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Comparing New START, SORT and START

This article compares the provisions of the New Strategic Arms Reduction Treaty (New START or NST) with those of its predecessor treaties, the Strategic Offensive Reductions Treaty (SORT or Moscow Treaty) and the first START treaty. Under each of these legally-binding, bilateral treaties between Russia and the United States, the parties sought to reduce their strategic offensive arms (SOA).

Overview

START entered into force on December 5, 1994. It remained in force for fifteen years, expiring on December 5, 2009. START was the first treaty to reduce the number of deployed SOA and the treaty established an extensive compliance verification regime, which included on-site inspections, data exchanges and other measures. The START verification regime was also used to enhance the parties' abilities to verify compliance with SORT.

Under SORT, which entered into force on June 1, 2003, Russia and the United States agreed to further reduce their numbers of strategic nuclear warheads to levels two-thirds lower than those set by START. SORT treaty provisions called for these levels to be achieved by December 31, 2012, but set no interim sublimits or warhead reduction goals. The treaty did not specify counting rules for warheads and contained no verification regime beyond calling for annual data exchanges. SORT was superseded by New START when this treaty entered into force on February 5, 2011.

Under New START, Russia and the United States agreed to further reduce their SOA below the limits set by START or SORT. The new treaty contains a detailed compliance verification regime based on the regime established by the first START treaty. Like START, New START provides for on-site inspections, data exchanges and other measures, but the new regime has been streamlined and adapted to the specific provisions of the new treaty. New START will remain in force for ten years unless both parties agree to extend it for up to five additional years.

Steadily Decreasing Limits

START limited the number of deployed strategic nuclear delivery vehicles to 1,600 and required the elimination of the launchers associated with eliminated missiles. START also reduced the number of warheads *attributed* to deployed intercontinental ballistic missiles (ICBMs), submarine launched ballistic missiles (SLBMs), and heavy bombers (HBs) to 6,000.

All of the START treaty's limits were met by the treaty-specified deadline in 2001. Also under START, Ukraine, Belarus and Kazakhstan removed or eliminated all strategic delivery systems deployed on their territories and became nuclear-weapon free.

Under SORT, the parties each agreed to reduce their operationally deployed strategic nuclear warheads to 1,700 – 2,200 by the treaty's expected expiration date of December 31, 2012. However, the parties successfully met these limits before SORT was superseded by the entry into force of New START on February 5, 2011.

Under New START, the parties each agreed to reduce strategic warheads to a level 74 percent lower than the limits set by START and 30 percent lower than those set by SORT. New START also limits the number of deployed and non-deployed strategic nuclear weapon delivery vehicles (SNDVs) each party may possess.

New START specifies that each party will meet the following limits on their SOA by February 5, 2018:

- 1,550 deployed warheads (counting one per deployed HB and the actual number on each deployed ICBM and SLBM);
- 800 deployed and non-deployed ICBM launchers, SLBM launchers and HBs equipped for nuclear weapons;
- 700 deployed ICBMs, SLBMs and HBs equipped for nuclear weapons.

SOA Limits by Treaty

	Warheads	Delivery Vehicles
START	6,000[1]	1,600[3]
SORT	1,700 – 2,200[2]	*Not addressed*
New START	1,550[1]	700[1] 800[4]

[1] on deployed ICBMs, SLBMs, and HBs equipped for nuclear armaments
[2] strategic nuclear warheads
[3] deployed strategic nuclear delivery vehicles
[4] deployed and non-deployed ICBM and SLBM launchers, and deployed and non-deployed HBs equipped for nuclear armaments

Counting Rules

Under New START, each deployed ICBM, SLBM and HB is counted as one toward the aggregate limit of 700 SNDVs per party. When counting warheads, the actual number of re-entry vehicles (RVs) contained on each deployed ICBM or SLBM is counted toward the 1,550 limit per party. In addition, each deployed HB is counted as one against the warhead limit. The reason for having this different counting rule for HBs is because neither party maintains nuclear armaments on their HBs on a day-to-day basis, yet HBs are capable of delivering nuclear weapons.

