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The Elimination of Nuclear Weapons: Desirable? Achievable? Sustainable?

At the acrimonious seventh Review Conference of parties to the 1968 Nuclear Non-Proliferation Treaty (NPT) in May 2005, no one could have foreseen that the outright elimination of nuclear weapons would become a matter of serious policy discussion in time for the eighth meeting (coming up this May in New York). Yet remarkably it has. To a greater extent, in fact, than at any time since the end of the Cold War, when the numbers of US and Russian nuclear weapons began to tumble.

The revitalization of the disarmament debate began in January 2007, with a *Wall Street Journal* oped by four senior US statesmen – George Schultz, William Perry, Henry Kissinger and Sam Nunn – advocating US leadership toward a world free of nuclear weapons. Last April, US President Barack Obama explicitly endorsed that vision in his widely quoted Prague speech. In contrast to the Bush administration, in the 14 months since Obama took office, nuclear non-proliferation and disarmament have emerged as major themes in US foreign policy, raising hopes for significant movement forward on both fronts at the upcoming NPT conference. As one of the five recognized nuclear weapon states party to the NPT, the US is legally obliged to pursue nuclear disarmament as part of the "grand bargain" of the Treaty, which proscribes its non-nuclear-weapon state parties from producing bombs of their own.

This newsletter addresses the "global zero" issue from three angles. First, is the abolition of all nuclear weapons actually a desirable, or sensible, state of affairs? Second, is it achievable? And third, if it is achievable, is it sustainable?

1.1 Desirability

In terms of the desirability of the goal, there are arguments to the contrary; most prominently, that a world without nuclear weapons would be one at greater risk of instability and conflict. But this argument is fundamentally flawed. Today, it is generally recognized that nuclear weapons have no practical use as instruments of warfare – their use is either suicidal or unthinkable – and that they work principally, if not exclusively, to deter nuclear attacks by others. Consequently, as the 2009 report of the International Commission on Nuclear Non-Proliferation and Disarmament (ICNND) notes, if nuclear deterrence is their only real purpose, the utility of nuclear weapons would disappear with the weapons themselves.

Furthermore, as the final report of the Canberra Commission on the Elimination of Nuclear Weapons noted in 1996: "The possession of nuclear weapons by any state is a constant stimulus to other states to acquire them." The more states with nuclear weapons, and the longer those weapons exist, the greater the danger is that one day, whether by accident or design, one will be used. In the words of the Commission, it "defies credibility" that no such event will ever occur. There have been close calls before: Cuba in 1962 being the most well-known near-catastrophe; Operation Abel Archer in 1983 being another. When you then factor in the relatively new danger of terrorists somehow acquiring a nuclear bomb (from Pakistan, for example), the case for the desirability of global zero is clea r.

1.2 Achievability

But is global nuclear disarmament achievable? Certainly not without a significant, and sustained, expenditure of political will by the eight clear-cut nuclear-armed states – and by the US and Russia in particular. As the two countries together holding some 95 percent of the estimated 23,000 nuclear warheads currently in existence, the old Cold War rivals must lead the way. At the time of writing, US and Russian negotiators were still discussing the fine print of the deal that is to replace the bilateral 1991 Strategic Arms Reduction Treaty (or START I, which expired last December). Under the new START, deployed strategic warheads are to be cut to between 1,500 and 1,675 apiece, as agreed last July, though shorter-range tactical weapons and stored warheads – neither of which have ever been limited by treaty – will remain untouched.

Until the *total* number of US and Russian warheads is substantially lower than at present, no work on any wide-ranging multilateral disarmament treaty – that is, one encompassing all nuclear-armed states, and all those with significant nuclear power programs – can realistically begin. One thousand each is often seen as a necessary milestone. As Ivo Daadler and Jan Lodal argued two years ago in *Foreign Affairs*, that many is more than enough to deter a nuclear attack.

Getting to 1,000 (or below) will clearly not be easy. Addressing concerns over the overwhelming conventional military dominance of the US, along with the various other security issues between existing nuclear-armed states (especially between arch-rivals India and Pakistan), is vital if leaders are to be persuaded to do away with their nuclear weaponry. Equally important is finding ways to resolve the crises over North Korea's NPT "break-out" and Iran's highly suspect nuclear power program. As an NPT party, the latter has the right to develop the very kinds of fissile materials (namely, highly enriched uranium and/or plutonium) necessary for the nuclear weapons it seems determined to acquire. In its starkest assessment of the Islamic Republic's nuclear activities yet, the International Atomic Energy Agency (IAEA) – the world's badly under-resourced nuclear inspectorate – said last month that its inform ation on Iran "raises concerns" about work "related to the development of a nuclear payload for a missile."

Given the anticipated rise in the number of countries investing in nuclear power, strengthening the IAEA's ability to verify non-nuclear-weapon states' compliance with the NPT is crucial if global disarmament is to be realized. And disarmament processes will themselves need verifying, under a regime still to be established. But this work does not need to start from scratch. Considerable exploratory work on the verification of nuclear disarmament has been undertaken already – the Trilateral Initiative between the US, Russia and the IAEA from 1996-2002, for instance, or the more recent collaboration between the UK and Norway. And as Barry Blechman, of Washington's

Stimson Center, has noted, many verification precedents for disarmament have long been set. S TART I's intrusive monitoring provisions, notably, and IAEA verification of South Africa's voluntary nuclear disarmament in the 1990s also.

