuclear options and other related developments. According to the U S perception, India had taken a step which was bound to hamper the rising security threats and economic cooperation between the both countries. (Reuters News Media:1998) From the year 1994, a new American law which was known as the Nuclear Proliferation Prevention Act, has been in place and this was an important one. This Act in total combined all major efforts of previous legislations on proliferation issues to facilitate a clearer position of the U.S on the subject of both Indian threat as well as their stance on Non Proliferation Treaty. One of the key parts of this legislation was the incorporation of the Glenn Amendment which authorized any sanctions against countries that detonates one or more nuclear devices. Acting under this law, President Bill Clinton imposed the following sanctions on May 13, 1998:

- Termination of assistance under the Foreign Assistance Act of 1961, except for humanitarian assistance for food and other agricultural commodities;
- Termination of sales of defence articles, defence services, or design and construction services under the Arms Export Control Act, and termination of licenses for the export of any item on the United States munitions list;
- Termination of all foreign military financing under the Arms Export Control Act;
- Denial of any credit, credit guarantees, or other financial assistance by any department, agency or instrumentality of the United States government;
- The United States' opposition to the extension of any loan for financial or technical assistance by any international financial institution;
- Prohibition of United States banks from disbursing any loan or providing any credit to the Government of India, except for the purposes of purchasing food or other agricultural commodities; and Prohibition of export of specific goods and technology subject to export licensing by the Commerce Department.(The Hindu:1998)
5.8 U.S sanctions and pressures

The U.S imposition of various economic and military sanctions soon imitated various kinds of wide speculation in India, U.S and everywhere. While the Government of India kept issuing several statements to the effect that India is capable of sustaining American pressures and other sanctions. The U.S government officials initially expected that the Indian economy will face lots of pressure due to the loss of several billion dollars of financial assistance and other foreign investments due to the economic sanctions. Japan, Australia, New Zealand and a few other European countries also followed the U.S line and they too imposed economic sanctions. (Economic Times:1998) While all these developments were happening, no one knew the exact nature of the economic sanctions, and also that to what extent of their implications and the degree of their effectiveness by imposing these sanctions. The U.S officials were still searching in the dark, and since it was the very first time that the Glenn Amendment had been invoked. Jagdish Bhagwati, a renowned economist, said on May 25, 1998, that "the economic impact of the U.S sanctions would be very little... Unilateral trade sanctions almost never work(Economic times:1998). Even after when the imposition of sanctions everything was business as usual for the American banks in India, as the U.S executive gave out orders and were yet to be issued about the role of these banks in operating in India.(Jagdish Bhagawati:1998)

Protecting U.S. interests

While all these events happened, Pakistan conducted their own series of nuclear weapon tests in May itself after couple of weeks of Pokhran II nuclear tests. This event suddenly took off the heat off India. Then the U.S was bound to impose more economic sanctions on Pakistan as well. On the month of June 18, the State Department of U.S even detailed several of the economic sanctions imposed against India and Pakistan and They said that while imposing sanctions the U.S is trying to make both parties understand the trauma of the world. (Palmer: 1989) At that time the Bill Clinton Administration perhaps could have taken a strict stand in the World Bank for this reason but due to the domestic pressure from the business houses in U.S and also from the farming communities. The statements from both the White
House and other U.S officials was already began to indicate a change of policy before the World Bank which cleared the loans for India. The whole nature of the economic sanctions law was such that it had already tied the hands of the Administration. Once the economic sanctions are imposed, it is only with the help of another Congressional legislation that can lift these economic sanctions. The first step towards dealing with this law thus remained a major preoccupation of the Bill Clinton Administration. (Reuters:1998) The U S business and agriculture lobbying groups came to support the Bill Clinton Administration’s legislative position on this issue. There were two results that came out of the Bill Clinton’s White House efforts towards making the past law more flexible. First was step was a unanimous vote in the U S Senate in the second week of July in order to exempt credit and other guarantees provided by U S authorities to support food and medicine exports from the Arms Exports Control Act. The second result after this was the Senate decision which was a day after Clinton signed the Bill exempting farm products from the clutches of sanctions in order to support a measure by giving U S President full power to waive most of the economic sanctions under the Glenn Amendment. One week earlier, the Assistant Secretary of State Inderfurth had already pleaded in front of the Senate about the importance to make the economic sanctions law much more flexible with a Constant assurance that the implementation of the new legislation would force on India and Pakistan by changing their ways. He even said that the U S wanted both the nations to "conduct no further nuclear tests; sign and ratify the CTBT immediately and without conditions; refrain from deploying nuclear weapons; participate constructively in negotiations towards a fissile material cut-off treaty; formalize existing policies not to export weapons of mass destruction and missile technology and equipment; and resume direct dialogue to address the root causes of tension between them, including Kashmir." (USIS:1998)

