

## SPECIAL REPORT

# Nuclear war: the threat that never went away

In the first of a series of articles covering nuclear issues, **Declan Butler** looks at the nuclear non-proliferation treaty and finds that there has never been a better climate for negotiation.

**W**hat gets my juices flowing is my conviction that a terrorist will explode a nuclear bomb in one of our US cities by 2014. And the truth is that this is a preventable catastrophe. It will be despite a wealth of things that we could have done. Afterwards, we will say that we should have done these things — some of which we didn't do at all, or didn't do expeditiously enough."

Graham Allison, director of the Belfer Center for Science and International Affairs at Harvard University in Cambridge, Massachusetts, is one of many in the field of nuclear security acutely aware of how much the world has changed — and of the need to change international approaches to the issue accordingly.

In the 1960s, when the international nuclear non-proliferation treaty (NPT) was negotiated, there were five nations with nuclear weapons and the risk was of full-scale nuclear war.

The new nuclear threats involve smaller numbers of weapons, and come in three flavours: that terrorists will obtain and use a nuclear bomb; that nuclear weapons will be acquired and used by states in regional conflict; and that established nuclear weapons states will blur the line between nuclear and conventional weapons and use nuclear tactical battlefield weapons.

The NPT is now at a dangerous tipping point, say experts such as Allison, who warn that unless rapid progress is made on non-proliferation issues, there is a real risk of nuclear weapons being used for the first time since the bombing of Hiroshima and Nagasaki. The issues will come to a head at an intergovernmental meeting in 2010 in Vienna, Austria, of the NPT's 189 members. On the table are likely to be controversial proposals to end flouting of the NPT by withdrawing the right that countries have enjoyed to develop civil uranium-enrichment technology — which can be diverted to military ends. Low-enriched uranium fuel would instead be supplied via multilaterally controlled fuel banks and enrichment facilities, under the authority of the International Atomic Energy Agency (IAEA). But

the NPT review conference, which is held every five years, will above all be a measure of the international community's resolve to generate much-needed impetus for a suite of wide-ranging related steps designed to reinforce the NPT to deal with current threats.

Consensus on tightening-up the non-proliferation regime will be impossible unless the five official nuclear-weapons states — the United States, Russia, China, France and Britain — agree to take concrete steps to remove nuclear weapons from their security doctrines, to not build new weapons, and to accelerate dismantlement of existing arsenals.

## The grand bargain

The original aim of the NPT, which came into force in 1970, was to restrict the weapons to the five countries that already openly possessed them, all of which agreed to take steps to disarm. As part of the 'grand bargain', other states agreed not to develop nuclear weapons, but were guaranteed an 'inalienable right' to use nuclear energy for peaceful purposes, dubbed atoms for peace.

Over the past decade, the nuclear-weapons states' reluctance to embrace their side of the NPT bargain has stalled non-proliferation efforts and countries such as India and Pakistan have tested weapons. Huge progress was made at review conferences in 1995 and 2000, including a package deal of 13 steps to further the NPT's twin goals of non-proliferation and disarmament by the existing nuclear-weapons states, such as a commitment to a Comprehensive Nuclear-Test-Ban Treaty (CTBT) and a Fissile Material Cut-Off Treaty to outlaw the production of new weapons material.

The reaction to the 11 September terrorist attacks in 2001 stopped progress, and the 2005 review conference ended with almost no agreement. "The 13 steps have been rolled back or forgotten about," says Jean du Preez, an arms expert at the Monterey Institute of International Studies in California. Indeed, non-proliferation efforts have if anything gone backwards.

