

The International Nuclear Non-Proliferation Regime

While the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is its centerpiece, the global nuclear non-proliferation regime consists of a series of interlocking international treaties, bilateral undertakings, and multi-lateral inspections aimed at halting the spread of nuclear weapons. Other major elements of the regime are the International Atomic Energy Agency (IAEA) and two closely connected export control systems implemented by the key nuclear supplier countries (for details on each of the regime elements, see Appendices A-F in this volume).

Nuclear Non-Proliferation Treaty (NPT). The NPT, which was opened for signature in 1968 and entered into force in 1970, divides the countries of the world into two categories, “nuclear-weapon states” and “non-nuclear-weapon states.” It defines “nuclear-weapon states” as countries that detonated a nuclear explosion before January 1, 1967, namely the United States (first detonation in 1945), the Soviet Union (1949), Great Britain (1952), France (1960), and China (1964). Russia succeeded to the Soviet Union’s status as a nuclear-weapon state under the Treaty in 1992. The NPT treats all other countries as non-nuclear-weapon states.¹

Under the NPT:

- Non-nuclear-weapon states under the Treaty pledge not to manufacture or receive nuclear explosives. (Both nuclear weapons and “peaceful nuclear explosives” are prohibited.)
- To verify that they are living up to this pledge, non-nuclear-weapon states also agree to accept IAEA safeguards on *all* their peaceful nuclear activities, an arrangement known as “full-scope safeguards.”²
- All countries accepting the Treaty agree not to export nuclear equipment or material to non-nuclear-weapon states except under IAEA safeguards, and nuclear-weapon states agree not to assist non-nuclear-weapon states in obtaining nuclear weapons.
- All countries accepting the Treaty agree to facilitate the fullest possible sharing of peaceful nuclear technology.

- All countries accepting the Treaty agree to pursue negotiations in good faith to end the nuclear-arms race and to achieve nuclear disarmament under international control. (In practice, this applies to the nuclear-weapon states.)
- A party may withdraw from the Treaty on ninety days’ notice if “extraordinary events related to the subject matter of the Treaty” have “jeopardized its supreme interests.”

All five established nuclear-weapon states are parties to the NPT. The United States, Russia, and Great Britain are the Treaty’s depositary states; China and France did not join until 1992. As of the end of 1997, the Treaty had 180 non-nuclear-weapon state parties, for a total of 185 parties.

The NPT originally entered into force for 25 years, with periodic reviews of the Treaty occurring every 5 years. At the NPT Review and Extension Conference held in New York City in April-May 1995, the parties agreed to extend the Treaty indefinitely without conditions. In addition, they approved a set of principles and objectives to guide the parties during a strengthened review process in the future. The indefinite extension of the NPT was accomplished because many developing nations have come to recognize that nuclear proliferation threatens international peace and security.

Among the principal states of proliferation concern today, India, Israel, and Pakistan are not parties to the pact. Each has nuclear installations not subject to IAEA safeguards that contribute to its respective nuclear-weapons capability.³ Iran, Iraq, and Libya are non-nuclear-weapon state parties to the Treaty, but their commitment to the accord is suspect because of their demonstrated interest in acquiring nuclear arms.⁴

North Korea became a party to the Treaty in 1985 but took until April 1992 to agree to IAEA inspections of its nuclear activities. During the interval, it produced a quantity of plutonium that may be sufficient for one or two nuclear weapons. North Korea has not satisfactorily accounted for this material and was not in compliance with its IAEA safeguards obligations under the Treaty because of its refusal to permit an IAEA “special inspection” of two nuclear-waste sites believed to contain information regarding past production of pluto-

mium. Under an "Agreed Framework" signed with the United States in October 1994, North Korea agreed to resolve these issues at a future date; in the meantime, it has accepted restrictions on its nuclear activities that go beyond its obligations under the NPT, including a freeze on the operation and construction of a number of sensitive facilities.

International Atomic Energy Agency (IAEA).

The IAEA is part of the foundation of the international non-proliferation regime. Created in 1957, the Vienna-based IAEA is an international organization with 126 member countries. Its principal missions are to facilitate the use of nuclear energy for peaceful purposes and to implement a system of audits and on-site inspections, collectively known as "safeguards," to verify that nuclear facilities and materials are not being diverted for nuclear explosive purposes.