**United States bargaining**

There was no doubt that the lines said by Inderfurth in his statement was that he was spelling out the outer line of the U S position. He even was aware of the position taken by India and Pakistan as well in this matter. India does not only like to become recognized as a controversial nuclear weapon power but India also does not
like to link this to the Kashmir issue with the nuclear issue, this was among the other demands. The visit made by the members of the Senate Task Force on Sanctions in the subcontinent, and the rethinking done by the U S State Department on the issue, of the articulation of the Whole point is that the idea of U S is not to punish the Indian people and they even said that they are always welcome in the process of developments. (Hindustian Times:1988) And finally the U S was approached towards technology transfer, scientific collaboration. India and the U S had one of the biggest collaboration efforts in ever in the science and technology. But the U S at this time came to be perceived in India just as a power which has not only the one who started to discourage the scientific collaboration with Indian scientists but they were the ones who also as one which seeks to deny India the fruits of their own scientific achievements. The economic sanctions imposed on India over the important cryogenic rocket engine deal with Russia and the latest U S decision to deny the visas for Indian scientists and they even went on deporting Indian scientists who were working in the U S establishments anywhere in the world have strengthened such a perception and have generated a certain amount of anti American attitude in the country. The United States policy of liberal attitude towards Pakistan, and even their closer defence and security cooperation with China made a hard line posture over the Indian nuclear tests would possess a handful of considerable hurdles in restoration of normal ties between India and the U S. It will definitely take quite some time before the dark clouds over India U S relations are restrained with fresh wind of friendly cooperation. (The Hindu:1998)

5.9 Evolution of CTBT

Till today, there were over 2,000 nuclear tests that have been carried out at different places around the world. Arms control advocates who had always campaigned for the adopting of a treaty which bans all sorts of nuclear experiments since the early year of 1950s, when the general public was really concerned about this matter. There was tension due to the wider knowledge of nuclear tests as a result of this everyone was worried about a radioactive fallout from atmospheric nuclear tests and the increasing arms race. There were over 50 nuclear explosions that were registered between the period of July 16, 1945, and December 31, 1953
when the first among the nuclear explosive test was conducted by the U S at the White Sands Missile Range near Alamogordo, New Mexico. The Indian Prime Minister Jawaharlal Nehru of India voiced the increasing international concern in 1954; He even proposed the elimination of all nuclear test explosions in a worldwide manner. But within the context of the Cold War, there were several skepticism about the capability to verify the compatibility with a comprehensive nuclear test ban treaty which posed a major obstacle to any agreement. There was limited success that was achieved by the signing of the Partial Test Ban Treaty in 1963, which went for banning nuclear tests in the atmosphere, underwater and in space, but not in the underground. But at that time both France and China did not signed the PTBT. However, the treaty was still ratified by the U S by an 80 to 19 vote in the U S Senate.(Dary Kimbell:2012)

