



# The Pillars of Modern Nuclear Non-Proliferation and Arms Control

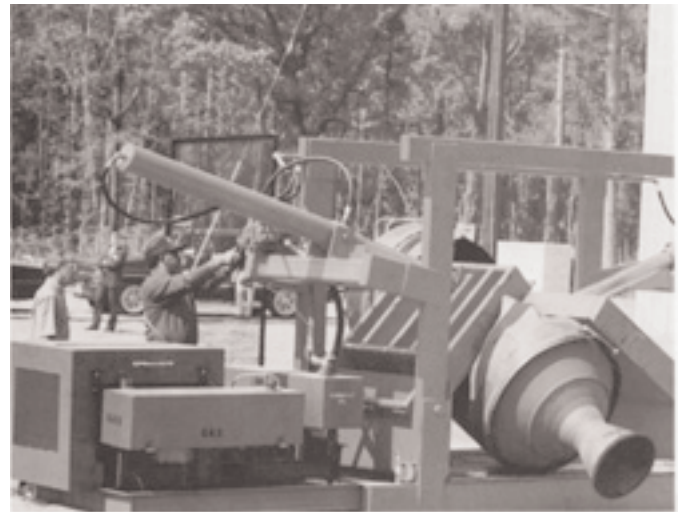
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International Physicians for the Prevention of Nuclear War*

A handful of treaties negotiated in the second half of the 20th century seeks to control nuclear weapons. These treaties, taken together, form a tenuous non-proliferation and arms control fabric. Central to the creation and implementation of this treaty framework is a commitment to nuclear disarmament by the official nuclear weapon states -- the US, Russia, China, France, and the UK, who together possess over 30,000 nuclear weapons. In addition, India, Israel, and Pakistan are known to have nuclear weapons, and others have pursued nuclear weapons. Whether the current non-proliferation and arms control regime can restrain nuclearism will depend on how fully states abide by their obligations today and work to strengthen this regime in the future.

This fact sheet provides a quick glimpse at the major pillars of modern nuclear non-proliferation and arms control and at current arsenals.

## **Non-Proliferation Treaty (NPT)**

- Signed in 1968 and entered into force in 1970, the Nuclear Non-Proliferation Treaty (NPT) has been signed by 189 countries.
- The NPT attempts to prevent the spread of nuclear weapons by restricting the transfer of certain technologies and relies on an inspection regime to be carried out by the International Atomic Energy Agency (IAEA, a United Nations agency), which also promotes nuclear energy.
- Of particular significance is Article VI of the treaty. Article VI commits the nuclear weapon states to good faith negotiations on nuclear disarmament in exchange for the promise by the non-nuclear weapon states not to acquire nuclear weapons.
- India, Israel, and Pakistan are not NPT member states. The Democratic Peoples Republic of Korea (DPRK) withdrew from the Treaty in 2003.



**Part of a Pershing II missile being destroyed. Under the 1987 INF Treaty, more than 200 of these missiles were retired and destroyed. Photo: US Army.**

## *Current Status*

The NPT has been called discriminatory because it recognizes five nuclear weapon states, although it also requires them to disarm. Thus, the viability of the NPT depends on the nuclear weapon states fulfilling their Article VI commitments. Every five years since 1970, the parties to the NPT have met to review progress and decide whether to extend the treaty for another five years. In 1995, the parties agreed to an indefinite extension of the NPT based on commitments by the nuclear powers to greater progress on key disarmament measures. The 2000 NPT Review Conference made some progress in this direction by identifying 13 “practical steps for the systematic and progressive efforts

to implement Article VI,” including an “unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals.” This consensus agreement also called for unilateral reductions of strategic and non-strategic weapons, increased transparency, irreversibility, reducing operational status of weapons, a diminishing role for nuclear weapons in security policies, and regular reports on progress in nuclear disarmament. The 2005 NPT Review was considered a failure, largely because of the refusal of the US and a small number of other states to agree upon an agenda or a final statement.

### **Partial Test Ban Treaty (PTBT)/Comprehensive Test Ban Treaty (CTBT)**

- In 1963, the Partial Test Ban Treaty (PTBT) was signed, banning nuclear tests in the atmosphere, underwater, and in outer space. Public health concerns, spawned by the release of radiation into the atmosphere during above ground tests, played a major role in realization of the PTBT. Physicians helped educate policy makers and the public about the health threat.
- A Comprehensive Test Ban Treaty (CTBT) has proved elusive over the past 37 years. A CTBT has long been seen by signatories to the NPT as a test of the nuclear powers’ commitment to Article 6 of the NPT and for many years a CTBT was viewed as crucial to halting both the development of new generations of nuclear warheads and the spread of nuclear weapons since it is difficult for a state with nuclear ambitions to build a workable nuclear warhead without first testing it.
- The ability of a CTBT to inhibit new warhead design is now in doubt. Using computer-simulated and sub-critical nuclear tests, it may now be possible to develop new generations of warheads without a full-scale nuclear test.

#### *Current Status*

In 1998, a CTBT was negotiated and opened for signature. It requires the signature and ratification of 44 nuclear-capable states. US President Bill Clinton signed it, but the treaty was rejected in 1999 by the US Senate, which has the power to ratify treaties. The Bush administration is opposed to the CTBT and has refused to resubmit it to the Senate. In early 2000, the Russian Duma ratified the CTBT. To date, India and Pakistan, whose signature and ratification are required, have refused to sign the CTBT. The future of the CTBT is unclear.

### **Strategic Offensive Reductions Treaty (SORT)**

- The Treaty Between the United States of America and the Russian Federation On Strategic Offensive Reductions (SORT) was ratified in 2002, and states that the US and Russia will each reduce its strategic nuclear warheads to 1700-2200 by December 31, 2012.

#### *Current Status*

While the Treaty sets out numerical goals for steep reductions in operational strategic warheads, it spells out no timelines for those reductions other than the final deadline; contains no verification or enforcement measures; and does not require dismantlement of warheads taken off operational status. In fact, most of the warheads will simply remain in storage, ready to be deployed should either country decide to do so. SORT, therefore, is widely considered a weak, ineffective agreement by abolition NGOs, including IPPNW.

## Where Do We Stand Now?

There are still more than 30,000 nuclear weapons in the world's nuclear arsenals. Below are estimates of the nuclear stockpiles of the nine states known to possess nuclear weapons.

US	5,735 operational strategic warheads 4,225 warheads in reserve 970 operational tactical warheads
Russia	5,830 operational strategic warheads 10,170 in reserve or indeterminate status unknown number (in thousands) operational tactical warheads
France	348
China	200
UK	185
Israel	75-200
India	40-50
Pakistan	24-48
DPRK	2-8

*Sources: Arms Control Association, The Carnegie Foundation, Natural Resources Defense Council*

*Updated November 2006*