In addition to monitoring all peaceful nuclear activities in non-nuclear-weapon state parties to the NPT, the Agency also monitors individual facilities and associated nuclear materials in non-NPT parties at the request of these states. Thus, even though India, Israel, and Pakistan are not parties to the NPT, several nuclear facilities in each of these countries are subject to IAEA monitoring, and these facilities cannot easily be used to support these nations' nuclear-weapons programs.

Until 1991, in non-nuclear-weapon state parties to the NPT, the IAEA monitored only those facilities declared by the inspected country and did not seek out possible undeclared nuclear installations. After the 1991 Gulf War, however, it was learned that Iraq had secretly developed a network of undeclared nuclear facilities as part of an extensive nuclear-weapons program. This led the IAEA to announce in late 1991 that it would begin to exercise its previously unused authority to conduct "special inspections," i.e., to demand access to undeclared sites where it suspected nuclear activities were being conducted. Subsequent measures were adopted under Program 93 + 2 in two installments. Part 1, implemented initially in 1996, consisted of measures that could be traced to existing legal authority. Part 2 consisted of measures whose implementation would require complementary legal authority. Part 2 measures were approved by the IAEA Board of Governors on May 15, 1997.

The Agency first attempted to conduct a special inspection in North Korea in 1992, but Pyongyang refused to comply with the IAEA's request, triggering a crisis that has yet to be fully resolved. However, the IAEA's new authority has indirectly provided added access for the Agency in Iran. Because an IAEA demand for special inspections carries the implied accusation that a country may be violating the NPT, Iran, anticipating that the Agency might seek special inspections within its territory, has sought to avert the stigma associated with such inspections by agreeing to permit the IAEA to visit any location in Iran on request. The Agency has visited undeclared sites in Iran several times but has not detected any activities in violation of Iran's NPT obligations.

Comprehensive Test Ban Treaty (CTBT). The newest element of the regime is the CTBT, a barrier to vertical as well as horizontal proliferation. The conclusion of this treaty fulfilled a preambular commitment of NPT parties to carry through with pledges made in the 1963 Partial Test Ban Treaty "to seek to achieve the discontinuance of all test explosions of nuclear weapons for all time." Opened for signature in New York on September 24, 1996, the CTBT prohibits nuclear test explosions of any size and establishes a rigorous verification system, including seismic monitoring and on-site inspections, to detect any violations.

The CTBT was negotiated at the Geneva Conference on Disarmament (CD), where decisions normally are made by consensus. India temporarily blocked approval of the treaty in mid-August 1996; it objected to the fact that the treaty did not include provisions demanded by India prescribing a "time-bound framework" for the global elimination of nuclear weapons. India also opposed the treaty's entry-into-force provision, which, in effect, would require India's ratification to bring the pact into force.⁵ To circumvent India's veto, Australia introduced the treaty into the U.N. General Assembly, where decisions are made by majority rather than by consensus. The CTBT was adopted by the U.N. General Assembly on September 10, 1996, by a vote of 158 to 3 (the negative votes coming from India, Bhutan, and Libya). (For more details on the CTBT, see Appendix C.)

Supplier Control Mechanisms. Two informal coalitions of nations that voluntarily restrict the export of equipment and materials that could be used to develop nuclear weapons form a third major element of the non-proliferation regime.

Shortly after the NPT came into force in 1970, a number of Western and Soviet-bloc nuclear-supplier states began consultations concerning the procedures and standards that would apply to nuclear exports to non-nuclear-weapon states. The group, known as the NPT Exporters Committee (or the Zangger Committee, so named after its Swiss chairman), adopted a set of guidelines in August 1974, including a list of export items that would trigger the requirement for the application of IAEA safeguards in recipient states. These procedures and the "trigger list," updated in subsequent years, represent the first major agreement on uniform regulation of nuclear exports by actual and potential nuclear suppliers.

Following India's nuclear test in 1974, an overlapping group of nuclear supplier states—but in this case including France, which was not then a party to the NPT—met in London to elaborate export guidelines further. In January 1976, this London group—which became known as the Nuclear Suppliers Group (NSG)—adopted guidelines that were similar to those of the NPT Exporters Committee but also extended to transfers of technology and included agreement to "exercise restraint" in the transfer of uranium-enriched and plutonium-extraction equipment and facilities.