None of this will be quick. Nor, however, need a world without nuclear weapons be all that distant. The Global Zero lobby group, founded in 2008, recently released a four-phase action plan ending in 2030, including the entry into force of an international treaty abolishing nuclear weapons by 2023. For its part, the ICNND report splits the process into two: a "minimization" stage – involving drastic reductions in nuclear warheads to a global maximum of 2,000 – to be completed by 2025, followed by a final "elimination" stage, though it leaves the length of this second stage undefined.

1.3 Sustainability

So, if it happens, could it last? Here, verification would again be critical. A global zero treaty would suffer an immediate, possibly terminal, crisis of confidence as soon as it could no longer be properly verified. Positive incentives to promote continued adherence, and vice versa, would need to be built into the pact as well.

That said, such an accord would in any case likely possess a degree of inherent stability. Since the knowledge necessary to rebuild nuclear weapons will remain in existence, should one party violate the deal, other former nuclear-armed states would be able to rapidly restock their own arsenals in turn, leaving the world, as Mr Blechman points out, "no worse off than it is now." Thus, while the deal could quickly unravel, no rule-breaker would be able to gain a decisive advantage – which ought to remove a powerful motivation to break the rules in the first place.

By David Cliff

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1.4 Resources

1.4.1 International and Governmental Organizations

The United Nations Office for Disarmament Affairs (UNODA)

The UNODA promotes nuclear disarmament, the non-proliferation of nuclear weapons and the strengthening of disarmament regimes relating to other weapons of mass destruction (WMD). It also promotes disarmament in the field of conventional weapons, particularly land mines and small arms.

The International Atomic Energy Agency (IAEA)

Based in Vienna, the IAEA has three principal roles: verifying the non-use of safeguarded nuclear material and facilities for weapons purposes; promoting nuclear safety and security; and promoting the peaceful applications of nuclear science and technology. The 2008 Zedillo Commission report

on the future of the IAEA is a particularly useful resource also, as it identifies many of the problems – notably underfunding and understaffing – that the IAEA has to overcome in carrying out its responsibilities.

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Organization (CTBTO) The Comprehensive Nuclear-Test-Ban Treaty (CTBT), which outlaws all nuclear testing, opened for signature in 1996 but has still not come into force. Of the 44 named states that must ratify the Treaty, nine have still do so. The CTBTO Preparatory Commission exists to lay the groundwork for the CTBT so that it can be effectively implemented once in effect. Its work mainly involves building up the Treaty's extensive global verification regime (now largely operational).

1.4.2 Non-Governmental Organizations

The Nuclear Threat Initiative (NTI)

Co-chaired by the founder of CNN, Ted Turner, and former US Senator Sam Nunn, the NTI's stated mission is to "strengthen global security by reducing the risk of use and preventing the spread" of WMD, and to build the "trust, transparency and security" needed for fulfillment of the NPT's goals and ideals. Its website contains a wealth of information, and includes a regularly updated, well-informed news page – the Global Security Newswire.

Global Zero

The Global Zero initiative, mentioned above, is an international, non-partisan effort formed in response to the threats of nuclear terrorism and the proliferation of nuclear weapons. Spearheaded by more than 200 former national security figures, Global Zero is dedicated to achieving the phased, verifiable elimination of all nuclear weapons.

Reaching Critical Will

A project of the Women's International League for Peace and Freedom, Reaching Critical Will was created in 1999 to "promote and facilitate engagement of non-governmental actors in UN processes related to disarmament." It works not just for nuclear abolition but also for total and universal disarmament, the reduction of global military spending and the "demilitarization of politics and society."

1.4.3 Research and Academia

International Panel on Fissile Materials (IPFM)

The IPFM – an independent group of arms control and non-proliferation experts from around the world – was founded in 2006 in order to provide analysis of the means to secure, consolidate and reduce stockpiles of highly enriched uranium and plutonium. It produces a yearly *Global Fissile Material Report* available for download from the IPFM website.

The International Weapons of Mass Destruction Commission

The International WMD Commission released its final report in 2006, a comprehensive look at ways to reduce the threat from nuclear, chemical and biological arms. In addition to this report, the Commission's website contains over 40 papers and studies by individual researchers, academic institutions and think-tanks relevant to its mandate.

Abolishing Nuclear Weapons: A Debate, George Perkovich and James Acton (editors), 2009 Produced by the Carnegie Endowment for International Peace, this first section of this two-part document re-publishes George Perkovich and James Acton's 2008 paper *Abolishing Nuclear Weapons* (originally published by the International Institute for Strategic Studies). The second section consists of chapters written by distinguished experts – from countries both with and without nuclear weapons – in response to it.

1.4.4 Media

The Press Room page at the Nuclear Security Project

The Nuclear Security Project (a branch of the NTI) provides a useful page of articles and op-eds relating to nuclear disarmament, including the January 2008 Schultz et al. follow-up piece : *Toward a Nuclear-Free World*.

Nearing Arms Pact, US and Russia Look Ahead, by Peter Baker, New York Times

This December 2009 article deals with what will come after the new US-Russian START agreement is eventually signed and put into force. According to the piece, presidents Obama and Medvedev plan to send their respective negotiators back to the table to discuss cuts in tactical weapons – many of which are still deployed across Europe – and stored warheads.

Obama must decide degree to which US swears off nuclear weapons, by Mary Beth Sheridan and Walter Pincus, *Washington Post*

The *Washington Post* reports on the ongoing debates within the Obama administration over the forthcoming Nuclear Posture Review, which is done at the start of each new US administration. One major unresolved issue is whether Obama will choose to officially declare that the sole purpose of US nuclear weapons is to deter their use by others. Former president George W Bush maintained that nuclear weapons could also be used in response to chemical or biological attacks during his tenure.