Strategic Arms Reduction Treaty (START I)

The Strategic Arms Reduction Treaty (START I), signed in 1991, was a bilateral arms control treaty between the United States and the Soviet Union. The result of the agreement was the first significant reduction in the number of strategic nuclear weapons in both the U.S. and the Soviet stockpiles. It entered into force in 1994, after the Soviet Union’s dissolution, and eventually expired in 2009. The treaty is considered one of the most successful arms control agreements because by the time of its full implementation in 2001, 80 percent of all the world’s strategic nuclear weapons were dismantled. These standards were maintained for eight years after full implementation.

Negotiations began in May 1982 when President Ronald Reagan proposed arms control with the Soviet Union similar to dialogues of the 1970s. However, as opposed to the earlier Strategic Arms Limitation Talks (SALT), these agreements would actually reduce the number of nuclear weapons. The Kremlin withdrew from negotiations when the United States deployed intermediate-range missiles to Europe. This eventually led to the signing of the Intermediate-Range Nuclear Forces (INF) Treaty for which arms reduction talks restarted in 1985. While START I was signed in 1991, the dissolution of the Soviet Union delayed its entering into force. The Soviet Union’s successor states signed the Lisbon Protocol which made them parties to START I and arranged the transfer to Russia or destruction of all strategic nuclear warheads. All signatory states came to full compliance with the treaty in 1994.

The process to full implementation included three phases of gradual disarmament. Each stage slowly reduced the permitted amount of warheads, delivery vehicles and certain deployed missiles like intercontinental ballistic missiles (ICBMs) and sea-launched ballistic missiles (SLBMs). Full implementation was achieved in 2001.

START I produced terms mandating that each party have no more than:

- 1,600 deployed ICBMs, SLBMs and heavy bombers
- 154 deployed heavy ICBMSs
- 6,000 nuclear warheads on ICBMs, SLBMs and heavy bombers, with maximums per missile type:
  - 4,900 on ICBMs or SLBMs
  - 1,540 on heavy ICBMs
  - 1,100 on mobile ICBMs
- 3,600 metric tons of throw-weights, or 3,600 metric tons of lifting power of ballistic missiles

START I also introduced bans on:

- The construction of new types of heavy ICBMs and SLBMs
- The testing of missiles equipped with a greater number of warheads than established in the agreement
- Ballistic missiles with more than 10 warheads

Considering the technical difficulties of arms control verification, the treaty counted each:

- ICBM and SLBM reentry vehicle as a single warhead
- Russian heavy bomber equipped to carry long-range nuclear air-launched cruise missiles (ALCMs) up to a total of 180 bombers as eight warheads
- Russian heavy bomber past the 180 limit as the actual number of ALCMs they carry
- American heavy bomber equipped to carry long-range nuclear ALCMs up to a total of 150 bombers as 10 warheads
- American heavy bomber equipped to carry long-range nuclear ALCMs past the 150 limit as the actual number of warheads they carry
- Bomber not equipped to carry long-range nuclear ALCMs as one warhead
Additionally, no more than 1,250 warheads could be removed from delivery vehicles and not counted.

START I’s verification provisions set extensive measures to ensure compliance. Stipulations included such monitoring techniques as National Technical Means of Verification (NTM) and a ban on any actions that would impair the effectiveness of the other party’s NTM. The treaty also mandated the parties to provide data exchanges on their number of strategic delivery vehicles, the vehicles’ locations, and any changes in the data. Each party had access to short-notice and planned inspections, so they could verify each others’ data. The United States was also allowed to monitor Russia’s production of mobile ICBMs, and both parties agreed to a ban on the encryption and exchange of telemetric data that tracked ballistic missiles during test launches.