**"The nuclear non-proliferation treaty is at a dangerous tipping point."**



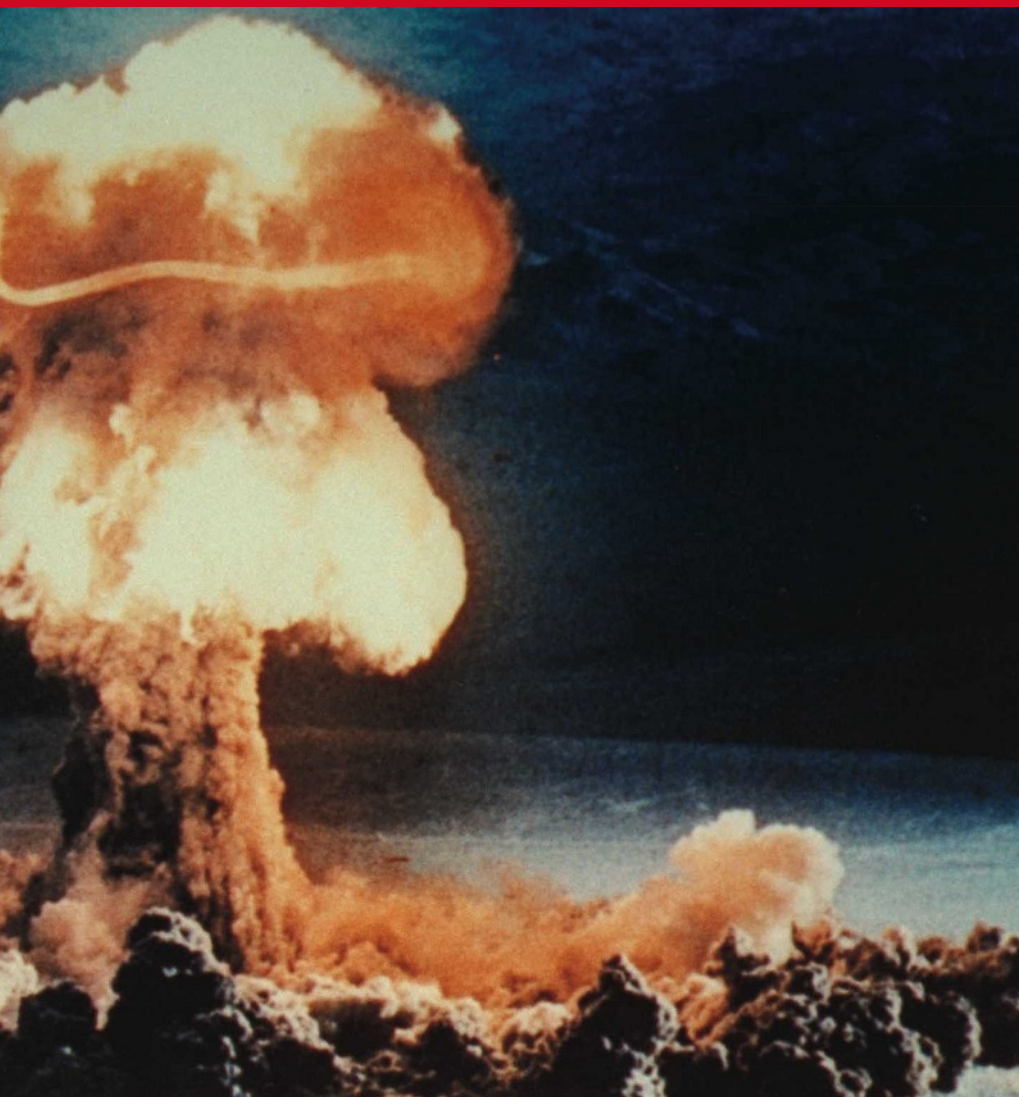
The United States and China, signatories to the CTBT, have failed to ratify it, and so prevented the treaty entering into force. And the US 2002 Nuclear Posture Review, while making cuts to the country's weapons infrastructure, flew in the face of its NPT commitments by increasing the role of nuclear weapons in its security doctrine and expanding the scenarios in which they might be used to include attacks on countries with biological or chemical weapons.

## Nuclear arms-races

North Korea's testing of a nuclear device in 2006, and Iran's possible pursuit of nuclear weapons, also pose significant challenges to the NPT. There is risk of a domino effect — if Iran acquires nuclear weapons, so will Saudi Arabia in response, launching a nuclear arms-race in the increasingly volatile Middle East.

Many experts are cautiously optimistic, however, that the current crises in nuclear non-proliferation are concentrating minds in capitals worldwide, and may actually generate a renewed political commitment to disarmament, which could be a springboard to a stronger regime. Momentum for disarmament is growing, particularly in the United States, whose leadership is critical to kick-starting non-proliferation efforts. "The United States

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now realizes that if it is to make progress on its own agenda it needs to re-embrace multilateral non-proliferation efforts," says du Preez. Gordon Brown's UK government has also adopted a much more proactive line on disarmament than his predecessor's.

