Nuclear Zero: Agreement, Irreversibility, and the Timetable Problem

Bruce D. Larkin

Whether ‘global zero’ is achieved, or is not, historians will endeavor to trace the choices which led to the outcome. If zero is ‘not achieved yet’ or judged ‘unachievable’ the trace will center on decisions that flashed a red light or—worse—derailed the train. If zero is achieved the markers by which adequate consensus came into being (when politics gave denuclearization the green light) will appear to be explicable waystations on the track to nuclear zero.

The problem for those judging whether prohibiting nuclear weapons would be good policy, and then whether any proposed measure concerning nuclear weapons would enhance or diminish the likelihood that zero would be the outcome, is that the future effects of today’s judgments cannot be known. They can be asserted, they can be well-imagined by bringing reason to past experience, their likelihood can even be agreed, but they cannot be known. In other matters first steps can be taken, the results judged, adjustment made as needed, and follow-on steps agreed. But because nuclear stands as the ‘winning weapon’, because there are profound fears of judging wrong about one’s own security, nuclear is unlike other complex policy fields.

The Timetable Problem

Barack Obama stands on the rail platform, green lantern in hand. Beside him a train full of nuclear policy specialists, military officers, politicians, officials, sherpas and knaves, of all countries,
bags full of draft resolutions and briefing documents, ready for departure. Latecomers climb aboard. The Departures board says:

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Train to GLOBAL ZERO    19.46 [Delayed]
via REDUCTIONS, PRECONDITIONS, TRANSPARENCY AND EXTENDED NEGOTIATIONS
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Obama blows his whistle. Doors close. He swings the lantern.

What route will this train take? and on what timetable? The choices pose several tricky questions. At which other stations must the train stop? In what sequence? Is it a condition of reaching Station C that there be a prior ‘successful’ arrival at Station B—or can Station B be bypassed? Are there preparations which must be made (at, say, Station E and Station F) before it is safe even for the train to pass through on the way to its final destination? Are there Stations where the local Stationmaster would hold up the train if he could, convinced the Station would be better off if the train’s journey were to be abandoned? Is there doubt about the cargo to be loaded at some stations, and about whether some Stations have held cargo back? To what extent can the route map, and timetable, be improvised en route and, if so, by whom and on what authority?

**Shall We ‘Go Slow’ or ‘Move Fast’?**

Getting to zero is a ‘big problem’. The usual approach, breaking a problem into its components, could work, but parts are many and contentious. Five dominate the others:

**Proliferation.** Must the ‘problem of proliferation’ be resolved before abolition can be seriously entertained? Or can non-proliferation only be secured by achieving abolition?

**Preconditions.** Does the only route, or the only safe and secure route, to abolition lie by way of defining and satisfying a number of preliminary conditions (such as transparency, non-proliferation, control of fissile material)? Or can a more direct approach to abolition be taken, which has the effect of showing how preliminary conditions can be satisfied?

**Universality.** Can an abolition regime tolerate ‘hold-outs’? Can the process of designing and bringing about an abolition regime tolerate ‘hold-outs’? Consider Israel, or India. Acknowledging the norms of universality, consensus, and voluntary commitment to disarmament obligations, what stance could and should be taken toward ‘hold-outs’?
Demonstration. Must preliminaries be shown to be robust ‘over a relatively long period of time’ before abolition can be seriously entertained? Or would seriously entertaining abolition shorten the time required to show readiness to adhere?

Collective Security. Abolition will require a well-crafted ‘threat response’ to ensure security against any state or group that defects from the regime. Post-zero guarantees might be lodged in a system of collective security. With respect to (a) authoritative decision to enforce abolition and (b) how to effect those decisions by force, if necessary, what is the relative balance to be struck between prior assurance (being persuaded before abolition is instituted that the regime is adequately specified and adequately armed) and reliance on political means (evidence-based judgment and pragmatic choice of action, after abolition is instituted, in the face of noncompliance)?

Each of the issues just identified turns on two contrary positions for both of which persuasive arguments can be made. One view says ‘go slow’. The second argues that it is better to commit to ‘prompt, prudent, pragmatic denuclearization’: as agreement to global zero becomes closer the reasons adduced to ‘go slow’ will dissolve.

To summarize, these are

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<th>ISSUE</th>
<th>Obstacles: ‘Go Slow’</th>
<th>‘Prompt, Prudent’</th>
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<tr>
<td>Proliferation</td>
<td>Solve cases and institutionalize assurances</td>
<td>Solve via abolition</td>
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<tr>
<td>Preconditions</td>
<td>Meet weighty catalog of preconditions</td>
<td>Use agreement on zero to create or sidestep ‘preconditions’</td>
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<td>Universality</td>
<td>‘Hold outs’ block road to zero</td>
<td>‘Hold outs’ are drawn into agreement to zero</td>
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<td>Demonstration</td>
<td>Long, thorough demonstrations of mechanisms and ‘good faith’ required</td>
<td>Only as much demonstration is required as takes place before consensus for zero.</td>
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<td>Collective Security</td>
<td>A high level of ‘prior assurance’ must precede surrendering nuclear weapons and placing reliance on ‘collective security’</td>
<td>If pragmatic tests are met, post-zero glitches can be solved by political means, including resort to warranted &amp; authorized use of force</td>
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In practice, obstacles must be addressed. The distinction between ‘go slow’ and ‘prompt’ approaches is that ‘go slow’ takes hard tasks as reasons why global zero can only be a ‘long-term’ or ‘eventual’ goal, a ‘vision’, even ‘for a future generation’, while the ‘pragmatic, prompt’ approach assumes that with political skill and imagination the hard tasks can be addressed well enough that global zero can be agreed, on terms that respect the need for security, liberty, and socio-economic justice.