5.10 Nuclear Non-proliferation Treaty

A greater step that was put towards a non nuclear proliferation of nuclear weapons came with the signing of the Nuclear Non proliferation Treaty (NPT) in 1968. Under the Nuclear Non proliferation Treaty, the non nuclear weapon states were prohibited from, possessing, manufacturing or even acquiring nuclear weapons or other nuclear explosive kinds of devices. All the signatories, including the nuclear weapon states, were heavily committed to the goal of a complete nuclear disarmament. But with India, Pakistan and Israel they have declined to sign the Nuclear Non proliferation Treaty on grounds that such a treaty will fundamentally be a discriminatory as it places Several limitations on all these states that do not even have a nuclear weapons while making no efforts to curb these nuclear weapons development that are declared as nuclear weapons states.(Dary Kimball:2012)

5.11 Adoption of the CTBT

There were Intensive efforts that are made over the next three years which were to draft the Nuclear Non proliferation Treaty text and its two combined annexes. But the Conference on nuclear Disarmament, in which several negotiations were being held, did not succeed in reaching an agreement on the text. “Under the direction of Prime Minister John Howard and Foreign Minister Alexander Downer,
Australia then sent the text to the United Nations General Assembly in New York, where it was submitted as a draft resolution. On September 10, 1996, the Comprehensive Test-Ban Treaty (CTBT) was adopted by a large majority, exceeding two-thirds of the General Assembly's Membership” (Un Resolution: 2011).

5.12 Evolution of NPT

The agreement on the Non-Proliferation of Nuclear Weapons, was commonly known as the Non-Proliferation Treaty or NPT, is an international treaty whose objective was to prevent the widespread of nuclear weapons and weapons technology around the world. It was also aimed to promote a constant cooperation in the peaceful purposes of nuclear energy and even to further the goal of achieving nuclear disarmament and general and complete disarmament. It was opened for signature in the year of 1968, the Non-Proliferation Treaty came into force in the year of 1970. On May 11, 1995, the Non-Proliferation Treaty was extended indefinitely. More and more countries began to sign to the Non-Proliferation Treaty than any other arms limitation and disarmament agreement; this was a testament to the Treaty's significance. A total of 190 states have joined the Non-Proliferation Treaty, although North Korea, which signed the NPT in 1985, later announced its withdrawal in 2003 from the treaty. Four UN member states who did not sign the Non-Proliferation Treaty are India, Israel, Pakistan and South Sudan. The Non-Proliferation Treaty had recognized five states as major nuclear-weapon states, the United States, Russia, the United Kingdom, France, and China. They are also the five permanent members of the United Nations Security Council. Four other nations are known to possess nuclear weapons. India, Pakistan and North Korea have openly tested and declared that they have nuclear weapons in their possession, but even at this time Israel had a policy of creating shadows regarding its own nuclear weapons programme. The Non-Proliferation Treaty consists of a preamble and eleven articles. Although the concept of All these "pillars" are not at all expressed anywhere in the Non-Proliferation Treaty, the treaty is nevertheless sometimes interpreted as a whole of three-pillar system, which has an implicit balance among them:
1. non-proliferation,
2. disarmament, and
3. right to peacefully use nuclear technology.

The Non-Proliferation Treaty has often been seen as something based on a central bargain: “the NPT nonnuclear-weapon states agree never to acquire nuclear weapons and the NPT nuclear-weapon states in exchange agree to share the benefits of peaceful nuclear technology and to pursue nuclear disarmament aimed at the ultimate elimination of their nuclear arsenals.”(Thomas C.Read:209)

Treaty "pillars"

The NPT has been first commonly described as having three main "pillars": the nonproliferation, disarmament, and peaceful use. The "pillars" concept has been questioned by some who believe that the NPT is, as its name suggests, principally about nonproliferation, and that "three pillars" language misleadingly implies that the three elements have equivalent importance.

