What to Do with a Vision of Zero

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The tantalising ideal of a world entirely free of nukes is hoving back into view. It's a goal that disciplines minds, even if you never quite attain it

A WORLD without nuclear weapons is a vision as old as the nuclear age. The makers of the bombs that exploded over Hiroshima and Nagasaki in 1945 fretted a lot about the ultimate consequences for mankind of their devilish ingenuity. Now anti-nuclear campaigners are hoping that "Yes, we can!" will do more for their cause than older slogans like "Ban the bomb!" ever did. For on the stump, Barack Obama, America's president-elect, promised to make the goal of eliminating nuclear weapons worldwide a "central element" of America's nuclear policy.

He will not be the first American president to dream of nuclear disarmament; that unlikely peacenik Ronald Reagan did so too in his day, to the consternation of allies at home and abroad. The reality, in any event, is not one that America can will on its own. Yet Mr. Obama has tapped into a new seam of dissatisfaction with the world's nuclear order. Might getting to zero soon be a less forlorn prospect?

The latest nuclear-free buzz around the globe takes in more than the usual anti-nuclear suspects. The five officially recognised nuclear powers—America, Russia, Britain, France and China—are all feeling the pressure.

So they should. The Nuclear Non-Proliferation Treaty (NPT) that came into force in 1970 commits them to good-faith negotiations on "effective measures" to end the nuclear-arms race at an early date and to nuclear disarmament as part of a process of "general and complete disarmament under strict and effective international control". That was their part of a bargain that now has 184 other governments signed up not to build bombs of their own. Nuclear numbers have tumbled since the end of the Soviet-American arms race, but they are far from zero.

The nuclear-weapons powers are being pressed to do more ahead of a five-yearly review of the NPT's workings, in 2010. The last such gathering ended in a punch-up. Another ill-tempered diplomatic brawl would further harm the treaty, which is taking a battering all round.

Iran and North Korea, as well as others, have bent or broken its anti-nuclear rules. India, Pakistan and Israel built weapons outside the treaty and reject its constraints. The fear is that, should others follow, the risk of miscalculation between growing numbers of different players will make the era of mutual assured destruction, or MAD—the threat of mutual annihilation that kept a scary peace between America and the Soviet Union during the cold war—look like a golden age of sanity.

Meanwhile, as more governments from Africa to Latin America look to nuclear power as the answer to meet growing energy demand, potentially dangerous nuclear materials will end up spreading ever more widely. Without stricter controls and tougher inspections, the technologies for enriching uranium and extracting plutonium that can be used to help keep the lights on could also be abused for weapons-making. Moreover, as the barriers to entry in the bomb-making business keep falling, there are fears that terrorists will find it easier to get their hands on a bomb, or other dangerous material.

Despite this, anger that the five still cling to their bombs has made some non-nuclear states dig in their heels against seemingly sensible new ideas, such as an international nuclear-fuel bank that could help stem new proliferation dangers. They see restrictions on their nuclear freedom as another form of nuclear apartheid.

Enter four prominent American elder statesmen, George Shultz, William Perry, Henry Kissinger and Sam Nunn, dubbed the "four horsemen of the apocalypse". Last year (and again this) they argued in the *Wall Street Journal* for America to take the lead in pushing towards a nuclear-free world. The steps they proposed were not new: further weapons cuts, making safer those that remain, ratifying the Comprehensive Test-Ban Treaty (CTBT), halting production of fissile material for use in weapons and securing all nuclear materials around the globe. Nor, if all were taken, would they get the world to zero. But by holding up a nuclear-free vision, they gave political cover to a renewed debate about whether nuclear weapons, credited with keeping peace between the big powers after the 20th century's two world wars, are now part of the problem.

Now everybody wants a plan

These days no self-respecting think-tank, it seems, can be without a report on nuclear disarmament. Japan and Australia, sponsors of rival grand commissions when a potential nuclear-free window opened at the cold war's end, have joined forces to set up a new one.

Yet the document likely to be most thumbed through for clues about the world's nuclear future will be the American Defence Department's next nuclear-posture review, due in early 2009. Already the tug-of-war is under way among Mr. Obama's would-be advisers over the principles that should shape it.

In a recent *Foreign Affairs* article, Ivo Daalder and Jan Lodal argued for four urgent steps: a declaration that America's nuclear weapons have no other purpose than to deter the use of such weapons by others; a unilateral American reduction to no more than 1,000 warheads (including reserves), as a step towards zero; work on an "airtight" verification system; and a vigorous diplomatic effort to convince the world of the logic of nuclear zero.