Irreversibility

It would be very hard—probably impossible—to achieve global zero if governments could freely undo the commitments made by their predecessors.

Imagine the politics if governments could insist on new provisions, new concessions, threatening non-participation if refused. The deal would always be on the brink of falling apart. Inside each country opponents of zero would run free.

Enter the principle of irreversibility. In the language of the 2000 NPT Review Conference, “The principle of irreversibility to apply to nuclear disarmament, nuclear and other related arms control and reduction measures.”

Of course, it is easier to win a state’s commitment to treaty obligations if the treaty itself provides a way out. That is the purpose of treaty provisions for withdrawal. GW Bush, in declaring that the United States would no longer be bound by the ABM Treaty, said that he was exercising the withdrawal provision. But as unilateral withdrawal would vitiate the purpose of creating a universal nuclear prohibition, a Nuclear Weapons Convention would probably stipulate a method of amendment but also that states could not abandon commitments without consent of the other parties.

Now nuclear weapons and precursors are the subject of numerous agreements and negotiations. Is irreversibility to be built into all of these? The NPT Review language applies only to “nuclear disarmament, nuclear and other related arms control and

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reduction measures.” What of other agreements, such as those to provide fuel for civil reactors? Some terms are purely commercial, but others—such as those stipulating return of spent fuel to the source—are precautions against diversion of fissile material. These ought to be subject to irreversibility.

We learn from cases. North Korea committed to the NPT, but then withdrew … and suspended its withdrawal … and ten years later withdrew again. Having joined the IAEA, it withdrew. Article X of the NPT specifies that

1. Each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. …

This provision mirrors standard withdrawal provisions of many other treaties. The IAEA Statute also offers a right of withdrawal.

Withdrawal itself is a ‘reversion’. States seeking to mitigate the effects of a member’s withdrawal, or render withdrawal less attractive, or render withdrawal of a member less damaging to the regime, have urged a new provision that members must give up any equipment or materials to which they gained access by virtue of their membership. They may ‘revert’, but their material circumstances must also revert.

Iran, too, has made undertakings and then withdrawn. It signed the Additional Protocol (IAEA INFCIRC/540) in 2003 but in February 2006 informed IAEA that “its voluntary commitment to implement the AP [Additional Protocol] had been suspended …” but not its being bound by its earlier safeguards agreement.

By an exchange of letters Iran agreed to be bound by a change in Code 3.1 of Subsidiary Arrangements to safeguards, but in March 2007 declared it would cease to implement the modified Code 3.1. (This move was foregrounded in assessing whether Iran was or was not bound to have earlier informed the IAEA of the second uranium enrichment facility, under construction near Qom, revealed in September 2009.)

Was Iran’s turning commitments on and off, at its own discretion, in keeping with international law? Would Iran’s actions embolden any state which sought advantage by abandoning a formal undertaking earlier made?
Where Are the Negotiations Taking Place Today?

Picturing sites of negotiations, whether intermittent or ongoing, is in part recording formal negotiations known to us and in part an exercise in imagination. Illustrations: the sequence of every-five-year NPT Review Conferences, and Preparatory Conferences in some intervening years; and every year the United Nations General Assembly meets from September, entertaining resolutions on nuclear weapons. These recurring events, and the successive IAEA Board of Governors’ meetings, mark out a calendar.

Under the UN Charter the Security Council has “primary responsibility for the maintenance of international peace and security.” This is an expressly delegated task. The Members “confer” this responsibility, and in carrying it out the UNSC “acts on their behalf.” Its unprecedented special meeting on 24 September 2009, under the gavel of Barack Obama, voted a unanimous resolution on the agenda item “Maintenance of international peace and security, nuclear proliferation, and nuclear disarmament.” The resolution begins

The Security Council, Resolving to seek a safer world for all and to create the conditions for a world without nuclear weapons, in accordance with the goals of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), in a way that promotes international stability, and based on the principle of undiminished security for all …

but does not commit to zero. More importantly, however, it is a further step in the Council being seized of issues centered on nuclear weapons, their proliferation, and the risk of their use as a terror weapon.