First pillar is non-proliferation

The Five states which are recognized by the whole Non-Proliferation Treaty as nuclear weapon capable states (NWS) are China (signed 1992), France (1992), the Soviet Union (1968; obligations and rights now assumed by the Russian Federation), the United Kingdom (1968), and the United States (1968) (The United States, UK, and the Soviet Union — were the only states openly possessing such weapons among the original ratifies of the treaty, which entered into force in 1970). These five NWS agree not to transfer "nuclear weapons or other nuclear explosive devices" and "not in any way to assist, encourage, or induce" a non-nuclear weapon state (NNWS) to acquire nuclear weapons (Article I). NNWS parties to the NPT agree not to "receive," "manufacture" or "acquire" nuclear weapons or to "seek or receive any assistance in the manufacture of nuclear weapons" (Article II). NNWS parties also agree to accept safeguards by the International Atomic Energy Agency (IAEA) to verify that they are not diverting nuclear energy from peaceful uses to nuclear weapons or other nuclear explosive devices (Article III).
Second pillar: disarmament

Article VI of the Non Proliferation Treaty represents that the one and only binding commitment in this multilateral treaty is the goal of disarmament by the nuclear-weapon States. The Non Proliferation Treaty’s preamble contains the language that affirming the desire and ambitions of treaty signatories to release international tension and by that add strength to international trust and this will create someday the conditions which halt to the production of nuclear weapons, and treaty on general and complete disarmament that liquidates, in particular, nuclear weapons and their delivery vehicles from national arsenals. (UN report:2007)

Third pillar: peaceful use of nuclear energy

The third and final pillar that wholly allows for and agrees to the transfer of the nuclear technology and related materials to Non Proliferation Treaty signatory countries for the development of peaceful civilian nuclear energy programs in such countries, as long as these countries can at least demonstrate that their nuclear programs are not being used for the development of mass killing nuclear weapons. But only a very few of those states with nuclear energy programs are willing to abandon the use of nuclear energy for weapon production. The third pillar of the NPT under Article IV provides other states with the possibility to do the same, but under conditions intended to make it difficult to develop nuclear weapons. (IAEAReport:2003)

Key articles

Article I: Each nuclear-weapons state (NWS) undertakes not to transfer, to any recipient, nuclear weapons, or other nuclear explosive devices, and not to assist any non-nuclear weapon state to manufacture or acquire such weapons or devices.

Article II: Each non-NWS party undertakes not to receive, from any source, nuclear weapons, or other nuclear explosive devices; not to manufacture or acquire such weapons or devices; and not to receive any assistance in their manufacture.

Article III: Each non-NWS party undertakes to conclude an agreement with the IAEA for the application of its safeguards to all nuclear material in all of the state's
peaceful nuclear activities and to prevent diversion of such material to nuclear weapons or other nuclear explosive devices.

**Article IV:** Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the Parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty. All the Parties to the Treaty undertake to facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information for the peaceful use of nuclear energy. Parties to the Treaty in a position to do so shall also co-operate in contributing alone or together with other States or international organizations to the further development of the applications of nuclear energy for peaceful purposes, especially in the territories of non-nuclear-weapon States Party to the Treaty, with due consideration for the needs of the developing areas of the world. (IAEA report:2003)

**Article VI:** The states undertake 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 towards a "Treaty on general and complete disarmament under strict and effective international control".

**Article X.** Establishes the right to withdraw from the Treaty giving 3 months' notice. It also establishes the duration of the Treaty (25 years before 1995 Extension Initiative). (IAEAREport:2003)

**History**

The reason for the creation of Non Proliferation Treaty was the major concern for the safety of a world with many nations with large numbers of nuclear weapons. In the end of the cold war the deterrent relationship between the US and S U became completely fragile. The Non Proliferation Treaty process was already initiated by Frank Aiken, Irish Minister for External Affairs, in 1958. It was opened for signature in 1968, with Finland the first State to sign. There were Several Non Proliferation Treaty signatories that have agreed to give up their nuclear weapons or nuclear weapons programs. The South Africa had already undertook a nuclear
weapons program in their past, but it has renounced it and signed the treaty in 1991 after destroying its small nuclear arsenal and soon the remaining African countries too signed the treaty. Several former Soviet Republics like Ukraine, Belarus and Kazakhstan, destroyed or transferred to Russia the nuclear weapons they inherited from the Soviet Union. The former Soviet republics joined Non Proliferation Treaty by 1994. (Mohamed El Baradei: 204)

