The Reykjavik-2 Initiative and the Essential Role of the CTBT

Richard L. Garwin
IBM Fellow Emeritus*

(* Personal views. Affiliation given for identification only)
Thomas J. Watson Research Center

Yorktown Heights, NY 10598

RLG2 at us.ibm.com, (914) 945-2555, <u>www.fas.org/RLG/</u>

A contribution for the session on

Strengthening the disarmament and non proliferation regime : the Comprehensive Test Ban Treaty (CTBT) and a Fissile Material Cutoff Treaty (FMCT)

Erice, Sicily, August 22, 2008

The Reykjavik-2 Initiative and the Essential Role of the CTBT

These statesmen, with enormous past responsibilities and great current involvement in national security matters, in their January 2007 Op-Ed laid out a series of steps for agreement and action "that would lay the groundwork for a world free of the nuclear threat.":

- Changing the Cold War posture of deployed nuclear weapons to increase warning time and thereby reduce the danger of an accidental or unauthorized use of a nuclear weapon.
- Continuing to reduce substantially the size of nuclear forces in all states that possess them.
- Eliminating short-range nuclear weapons designed to be forward-deployed.
- Initiating a bipartisan process with the Senate, including understandings to increase confidence and provide for

periodic review, to achieve ratification of the Comprehensive Test Ban Treaty, taking advantage of recent technical advances, and working to secure ratification by other key states.

- Providing the highest possible standards of security for all stocks of weapons, weapons-usable plutonium, and highly enriched uranium everywhere in the world.
- Getting control of the uranium enrichment process, combined with the guarantee that uranium for nuclear power reactors could be obtained at a reasonable price, first from the Nuclear Suppliers Group and then from the International Atomic Energy Agency (IAEA) or other controlled international reserves. It will also be necessary to deal with proliferation issues presented by spent fuel from reactors producing electricity.

- Halting the production of fissile material for weapons globally; phasing out the use of highly enriched uranium in civil commerce and removing weapons-usable uranium from research facilities around the world and rendering the materials safe.
- Redoubling our efforts to resolve regional confrontations and conflicts that give rise to new nuclear powers.

In their January 15, 2008 publication, the leaders of this movement, supported by 17 other U.S. and international participants in the Conference of October 2007 included specific near-term steps as quoted directly from that Op-Ed document:

• Extend key provisions of the Strategic Arms Reduction Treaty of 1991. Much has been learned about the vital task of verification from the application of these provisions. The treaty is scheduled to expire on Dec. 5, 2009. The key provisions of this treaty, including their essential monitoring and verification requirements, should be extended, and the

further reductions agreed upon in the 2002 Moscow Treaty on Strategic Offensive Reductions should be completed as soon as possible.

• Take steps to increase the warning and decision times for the launch of all nuclear-armed ballistic missiles, thereby reducing risks of accidental or unauthorized attacks. Reliance on launch procedures that deny command authorities sufficient time to make careful and prudent decisions is unnecessary and dangerous in today's environment. Furthermore, developments in cyber-warfare pose new threats that could have disastrous consequences if the command-and-control systems of any nuclear-weapons state were compromised by mischievous or hostile hackers. Further steps could be implemented in time, as trust grows in the U.S.-Russian relationship, by introducing mutually

Erice, Sicily

agreed and verified physical barriers in the command-and-control sequence.

- Discard any existing operational plans for massive attacks that still remain from the Cold War days. Interpreting deterrence as requiring mutual assured destruction (MAD) is an obsolete policy in today's world, with the U.S. and Russia formally having declared that they are allied against terrorism and no longer perceive each other as enemies.
- Undertake negotiations toward developing cooperative multilateral ballistic-missile defense and early warning systems, as proposed by Presidents Bush and Putin at their 2002 Moscow summit meeting. This should include agreement on plans for countering missile threats to Europe, Russia and the U.S. from the Middle East, along with completion of work to establish the Joint Data Exchange

Center in Moscow. Reducing tensions over missile defense will enhance the possibility of progress on the broader range of nuclear issues so essential to our security. Failure to do so will make broader nuclear cooperation much more difficult.