The five ‘recognized’ nuclear weapon states—the N5: United States, Britain, Russia, China and France—have acknowledged their special position and common concerns. They have met privately on nuclear matters. As Permanent Members of the UNSC they meet and converse with the other members behind closed doors, as they did on 18 September 2009 in coming to an

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3 UNSC Resolution 1887 (2009).
agreed text of UNSC 1887. Their obvious centrality has two sides: if all agreed to zero it would be a major step, but if any one refused, that would be a major barrier.

The question whether Israel, India, Pakistan and—even—North Korea are to sit down with the N5 to discuss achieving global zero already perplexes. They must be included, so long as they have nuclear weapons … but the N5 resist adjusting the NPT to regard any of them as a “nuclear-weapon state” and so legitimize their unwillingness to forego nuclear weapons.

There exist scores of treaties, agreements, and formal undertakings about nuclear weapons and their delivery systems. Each creates a defined—partial, focussed, chartered—regime. Examples include the NPT itself, the IAEA Statutes, states’ acceptances of safeguards, the CTBT, regional treaties (e.g. ‘zones of peace’ and their protocols), multilateral arms control agreements (e.g. Nuclear Suppliers’ Group, Missile Technology Control Regime), and unilateral commitments (such as the GHW Bush and Gorbachev measures of September and October 1991). To maintain, sometimes expand, these agreements and undertakings requires ongoing politics: every substantive issue provokes distinct positions, which the regime participants must negotiate among themselves, within government, and with domestic constituents and ‘interests’.

Mapped around negotiations inside and among governments is a sphere occupied by advocacy organizations, study centers, and individuals: the engaged sectors of ‘civil society’. A few derive from, and obtain support from, governments: SIPRI, the WMD Commission (Blix Commission), the joint Japanese-Australian commission, joint UK-Norwegian project on verification, for example. UNIDIR reflects an agreement not on policy but to favor systematic study. These have the advantage of access to participating governments.

Study and advocacy groups also operate as private organizations. Long-standing among these are the Carnegie Endowment for International Peace and the Pugwash Conferences on World Affairs. Their influence depends largely on the quality and imagination of their studies. Collaboration of the Nuclear Threat Institute and the four former US officials who in January 2007 voiced the compelling need for abolition illustrates a fresh effort to gain impetus for global zero. Within all of these groups there is ongoing discussion of what issues should be addressed,
what positions taken, and what strategies and tactics best serve the
organizations’ objectives.

How can these multiple ‘sites’ of the nuclear conversation
orchestrate themselves to render global zero an acknowledged
option? to create fertile conditions for denuclearization? to bring
about abolition?

An Advocate

Movements for change are typically identified with a single
advocate, a proponent who is thought to lead a diverse coalition to
the outcomes attributed to it. Gandhi and Indian independence.
Chaim Weizmann and the creation of Israel. Robert Schuman and
the vision of a united Europe. Arvid Pardo, arguing that “The seas
beyond the limits of national jurisdiction are the common heritage
of all mankind,” a position embodied in the UN Convention on the
Law of the Seas. Gro Harlem Brundtland and ‘sustainability’. Within
the United States, but with global resonance, Stephen
Schneider, and James Hansen, and Al Gore on global warming. A
political or sociological study of any movement might conclude it
was widely based, a movement whose ‘time had come’, ‘overdetermined’ by circumstance, but the fact remains that a
decisive role is typically accorded to one person, or two or three,
without whom, it is widely believed, the fortunes of the movement
would have been radically different, and much less.

From the 1940s to 1990s many spoke knowledgeably and
elocutiously about the dangers of nuclear weapons, but even the
reputations of Bertrand Russell and Albert Einstein did not mean
that their words alone could place denuclearization on the global
agenda.5 If there was a breakthrough, it lay in Mikhail Gorbachev’s
proposal that all nuclear weapons be eliminated by the end of
1999.6 And yet it failed to be taken up, and the subsequent Reagan-
Gorbachev discussions in Reykjavik ended in impasse. If
Gorbachev’s proposal was prophetic, he is nonetheless far from
having influence, without honor in his own country. But he was the
first head of a nuclear weapon state to make a serious proposal for
denuclearization.

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5 though Russell and Einstein sought to do so. See the Russell-Einstein
Manifesto (9 July 1955). http://www.pugwash.org/about/manifesto.htm
6 Mikhail Gorbachev, 15 January 1986, For a Nuclear Free World (Moscow:
After eight years in the desert of the GW Bush presidency, the United States elected a president who had paid attention to nuclear weapons and their implications. Barack Obama declared in a speech in Prague soon after his election that

The existence of thousands of nuclear weapons is the most dangerous legacy of the Cold War. … So today, I state clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons. (Applause.) I’m not naive. This goal will not be reached quickly — perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, “Yes, we can.” (Applause.)

He then set out a series of steps the United States would take. (We will look at his proposals below.) The United States would lead by example. Barack Obama was in place to sparkplug, symbolize, and give direction to the drive for “a world without nuclear weapons.”

Obama’s initiative at the 24 September 2009 UNSC meeting led to UNSC Resolution 1887, which endorses a number of nonproliferation steps. Obama, however, framed it as a “commitment” to abolition: “The historic resolution we just adopted enshrines our shared commitment to the goal of a world without nuclear weapons.”