5.13 United States-NATO nuclear weapons sharing

At the time Non Proliferation Treaty was being negotiated, North Atlantic Treaty Organization had placed a secret nuclear weapons sharing agreement in which the US had agreed to provide nuclear weapons that are to be deployed other North Atlantic Treaty Organization states. Some argue this is an action of proliferation by violating Articles I and II of the Non Proliferation treaty. But there was a counter-argument which is that the US controlled all the weapons in storage within the North Atlantic Treaty Organization states, and that no means of transfer of the weapons or any control over them was intended "unless and until a decision were made to go to war, at which the treaty would no longer be controlling", so there is no breach of the Non proliferation treaty. These agreements were disclosed only to a few of the states, including the US, after negotiating the treaty, but most of the states that signed the Non proliferation treaty in 1968 would not have known about these agreements and interpretations at that time. (Hans M Kristensen: 2005)

At the end of 2005, it was estimated that the US still provides about more than 180 tactical B61 Nuclear bombs that are to be used by Belgium, Germany, Italy, the Netherlands and Turkey under these North Atlantic Treaty Organization states agreements. Many of these states, and also the Non-Aligned Movement, argues that this action of US violates the Non proliferation Treaty Articles I and II of the treaty, and are exerting diplomatic pressure to terminate these agreements. They have successfully pointed out that the pilots and other staff of the "non-nuclear" North Atlantic Treaty Organization states practice handling and delivering the US nuclear bombs, and even non US warplanes have been adapted so as to deliver US nuclear bombs which must have involved the transfer of some technical nuclear weapons information. North Atlantic Treaty Organization states believe its
"nuclear forces continue to play an essential role in war prevention, but their role is now more fundamentally political." (Hans M. Kristensen:2005)

NOTES.

1. Pokhran-II refers to the series of five nuclear bomb test explosions conducted by India at the Indian Army's Pokhran Test Range on May 1998. It was the second nuclear test since the first test, code-named Smiling Buddha conducted in May 1974.

2. After the Pokhran-I, the nuclear programme had struggled for years to gain credibility and its progress crippled by the lack of indigenous resources and dependent on imported technology and technical assistance.

3. The Indian intelligence had been aware of U.S. spy satellites and the American CIA had been detecting Indian test preparations since 1995; therefore, the tests required complete secrecy in India and also needed to avoid detection by other countries, specially the ISI

4. News of the tests was greeted with jubilation and large-scale approval by the society in India.¹ The Bombay Stock Exchange registered significant gains. Newspapers and television channels praised the government for its bold decision; editorials were full of praise for the country's leadership and advocated the development of an operational nuclear arsenal for the country's armed forces

5. By the time India had conducted tests, the country had total of $44bn in loans in 1998, from IMF and the World Bank.¹¹ The industrial sectors of the Indian economy such as the chemicals industry, was likely to be hurt by sanctions.¹¹ The Western consortium companies, which invested heavily in India, especially in construction, computing and telecoms, were generally the ones that were harmed by the sanctions.¹¹ In 1998, Indian government announced that it has already allowed for some economic response, but is willing to take the consequences.
6. The most vehement and strong reaction to India's nuclear explosion was from its neighbouring country, Pakistan. Great ire was raised in Pakistan, which issued a severe statement blaming India for instigating a nuclear arms race in the region. Pakistan Prime Minister Nawaz Sharif vowed that his country would give a suitable reply to the Indians.\[7\] The day after the first tests, Minister of Foreign Affairs Gohar Ayub indicated that Pakistan was ready to conduct a nuclear test of its own. As he said: "[Pakistan] is prepared to match India, we have the capability.... We in Pakistan will maintain a balance with India in all fields," he said in an interview. "We are in a headlong arms race on the subcontinent."

7. U.S President Bill Clinton found the nuclear tests by India an affront to U.S efforts to prevent nuclear proliferation. He stated that he was "deeply disturbed by the nuclear tests," he did not believe that such tests contributed to "building a safer 21st century" and added that "this action by India not only threatens the stability of the region, it directly challenges the firm international consensus to stop the proliferation of weapons of mass destruction.

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