• Dramatically accelerate work to provide the highest possible standards of security for nuclear weapons, as well as for nuclear materials everywhere in the world, to prevent terrorists from acquiring a nuclear bomb. There are nuclear weapons materials in more than forty countries around the world, and there are recent reports of alleged attempts to smuggle nuclear material in Eastern Europe and the Caucasus. The U.S., Russia and other nations that have worked with the Nunn-Lugar programs, in cooperation with the International Atomic Energy Agency (IAEA), should play a key role in helping to implement United Nations

Security Council Resolution 1540 relating to improving nuclear security—by offering teams to assist jointly any nation in meeting its obligations under this resolution to provide for appropriate, effective security of these materials.

Additional measures identified in the January 15, 2008 publications are to:

- Start a dialogue, including within NATO and with Russia, on consolidating the nuclear weapons designed for forward deployment to enhance their security, and as a first step toward careful accounting for them and their eventual elimination. These smaller and more portable nuclear weapons are, given their characteristics, inviting acquisition targets for terrorist groups.
- Strengthen the means of monitoring compliance with the nuclear Non-Proliferation Treaty (NPT) as a counter to the

global spread of advanced technologies. More progress in this direction is urgent, and could be achieved through requiring the application of monitoring provisions (Additional Protocols) designed by the IAEA to all signatories of the NPT.

• Adopt a process for bringing the Comprehensive Test Ban Treaty (CTBT) into effect, which would strengthen the NPT and aid international monitoring of nuclear activities. This calls for a bipartisan review, first, to examine improvements over the past decade of the international monitoring system to identify and locate explosive underground nuclear tests in violation of the CTBT; and, second, to assess the technical progress made over the past decade in maintaining high confidence in the reliability, safety and effectiveness of the nation's nuclear arsenal under a test ban. The

Comprehensive Test Ban Treaty Organization is putting in place new monitoring stations to detect nuclear tests—an effort the U.S should urgently support even prior to ratification.

The Reykjavik-2 Initiative and the Essential Role of the CTBT

(Draft spoken text)

It is a pleasure for me to be able to contribute at the initiative of the Italian Foreign Ministry and the World Laboratory my views on an important and essential aspect of international security as indicated by the title.

My own experience with nuclear weapons extends from 1950 to the present time, in working with the U.S. government. I contributed substantially to the development of the first hydrogen bomb as stated by Edward Teller in the 1983 Erice sessions on the Prevention of Nuclear War, and in his 20-page testament on the history of the atomic (and hydrogen) bombs, and in a 2001 article in the The New York Times.¹

The Reykjavik-2 initiative refers to a process begun at Stanford University in October 2006 by George P. Shultz, formerly Secretary of State to President Ronald R. Reagan, and Sidney D. Drell, Professor Emeritus at Stanford University and Senior Fellow at the Hoover Institution at Stanford University. At Reykjavik in October, 1986, President Reagan and President of the Soviet Union Mikhail Gorbachev held a crucial conference at Reykjavik, Iceland, in which they revealed their shared vision to abolish all nuclear weapons. While they failed to achieve an agreement to get rid of all nuclear weapons, their meeting was of the utmost importance and led to major reductions in deployed long-range and intermediate-range nuclear strike forces including the elimination of the land-based intermediate-range nuclear forces of the United States and the Soviet Union.

The Reykjavik-2 initiative resulted in two Op-Ed articles in The Wall Street Journal²³

Furthermore, a summary report of the second Reykjavik-2 conference of October 2007 has been published⁴

The nominal leaders of the Reykjavik-2 initiative, George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn were respectively Secretary of State, Secretary of Defense, Secretary of State and National Security Advisor, and Distinguished Senator and head of the Armed Service Committee in various U.S. administrations. Their efforts have continued with a meeting sponsored by the Norwegian government in Oslo February 2008 and will surely play an important role on the next U.S. presidential administration.

The burden of this initiative is that it is in the urgent international security interest of the world to abolish nuclear weapons, and although that is not possible of achievement at this moment, the goal must be adopted if the use of nuclear weapons by terrorists or states is to be avoided. That is, both the traditional nonproliferation goals of preventing the spread of nuclear weapons to additional states and the goals of arms reduction of nuclear weapons in the current nuclear-armed states can be achieved only in the context of a program to abolish nuclear weapons.