It remains to be seen how many other governments and government leaders, especially those adorned with nuclear weapons, will take up Obama’s calls for abolition. Reportage had it that France had caviled at including support any stronger than “Resolving to seek a safer world for all and to create the conditions for a world without nuclear weapons … ” where the operative phrase is ‘create the conditions’. Le Monde told of French differences with its peers.

But of course it makes perfect sense to ‘create conditions’. Moreover, some steps to do so intersect plainly with non-proliferation measures, for which there are wider constituencies fearing new atomic states and ‘nuclear terrorism’ … but not necessarily drawn at all to giving up nuclear weapons.

States, non-state entities, and individual adepts have each crafted, or will craft, a selection of nuclear initiatives to which they will accord priority and attention. Some may be particular to the party concerned. Many will be drawn, however, from a short list of candidate proposals around which some consensus is being formed, or at least attempted. In the next section we will compare three such short lists. Then we will look at the sketchy timetables that seem to have some traction.

Proposals: Short Lists

UNSC 1887

We will take UNSC 1887 as our organizing baseline, and then compare its calls to those of Sam Nunn, George Shultz, William Perry and Henry Kissinger.\(^\text{10}\) UNSC 1887 typically ‘calls upon’ States to take actions, but does not mandate them.

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<th>Topic</th>
<th>Text of UNSC 1887 [Quoted or Key Points]</th>
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<tr>
<td>4. NPT universalisation</td>
<td>“4. Calls upon all States that are not Parties to the NPT to accede to the Treaty as non-nuclear-weapon States so as to achieve its universality at an early date, and pending their accession to the Treaty, to adhere to its terms;”</td>
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<td>5. NPT Article VI</td>
<td>Calls on NPT Parties to effect Article VI, and “all other States to join in this endeavour;”</td>
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<tr>
<td>7. CTBT</td>
<td>Calls on all States to sign and ratify the CTBT, and to not test.</td>
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<tr>
<td>8. FMCT</td>
<td>Calls on CD to negotiate a fissile material production ban.</td>
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<tr>
<td>13. Export controls</td>
<td>“Calls upon States to adopt stricter national controls for the export of sensitive goods and technologies of the nuclear fuel cycle;”</td>
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<td>14. Reactor fuel</td>
<td>“Encourages the work of the IAEA on multilateral approaches to the nuclear fuel cycle, including assurances of nuclear fuel supply …”</td>
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<td>15a. Safeguards</td>
<td>“Calls upon all non-nuclear weapon States party to the NPT that have yet to bring into force a comprehensive safeguards agreement or a modified small quantities protocol to do so immediately.”</td>
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\(^{10}\) Nunn, Shultz, Perry and Kissinger, in January 2007 and January 2008, made a concise case for abolition and steps toward it.
15b. Additional protocol (INFCIRC/540)  “Calls upon all States to sign, ratify and implement an additional protocol …” which would enable IAEA to inspect any site of activity suspected to be in violation of the NPT.

16. Noncompliance with safeguards  “Encourages States to provide the IAEA with the cooperation necessary for it to verify whether a state is in compliance with its safeguards obligations, and affirms the Security Council’s resolve to support the IAEA’s efforts to that end, consistent with its authorities under the Charter;”

17. NPT withdrawal  Notes “ongoing discussions” of what States Parties could do in response to a withdrawal, “and affirms that a State remains responsible under international law for violations of the NPT committed prior to its withdrawal;”

18. Supplier clawback  “Encourages States to require as a condition of nuclear exports” that withdrawal or breach of safeguards would grant supplier right to insist on return of “nuclear material and equipment … as well as any special nuclear material produced through the use of such material or equipment;”


The chart omits obvious and anodyne provisions. Note that, with exceptions, the provisions call for actions by States. Many address state inaction perceived to prevent non-proliferation measures from achieving their sought intent.

Paragraph 16, however, carries a message from the Security Council: if there is suspicion that safeguards are being violated, and if the IAEA is impeded in its effort to determine whether that is so, then the Council is resolved to “support” the IAEA. On one reading this is a threat to draw on the Council’s substantial Charter authority to act for the “maintenance of international peace and security.” On another reading Paragraph 16 is nothing but a weak gesture of its authority, unlikely to be drawn upon in any specific standoff with a suspected violator.

**Nunn, Shultz, Perry, Kissinger**

In their original January 2007 version, Nunn et al. say that “We endorse setting the goal of a world free of nuclear weapons and
working energetically on the actions required to achieve that goal …” Of paramount importance—“first and foremost”—they urge a “joint enterprise” with the governments of the other nuclear weapon states. Their aim is “agreement” on the “urgent steps” to “lay the groundwork for a world free of the nuclear threat.” Abolition is a goal, and this is only the beginning. This is “groundwork” time:

What should be done? Can the promise of the NPT and the possibilities envisioned at Reykjavik be brought to fruition? We believe that a major effort should be launched by the United States to produce a positive answer through concrete stages.