This year's US presidential elections will be critical to the NPT review, and the Democrat candidates have broadly backed a re-engagement with multilateral efforts. "But whoever gets elected, non-proliferation issues will get a much more sympathetic hearing," says Bates Gill, director of the Stockholm International Peace Research Institute in Sweden.

There are two main negotiation tracks emerging in the run-up to 2010. The nuclear-weapons states want to reinterpret the treaty to bring in much tighter restrictions on civil nuclear use, in what may amount to a rethinking of the 'atoms for peace' philosophy that has been the core of the NPT. But such moves are not going to fly with the countries lacking nuclear weapons unless the nuclear-weapons states themselves agree to measures to hold up their part of the NPT bargain.

The predicted expansion of nuclear power for energy generation, entailing an increase in facilities and nuclear material, and the repeated flouting of IAEA safeguards on civil nuclear

power, have led to calls for a ban in 2010 on the spread of technologies for uranium enrichment and reprocessing of spent fuel. Such technologies are inherently dual-use, and countries that possess such facilities are, in reality, virtual weapons states, as it takes little to redirect the technology to a weapons programme should they so wish.

Although tougher safeguards could make it more difficult for covert programmes to escape detection, as long as facilities are under national control, a determined state can abuse the system or withdraw from the NPT completely. "The Iran crisis has put the question of national enrichment facilities in the spotlight," says Frank von Hippel, a nuclear-weapons expert at Princeton University in New Jersey.

Hence the NPT agenda is likely to contain a proposal to resuscitate plans from the 1940s to bring enrichment facilities and reprocessing plants under multilateral control, with a restricted number of tightly guarded and controlled facilities acting as fuel banks for other countries. But it is clear from preparatory meetings for the NPT conference that many countries will only support further restrictions if the weapons states make concessions on several key issues. Although 'rogue states' have been the main public focus of



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non-proliferation, they are only one part the picture. The arms and stockpiles of the weapons states are also a big problem.

NPT cheats are nothing new for the treaty, and are at least amenable in theory to containment by diplomacy and sanctions, says Roland Timerbaev, a retired Russian ambassador, and one of the founding fathers of the NPT. In reality, cheats remain outliers and the majority of NPT members stick to the rules. The NPT's success is often overlooked, he adds, saying that without it, some 30–40 states would have acquired weapons. For Timerbaev, the greater risks to the non-proliferation regime are to be found in the continued existence of large nuclear arsenals, in the expansion of nuclear power, and in the huge and inadequately secured stockpiles of weapons-grade fissile material worldwide.

#### The way forward

There are many steps that could be taken quickly. One is early US ratification of the CTBT to provide impetus for planning the next review of the NPT. Wide ratification of the Fissile Material Cut-Off Treaty, which has lain dormant since its creation in 1995, would commit states to halting any new production of fissile materials. It is seen as the means to bring the unofficial weapons states, India, Pakistan, North Korea and Israel under a verifiable regime.

New reductions in arms remain important, but more crucial in the short term is 'outlawing' not the nuclear weapons themselves but any active role for them in policy. The goal is to reach a norm where it is as unacceptable for a country to have any active role for nuclear weapons as it is now to invoke the use of chemical or biological weapons. This issue of de-emphasis is key for non-weapons states such as South Africa, says du Preez. "If you only have a dozen weapons, but you say you are willing to use them and are making threatening postures, it is the opposite of the modus operandi of the cold war where nukes were a weapon of last resort. There is now a crossing of the line between conventional and nuclear weapons," he says.

The steps to getting rid of nuclear weapons from national security policies are well-trodden, and include the 13 steps to disarmament agreed by the weapons states at the 2000 review conference. What has been missing is political will. With new administrations in the United States, Britain and France, that may be forthcoming at the 2010 NPT review conference. There's a possible perfect storm gathering, says du Preez, and "all it needs is a spark" to re-ignite non-proliferation efforts. ■

See Editorial, page 107.