Also under New START, any ICBM launcher or SLBM launcher that does not contain an ICBM or SLBM is considered to be a non-deployed launcher. These non-deployed launchers, along with non-deployed HBs, count toward the 800 delivery vehicle limit.

SORT did not address delivery vehicles nor did it specify counting rules for strategic nuclear warheads, which the treaty limited to 1,500 – 2,200. Under SORT, the United States chose to count the number of RVs contained on its ICBMs and SLBMs that were in their launchers (in silos or on submarines), and to count the number of nuclear armaments loaded on HBs or stored in weapons storage areas at HB bases.

Under START, counting rules were based on a concept of attribution. Each deployed ICBM launcher, SLBM launcher and HB was "considered to contain" a certain number of warheads, depending on missile type, as specified in the Memorandum of Understanding (MOU).

Verification Provisions

The New START verification regime provides for initial and updated data exchanges on items of inspection (IOI); notifications; two types of on-site inspections; exchanges of telemetric information; and the use of national technical means (NTM). This regime takes into consideration the lessons learned from 15 years of implementing START, and is designed to reduce complexity and costs.

Under New START, the data exchanged on SOA and facilities is maintained by each party in a database, which is updated frequently through a system of notifications. This database includes information on the number, location and technical characteristics of IOI, as well as the unique identifier (UID) numbers assigned to each item of SOA. UIDs are a new verification tool intended to facilitate tracking the location and status of each item of SOA. UIDs may also be confirmed during inspections.

A Minuteman III missile undergoes maintenance at Minot, AFB.

New START contains provisions for each party to conduct up to 18 on-site inspections each year. There are two types of on-site inspections (Type One and Type Two) specified. Each party may conduct up to ten Type One inspections and up to eight Type Two inspections. Although there were twelve types of on-site inspections specified under the START verification regime, the Type One and Type Two inspections specified under New START enable the parties to conduct many of the same inspection activities and enable inspection teams to choose the activities that best fit treaty verification requirements.

New START also provides for the reciprocal exchange of telemetric data (missile flight test data) on up to five missile launches each year. Under the expired START treaty, telemetric data was exchanged on all flight tests, with the exception that, subject to certain restrictions, each party had the right to encapsulate and encrypt data during eleven flight tests each year. In addition, like START, New START includes provisions for the use of, and non-interference with, NTM.

Of the three treaties – New START, SORT and START – only START contained provisions for the parties to conduct continuous monitoring activities at the other party's mobile ICBM assembly facilities. The United States monitored ICBM assembly operations at Votkinsk, Russia until 2009. Russia never chose to exercise its right to conduct continuous monitoring activities in the United States.

SORT contained no verification regime. To provide transparency with regard to treaty compliance, the treaty called for annual data exchanges and established the Bilateral Implementation Commission (BIC). The activities conducted under the START treaty's verification regime provided additional transparency until START expired on December 5, 2009.

Consultative Bodies

Each of the three treaties established a consultative body to provide a forum where the parties could meet for the purposes of promoting treaty objectives and facilitating treaty implementation. START established the Joint Compliance and Inspection Commission (JCIC) and SORT established the BIC. New START established the Bilateral Consultative Commission (BCC). Like the JCIC and BIC, the BCC will meet at least twice each year in Geneva, Switzerland.

Either party may request a meeting to discuss compliance concerns and to resolve questions. Within these forums the parties may also negotiate and issue guidance on the technical and administrative procedures conducted to implement treaty provisions.

Under New START, the first meeting of the BCC took place in April 2011. Two joint statements were released as a result of this meeting. The first clarified the arrival time of the inspection team at the point of entry and the second clarified how photography could be used during on-site inspection activities.

For More Information

For the latest information on New START implementation, visit the DTIRP website at:
NST Synopsis: http://dtirp.dtra.mil/TIC/synopses/start.aspx
NST Texts & Fact Sheets:
http://dtirp.dtra.mil/TIC/treatyinfo/start.aspx