Parts of this sound more like creed than policy. Some people fear that if you push hard for abolition as an end in itself, the effect could be destabilising in a world that, despite vociferous disarmament demands from Brazil, Egypt, Indonesia, Ireland, South Africa and so on, still relies on America's extended nuclear umbrella for much of its security.

Some suggest using the ultimate goal of total elimination just as a framework for a whole series of steps that could in time ensure greater security, with much reduced nuclear numbers.

There is wide agreement now that convincing others of the five's commitment to their NPT promises requires movement on several fronts. These include deeper weapons cuts; more effort to bring into force a test ban and negotiate a long-awaited fissile-material cut-off treaty; efforts not only to devalue nuclear weapons as a currency of power and but also to tackle the regional insecurities that drive nuclear competition; and work on globally applicable verification techniques and enforcement mechanisms that would give both nuclear and non-nuclear states the assurance (even long before zero is in sight) that weapons, once dismantled, stay that way, and that cheats can be dealt with.

Of these, cutting weapons numbers is both easiest and symbolically most eye-catching. American and Russian stockpiles are anyway set to drop further. By 2012 they will be down to the 1,700-2,200 deployed warheads apiece agreed six years ago in the Moscow Treaty. America has also been pruning the weapons held in reserve for spares: its nuclear arsenal will by 2012 be less than a quarter its size at the end of the cold war. A cut to a round 1,000 would inconvenience neither side.

But how to go about it? George Bush was hammered for preferring unilateral cuts and so agreed to a treaty with Russia. Setting 1,000 as a target, give or take weapons in reserve, while offering to negotiate along these lines would reassure all round (as would the binding new verification rules Mr. Obama is expected to seek before existing ones run out next year).

Cash-strapped Russia always worries that unilateral American cuts can easily be reversed. But after the Georgia crisis, many of America's friends would like to see Russia held to tight treaty limits too. Expect anxieties from the Baltic states to Turkey, if Mr. Obama acts early on to remove America's last few tactical nuclear weapons from Europe (where Russia has many more).

Yet the problem for zero-boosters is that the lower you go, the trickier things get, argues Henry Sokolski of the Washington-based Non-proliferation Policy Education Centre. Crises may prove harder to manage when the nuclear gap between America and Russia and other potential contenders is not thousands, but hundreds.

One answer could be to widen arms-control talks to include China, Britain and France too. But neither China nor France has ever signalled interest. And what about India, Pakistan and Israel?

As for more global treaty commitments, Mr. Obama is expected to try to get Congress to ratify the test-ban (it refused in 1999). That could prod others, like China, to do likewise. He has also said he will not authorise the building of new nuclear weapons. That is music to disarmers' ears. But there may eventually have to be a trade-off: ending testing in return for building some simpler, safer warheads (based on a previously tested design).

The upside is that modernisation could enable America to make far deeper cuts than does tinkering with old warheads in today's stockpile. Anyway, Britain, France, Russia and China are modernising their weapons (only China is enlarging its arsenal, albeit from a low base). The downside is that others will cry foul. The going for a fissile-material cut-off treaty at the log-jammed Conference on Disarmament could be harder still. Long blocked by China, the last try was stymied by Pakistan and Iran. Clever diplomats are paid to find ways round such obstacles—but it will take ingenuity of an untried sort to navigate the minefield between today's world and one of very low nuclear numbers or none.

One roadblock after another

A recent *Adelphi Paper* from the London-based International Institute for Strategic Studies explores just some of the technical and political obstacles. What would be acceptable standards of verification when controls can never in fact be "airtight" and weapons-making knowledge still has to be protected? What are the trade-offs between imperfect verification and enforcement, since the UN Security Council seems unable to agree on enforcing its resolutions on Iran or North Korea? What might a residual deterrence capability against cheats look like? How might conventional military imbalances be managed in a nuclear-free world, without cascading back towards the carnage that blighted the first half of the 20th century?

The British government has taken a lead, co-operating with the Norwegians to explore techniques for verifying warhead dismantlement without giving nuclear secrets away. But this is the merest tip of the technical work needed to track and secure the world's dangerous nuclear materials. A British suggestion that the nuclear laboratories of the five might co-operate to find solutions has been handled by the others as gingerly as they might a bomb.

Nuclear weapons will be around for a long time. But thinking zero at least forces governments to see them in a new way.