082208R2ICa2.doc (version 2)

R.L. Garwin

11

¹ "Who Built the H-Bomb? Debate Revives," by W.J. Broad, The New York Times, Science Times, April 24, 2001.

² "A World Free of Nuclear Weapons," by G.P. Shultz, W.J. Perry, H.A. Kissinger, and S. Nunn, *The Wall Street Journal*, January 4, 2007.

³ "Toward a Nuclear-Free World," by G.P. Shultz, W.J. Perry, H.A. Kissinger, and S. Nunn, *The Wall Street Journal*, January 15, 2008.

⁴ "Reykjavik Revisited: Steps Toward a World Free of Nuclear Weapons," edited by G.P. Shultz, S.P. Andreasen, S.D. Drell, and J.E. Goodby, Hoover Institution, September 2008. www.hoover.org/publications/books/online/15766737.html.

Major security gains will accrue from the adoption of initial and intermediate agreements and programs to improve security over nuclear weapons and nuclear weapon materials and to reduce greatly the number of nuclear weapons in the world, now on the order of 25,000, of which about 95% are held by the United States and Russia.

Reality also intervened in the year between conferences, in the guise of six nuclear-armed cruise missiles being flown across the United States and for 36 hours the warheads were not only unaccounted for but also no one knew that they were missing in the period August 29-30, 2007.

At this conference in Erice, in August, 2008, I note that the need is urgent to move forward on these measures. Both Barack Obama and John McCain seem to look favorably upon this approach, and, significantly, John McCain in a speech of May 27, 2008 has advocated a process for the United States Senate to review the progress made toward verifying a CTBT and to begin a process for ratifying that Treaty and bringing it into force. The world will surely not believe that the United States is sincere and fair in its nonproliferation goals unless it does it part to set up a regime in which the testing of nuclear weapons is illegal and is a strong supporter of the regime.

The original purpose of the CTBT in the 1950s, of which Eisenhower said, famously, "... (not achieving a nuclear test ban) would have to be classed as the greatest disappointment of any administration -- of any decade -- of any time and of any party... " – May 29, 1961 – was to slow the development of new and more powerful nuclear weapons by terminating a qualitative arms race between the United States and the Soviet Union. Those weapons have been developed, and the CTBT can no longer serve that function. But what it can do is to prevent the introduction of significantly different nuclear weapons into the armories of the United States and Russia and of lesser nuclear states, and to pose a significant impediment to the acquisition of usable nuclear weapon stocks by others. In this way, it can help to keep within the Nonproliferation Treaty and the nonproliferation regime states that have no intention of developing nuclear weapons but that are dissatisfied with the unequal restrictions posed by the NPT on the five states that legally have nuclear weapon stocks under the NPT and the rest of the world that doesn't.

A third category of nuclear-armed nations outside the NPT is growing, beginning with Israel, India, Pakistan, North Korea, and perhaps in the next years, Iran, all of which developed their nuclear weapons largely independently. But other states with a small part of the enormous wealth present in the world could acquire nuclear weapons by purchase or theft, much to the detriment of international security.

The Fissile Materials Cutoff Treaty—FNCT—although not of the same degree of essentiality as the CTBT and the preservation of the NPT, would also be a useful tool and should be completed and signed, including, of course, by Pakistan and India.

But beyond the web of formal treaties, the traditional nuclear states beginning with the United States and Russia should first reduce the massive holdings in the two major states to on the order of 1000 nuclear weapons within the next few years and should begin a process with France, Britain, and China to ensure that those much smaller inventories are also reduced as the holdings of the United States and Russia fall below 1000 nuclear warheads on each side.

The alternative is the acquisition of nuclear weapons by more and more states and the probable use of nuclear weapons by terrorists, which would be enormously destructive not only as a direct result of their use but of the world order itself.

Beyond the CTBT and the FMCT, world leaders must set a higher goal and a faster pace to remove the threat of nuclear weaponry by rapidly reducing the numbers of such weapons providing better security for weapon-usable materials and moving toward a vision of the elimination of nuclear weapons.