First and foremost is intensive work with leaders of the countries in possession of nuclear weapons to turn the goal of a world without nuclear weapons into a joint enterprise. Such a joint enterprise, by involving changes in the disposition of the states possessing nuclear weapons, would lend additional weight to efforts already under way to avoid the emergence of a nuclear-armed North Korea and Iran.

The program on which agreements should be sought would constitute a series of agreed and urgent steps that would lay the groundwork for a world free of the nuclear threat. Steps would include:

• 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.

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• 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.

Achieving the goal of a world free of nuclear weapons will also require effective measures to impede or counter any nuclear-related conduct that is potentially threatening to the security of any state or peoples. …

We endorse setting the goal of a world free of nuclear weapons and working energetically on the actions required to achieve that goal, beginning with the measures outlined above.

**Barack Obama’s Remarks to the United Nations**

In his remarks to the United Nations General Assembly and the UN Security Council in late September 2009 Barack Obama emphasised the nuclear issue:

I have outlined a comprehensive agenda to seek the goal of a world without nuclear weapons. In Moscow, the United States and Russia announced that we would pursue substantial reductions in our strategic warheads and launchers. At the Conference on Disarmament, we agreed on a work plan to negotiate an end to the production of fissile materials for nuclear weapons.11

He declared non-proliferation and abolition as the first of four “pillars … fundamental to the future”:

First, we must stop the spread of nuclear weapons, and seek the goal of a world without them.

and laid out these steps the United States will undertake:

We will pursue a new agreement with Russia to substantially reduce our strategic warheads and launchers. We will move forward with ratification of the Test Ban Treaty, and work with others to bring the treaty into force so that nuclear testing is permanently prohibited. We will complete a Nuclear Posture Review that opens the door to deeper cuts and reduces the role of nuclear weapons. And we will call upon countries to begin negotiations in January on a treaty to end the production of fissile material for weapons.

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I will also host a summit next April that reaffirms each nation’s responsibility to secure nuclear material on its territory, and to help those who can’t -- because we must never allow a single nuclear device to fall into the hands of a violent extremist. And we will work to strengthen the institutions and initiatives that combat nuclear smuggling and theft.

At the Security Council the next day Obama repeated the points made to the General Assembly.\textsuperscript{13}

\textbf{The British Emphasis on ‘Conditions’}

Soon after Barack Obama’s election Britain issued a paper titled “Lifting the Nuclear Shadow: Creating the Conditions for Abolishing Nuclear Weapons.”\textsuperscript{14} The paper is simply worded, a summary of UK declaratory policy on nuclear disarmament. It continues the position outlined by then Foreign Secretary Margaret Becket speaking in Washington in June 2007. Abolition of nuclear weapons is treated as an objective, but an ‘ultimate’ goal, before which a number of daunting prerequisites must be met. The paper also paraphrases positions which illustrate the range of different views among specialists and public, enabling it to suggest complexity without being required to resolve it.

To be fair, British claims are largely unexceptional, sound acknowledgment of the difficult tasks ahead to achieve a convincing path to zero. For example, they say that “Securing agreement to a global ban will involve persuading those who are covered by a nuclear deterrent that it is in their security interests to give it up.” Yes. Certainly. But there are ‘go slow’ advocates who lean on the asserted ‘necessity’ to maintain ‘extended deterrence’, and it would not be helpful if the British language served their argument, or was understood to mean that as long as Israel claimed that it needed nuclear weapons it could veto serious moves toward zero.

What of the three specified conditions that distinguish Britain’s position?

\textsuperscript{12} Ibid.
\textsuperscript{13} White House. Remarks by the President at the United Nations Security Council Summit on Nuclear Non-Proliferation and Nuclear Disarmament. 24 September 2009.
a) establishing a watertight regime to prevent nuclear weapons from spreading to more states or to terrorists, at the same time as exploiting the peaceful benefits of nuclear energy

b) reducing arsenals and constructing an international legal framework which progressively tightens the constraints on nuclear weapons

c) addressing the technical, political and institutional challenges of moving from small numbers of nuclear weapons to none at all in a way which will enhance rather than destabilise national and international security

Can any abolition regime be ‘watertight’? Of course zero will require remarkable capacity to discourage, prevent, preclude, and if necessary respond to significant violation. Violation, however, will always be possible.

‘Reducing arsenals’ may be useful, but should not be a process to buy time. It is required to satisfy NPT Article VI, but it is not the main point of Article VI.

Moving from small numbers to zero is not a hard problem, if there is agreement to go to zero. There are technical intricacies, and the institutional resources to make that move and then safely and effectively maintain zero must be designed and put in place.