In April 1992, in the wake of the Gulf War, the NSG expanded its export control guidelines, which until then had covered only uniquely nuclear items, to cover 65 “dual-use” items as well. The group also added as a requirement for future exports that recipient states accept IAEA inspection on all of their peaceful nuclear activities. This rule, previously adopted by only some NSG members, effectively precludes nuclear commerce by NSG member states with India, Israel, and Pakistan.

In addition to agreeing to such full-scope safeguards, all nations importing regulated items from NSG member states must promise to furnish adequate physical security for transferred nuclear materials and facilities; pledge not to export nuclear materials and technologies to other nations without the permission of the original exporting nation or without a pledge from the recipient nation to abide by these same rules; and promise not to use any imports to build nuclear explosives. Similar rules—apart from the full-scope safeguards requirement—apply to exports regulated by the Zang-

ger Committee, which continues to function, although it has been partially eclipsed by the Nuclear Suppliers Group, whose export controls have been more far-reaching. The members of the two supplier groups are listed, and more detailed discussion is provided, in Appendix F in this volume.

Nuclear-Weapon-Free Zones (NWFZs).

NWFZs complement NPT arrangements because they can be geared to specific regional situations. The growing role of NWFZs as part of the non-proliferation regime was reflected in the draft review document of the 1995 NPT Review and Extension Conference: “the establishment of nuclear-weapon-free zones . . . constitutes an important disarmament measure which greatly strengthens the international non-proliferation regime in all its aspects” (see additional information on NWFZs in Appendix E in this volume). NWFZs have been established in Latin America (Treaty of Tlatelolco, 1967), the South Pacific (SPNFZ, 1996), and Africa (ANWFZ, 1996), and efforts have been made to establish one in Southeast Asia (SEANFWZ).

NOTES

¹In this book, Israel, India, and Pakistan are described as *de facto*, non-NPT or “self-declared” nuclear-weapon states. In May 1998, India and Pakistan each conducted nuclear weapon tests and declared themselves “nuclear powers.” As a result, this book refers to the original five, NPT-recognized, nuclear-weapon states as the *de jure* or “established” nuclear-weapon states. The NPT and the non-proliferation regime have no legal category and no provision for additional nuclear-weapon states. Until a better term emerges, non-NPT or “self-declared” nuclear-weapon states may be acceptable as descriptive terminology.

²“Full-scope safeguards” were developed pursuant to the NPT and mean IAEA inspections and monitoring of all nuclear materials, and the facilities that contain those materials, within the jurisdiction of the state in question. The goal of IAEA inspections and monitoring under the NPT is to verify that nuclear materials are not being diverted by the state in question to nuclear weapons or nuclear explosive purposes of any kind. A state may declare and exempt nuclear materials from IAEA inspection for narrow military purposes, such as fueling naval nuclear reactors. To date, no non-nuclear-weapon state parties to the NPT have built nuclear submarines and obtained this exemption for naval nuclear propulsion. Since the IAEA monitors only activities connected with the production or use of nuclear materials, it does not have under its original charter (or even under the NPT) a basis for searching for and investigating nuclear-weapon-related activities, such as fabricating or testing the non-

nuclear components of nuclear weapons, unless nuclear materials are present in these activities.

³Brazil also has a substantial nuclear infrastructure and a past interest in acquiring nuclear arms, and is not a party to the NPT. But Brazil has accepted equivalent restrictions on its nuclear activities pursuant to the Treaty of Tlatelolco, which establishes a nuclear-weapon-free zone in Latin America and the Caribbean, and pursuant to bilateral agreements with Argentina. Brazil’s president has also urged the parliament to consider Brazil’s joining the NPT.

⁴Iraq is also subject to a pervasive program of monitoring by the IAEA and the U.N. Special Commission on Iraq intended to eliminate its weapons of mass destruction and certain missile capabilities. These arrangements are being implemented pursuant to U.N. Security Council resolutions adopted in the aftermath of the 1991 Persian Gulf War.

⁵The CTBT’s entry-into-force provision requires the ratification of 44 nations that possess either nuclear power or research reactors—a group that includes both the 5 established nuclear-weapon states and the *de facto* nuclear-weapon states (India, Israel, and Pakistan). If the treaty still has not entered into force by September 1999, three years after it was opened for signature, the nations that have ratified it may convene a conference to discuss ways to accelerate entry into force. As of October 1997, 148 nations (including the 5 established nuclear-weapon states and Israel) had signed the treaty. However, India and Pakistan, whose ratification of the treaty was seen as essential, had not signed.