Each—‘watertight’ non-proliferation, reductions, ‘international legal framework’, and solving the ‘small numbers’ problem—is then expanded with particular sub-conditions. Concern that desiderata may be being prepared to be necessary conditions stems from paragraphs like this:

Among other proposals for strengthening safeguards are: widening the range of materials covered; increasing the frequency of inspections so that diversions would be detected more rapidly; and lowering thresholds to ensure the detection of the diversion of smaller quantities of material. Such steps would be expensive but might eventually be needed to provide the confidence necessary to enable a worldwide ban on nuclear weapons.14

Assessing proposals for immediate negotiations on a “universal, verifiable and legally-binding agreement to ban all nuclear weapons” Britain dismisses the notion, saying that

… most of the states with nuclear weapons, including the UK, while accepting that some form of such an agreement is likely to be necessary in due course to establish the final ban, consider that it would be premature and potentially counter-productive to focus efforts on it now when the many other conditions

14 Ibid., p. 18.
which misrepresents advocates of a Nuclear Weapons Convention, who want not ‘words alone’ but the prompt negotiation of a ban on terms which could win universal agreement.

If Britain is only endeavoring to be rigorous and careful in approaching denuclearization, no one could fault that. But if British concern draws energies into ‘conditions’ in a way that takes eyes off the goal and how to get there ‘promptly, prudently and effectively’, then it will have done a disservice.

**Timetables**

Only one approach to global zero foregrounds a timetable: that states should commit to a ‘time certain’ for zero. India has long insisted on states’ committing to zero by a specific declared date. Or perhaps India has taken refuge in the mantra of a ‘time certain’, because it deflected attention from India’s unreadiness to join the NPT, yet allowed India to appear to be urging abolition.

Skeptics insist that agreement to zero can only come out of extended negotiations, for which no deadline makes sense. A ‘timetable’ emerges as states agree.

Still, it is reasonable for us to ask how proponents of negotiating abolition imagine the duration of their task. And what sequence or orchestration of interim measures do they envisage? With answers to these questions we could better understand the options on offer. So we ask ‘what place does strategy assign to time?’.

**January 1986: Gorbachev’s Call for Abolition by 2000**

On 15 January 1986 Mikhail Gorbachev proposed abolition by the end of 1999. The program of abolition, to begin in 1986, was to proceed in three stages:

[Stage 1]  
“Within the next 5 to 8 years” the U.S. and USSR cut to one half “the nuclear weapons that can reach other’s territory.”


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would adopt and implement a decision to rid Europe of medium-range missiles. Britain and France would pledge “not to build up their respective nuclear arsenals.”

[Stage 2] To begin “no later than 1990 and last for 5 to 7 years.”

[2a] The “other nuclear powers” would join the process. The U.S. and USSR would now take steps “aimed at eliminating their medium-range nuclear forces” and freezing tactical systems.

[2b] After the U.S. and USSR achieved “50 per cent reduction of their respective armaments,” all nuclear powers would eliminate their tactical nuclear weapons. Tests would stop.


Gorbachev spoke expressly of a negotiated ‘timetable’:

The programme would envisage clearly-defined routes and reference points, establish a specific timetable for achieving agreements and implementing them and would make the negotiations purposeful and task-oriented. This would stop the dangerous trend whereby the momentum of the arms race is greater than the progress of negotiations.

and added that “the sooner this programme is translated into practical deeds, the safer life on our planet will be.”

April 2009: Obama Speaks in Prague

Barack Obama announced his commitment to “a world without nuclear weapons” in Prague on 5 April 2009. He avoided any deadline—and in so doing insulated himself against any charge of ‘failure’. He then set out a ‘trajectory’, a direction, and identified several preliminary and partial measures the United States would undertake. He began:

17 Primarily the intermediate-range missiles that were later banned by the INF Treaty. The translator is not recognizing here the common Western distinction between medium-range and intermediate-range missiles.

18 Gorbachev does not spell out who are the “other nuclear powers.” Israel is not mentioned, but a “universal accord” in 1986 would have had to include not only Israel but also India and South Africa.
I state clearly and with conviction America’s commitment to seek the peace and security of a world without nuclear weapons. (Applause.) I’m not naive. This goal will not be reached quickly — perhaps not in my lifetime. It will take patience and persistence. But now we, too, must ignore the voices who tell us that the world cannot change. We have to insist, ‘Yes, we can.’ (Applause.)

Now, let me describe to you the trajectory we need to be on. First, the United States will take concrete steps towards a world without nuclear weapons. To put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy, and urge others to do the same. …

On one key preliminary he insisted on urgency and fixed a deadline:

[W]e must ensure that terrorists never acquire a nuclear weapon. This is the most immediate and extreme threat to global security. One terrorist with one nuclear weapon could unleash massive destruction. …

So today I am announcing a new international effort to secure all vulnerable nuclear material around the world within four years. We will set new standards, expand our cooperation with Russia, pursue new partnerships to lock down these sensitive materials.

but as ‘secure’ and ‘vulnerable’ imply judgments open to different understandings, negotiation to accomplish this goal will certainly prove interesting.

September 2009: Obama Speaks to the United Nations

Speaking to the UN General Assembly, President Obama set down one marker, confirming he would “host a summit next April [2010] that reaffirms each nation’s responsibility to secure nuclear material on its territory.” A day later he told the UN Security Council that in January 2010 the United States would call on all to end production of fissile material for weapons. He reminded his listeners of the NPT Review Conference in May 2010. The next

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year would be “absolutely critical” in efforts against “the spread and use” of nuclear weapons.

The next 12 months will be absolutely critical in determining whether this resolution and our overall efforts to stop the spread and use of nuclear weapons are successful. And all nations must do their part to make this work. In America, I have promised that we will pursue a new agreement with Russia to substantially reduce our strategic warheads and launchers. We will move forward with the ratification of the Comprehensive Test Ban Treaty, and open the door to deeper cuts in our own arsenal. In January, we will call upon countries to begin negotiations on a treaty to end the production of fissile material for weapons. And the Non-Proliferation Treaty Review Conference in May will strengthen that agreement.

International Commission on Nuclear Nonproliferation and Disarmament

In 2008 the Australian and Japanese governments collaborated in initiating the International Commission on Nuclear Nonproliferation and Disarmament, co-chaired by former Australian Foreign Minister Gareth Evans and former Japanese Foreign Minister Kawaguchi Yoriko. At this writing the Commission has not yet completed its report, which will recommend steps and a timetable, but in April 2009 Gareth Evans spoke of his expectations.

Evans posits a ‘short term’ ending in 2012, and specifies steps he hopes are completed before and during the 2010 NPT Review Conference. He chooses 2025 as the year before which the move to actual abolition is unlikely, and sets out measures to be undertaken in the years leading to 2025. Of abolition he insists that

It’s important, in the middle of all this realism, however, about getting to the beyond 2025 final zero, to keep our basic idealism intact. The ultimate goal must remain one – the ultimate goal that we must never lose sight of is the elimination of nuclear weapons and the effective outlawing of nuclear weapons from the planet.

22 http://www.icnnd.org/
The rationale for that goal I think must again also never be lost sight of. It was very well articulated I think by the original Canberra Commission and rearticulated as the central motif of the Blix Commission, namely that so long as any country has nuclear weapons, others will want them; so long as any country has nuclear weapons, they’re bound one day to be used by accident if not design, and any such use would be catastrophic.

The short-term aims and hopes include CTBT ratification before the NPT Review Conference, ‘rearticulation’ of the 13 Steps of the 2000 NPT Review, and measures to strengthen the NPT. For 2009-2010 he lists several agenda items: START follow-on, strategic dialogue with Russia and China, CTBT, fissile material control, securing loose materials, Iran and the DPRK, and US nuclear policy (including acknowledgment that deterrence is the only nuclear mission).

Medium-term aims:

In terms of the medium term, which for present purposes we’re thinking about as the period running through to about 2025, the basic object, as we’re thinking about it again at the moment, is to both set and get to a target, minimalist vantage point – we’re still wrestling with the appropriate metaphor but I’ll leave that discussion to one side – a minimalist vantage point which would be characterized by dramatically reduced numbers of warheads, and we’re still debating what those numbers should be, whether it’s possible to have any actual numbers or would it only be a formula, but certainly dramatically reduced; secondly, dramatically reduced deployment of any of the weapons left in existence; thirdly, nothing anywhere on high readiness – on high launch readiness; and fourthly, common acceptance in military doctrine that the only purpose of nuclear weapons is to deter their use by others.

Again, whether or not no-first-use should be part of that kind of military doctrine or whether that’s an add-on or more emotional and real-world utility is something the commission is wrestling with. But we believe, I think in our preliminary discussions, that getting to a result like this with very low numbers, very little actual deployment, nothing on high readiness, and a common doctrine accepting that there’s no other purpose for these things in their potential use of tools other than to deter others from using nuclear weapons, we think that that would be a very much better world than the one we have at the moment, and one that is achievable within a time certain by a date certain, and for present purposes, 2025 seems to be workable.

To summarize: Evans’ short-term is 2009-2010, his medium term “about 2025,” and then “elimination of nuclear weapons” and their
prohibition, the goal “we must never lose sight of,” would be reached at some yet indeterminate point after 2025.


The Seven Most Important Questions

Take the goal to be preventing ‘spread and use’, shorthand for nonproliferation, abolition and prohibition. Assume, for the moment, that means to prevent ‘spread’ will enhance and speed the drive for abolition and prohibition. That would mean, for example, foregoing measures to prevent ‘spread’ that would make it harder to achieve consensus to abolish, such as intrusive methods that a nuclear weapons state declared anathema. What are the questions to answer, the tasks to define, the measures to design, to accomplish regime proof against ‘spread and use’?

Do these questions suggest actions and capabilities which could facilitate zero?

[1] What nuclear weapons are there? How are they secured? And what capabilities exist to manufacture more?

This is a matter of facts. There may be disagreements about the candor with which information is provided, and whether means to secure the weapons are ‘adequate’. In principle, however, the information on offer should be available to rational assessment of its quality and sufficiency.

[2] What fissile material exists? And how is it secured?

As in [1].

[3] What capabilities are there to process uranium and plutonium, from what sources, to acquire further bomb-usable fissile material?

Are these sources and facilities fully subject to INFCIRC/540 Safeguards?

As in [1].

[4] What negotiating practices and forums are required to address, and satisfy, reluctance to agree to zero?

Consider three modes of bargaining: coercive refusal (forcing others to pay an unreasonable price for consent), reciprocity (compensation for costs and risks assumed in agreeing to a fair and mutual deal), and assurance (satisfaction of doubts that agreeing will require accepting unacceptable risks or costs).

If a state ‘holds out’, using its refusal of consent to extract blood money from other states, it is practicing coercion, taking advantage of the negotiations in order to ‘win’. This is akin to blackmail or a protection racket, except that the blackmailer or racketeer threatens harm, whereas the coercive refuser threatens to deny a good.

What about reciprocity? In one sense, zero is good for all: everybody wins. But a state could claim that giving up nuclear weapons, or a nuclear power’s ‘nuclear umbrella’, would force it to increase conventional armament in order to be secure. Should it be compensated?

Governments will want to know how they can be assured that no other state is preparing moves which would threaten them. What is required?

In addition to the concerns of governments on the merits, governments also must guard their political flanks against internal opponents who may exploit the issue of ‘national security’ to endeavor to bring the government down. Their arguments are likely to take the form that ‘there are unacceptable risks’. Regime negotiators must take these arguments into account. What assurances can they offer?

[5] What capacity will be required to provide convincing assurance that a suspected violation of the regime is NOT taking place?

Prompt ‘anywhere, anytime’ inspection.
By whom will it be determined that a suspected violation of the regime is taking place, or has taken place, and what action, if any, should then be taken?

This is the most difficult problem of all. Time is of the essence. No government, no individual, comes to making the decisions with perfect impartiality.

Consider the possibility of two distinct bodies, the UN Security Council and a Nuclear Prohibition Commission. The UNSC would have its present “primary responsibility for the maintenance of international peace and security,” for which it could exercise all of its powers under the Charter. The Nuclear Prohibition Council, in contrast, would be confined to determining whether a suspected violation had taken place; and to that end it could deliver ‘protected inspectors’ to any germane location, placing that location under its control. As long as the sovereign state governing that location did not interfere with their actions, the ‘protected inspectors’ would not bring force to bear; but if the inspectors, or its armed units, were subject to interference or attack then force could be used to protect them and ensure that inspection proceed.

Such an arrangement has several advantages. It could be constructed to avoid a veto, ensure prompt action, respond to interferent force, but be limited to gathering the facts germane to an alleged violation and then ‘freezing’ the facilities or stocks at issue. It would establish facts and guarantee time for political negotiation of the alleged violation. By passing the question whether or not there were a violation to another body—the UNSC—the Commission could endeavor to remain ‘neutral’.

What shall be enforcement capacities of the regime? And how will it be assured that those capacities are in place and will act as ordered?

A small dedicated military force plus explicit commitment of forces by member states would be always at the disposal of the Security Council. As in [6], their missions could be limited initially to taking control of a suspect area and defending themselves as necessary, but that limitation could be removed if the UN Security Council judged it necessary. The Commission and Security Council would each assure itself that forces it is entitled to call upon are trained and ready.

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Conclusions

I have argued elsewhere that once the NWSs commit to ‘prompt, prudent, and pragmatic denuclearization’ the world could achieve ‘pragmatic zero’ within ten years. ‘Pragmatic denuclearization’ and ‘pragmatic zero’ mean that the terms of agreement, though not ‘perfect’, assure reasonable judges that the regime can be achieved and sustained, coupled to political methods to be drawn upon if at any point the regime confronts a threat that brings that ‘reasonable assurance’ into question. The commitment to ‘prompt denuclearization’ means that there is agreement to solve and implement ‘how’ tasks, rather than to become ensnared in ‘whether to’ arguments. And ‘prudent denuclearization’ implies viewing risks and obstacles realistically, never ignoring problems but using good sense to design convincing responses to them. And ‘ten years’ is not a short time, if there is good faith commitment to denuclearization.

It is in the interest of nuclear weapon holders to make that commitment, and will remain in their interest, to do so.
Abbreviations

ABM  Anti-Ballistic Missile
CTBT  Comprehensive Test Ban Treaty
DPRK  Democratic People’s Republic of Korea
FMCT  Fissile Material Control Treaty or Fissile Material Cutoff Treaty
IAEA  International Atomic Energy Agency
INFCIRC  [IAEA] Information Circular
N5  United States, Soviet Union, Britain, France, and China
NPT  Non-Proliferation Treaty [Treaty on the Non-Proliferation of Nuclear Weapons]
SIPRI  Stockholm International Peace Research Institute
START  Strategic Arms Reduction Talks
UK  United Kingdom
UN  United Nations
UNIDIR  United Nations Institute for Disarmament Research
UNSC  United Nations Security Council
WMD  Weapons of Mass Destruction

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