

Indian strategy takes N-test talks to brink

Paris. Prospects of a treaty banning all nuclear tests were hanging in the balance this week, as what may be the final round of negotiations began in Geneva. Although consensus has been reached on many aspects of the text, it is still possible that the entire treaty could be derailed by India, which feels that the text does not make an adequate commitment to nuclear disarmament.

The current draft of the Comprehensive Test Ban Treaty (CTBT) goes further than its strongest advocates could have hoped for this time last year. Negotiators from about 60 countries meeting at the Conference on Disarmament in Geneva are keen to reach agreement by next month, when presidential elections will be held in Russia.

This would allow the text to be sent to the UN General Assembly in September, and to take effect by next year. If a treaty is not agreed by next month, any new Russian government may demand further changes, causing inevitable delays.

"A draft with a thousand sections still in square brackets [that is, still to be agreed] will get swept away" by major political upheavals, says Christopher Paine of the Natural Resources Defense Council in Washington, arguing that an agreed treaty will be better able to resist political change.

Broad resolve to bring the negotiations to a swift conclusion was apparent in Geneva last week. In particular, China dropped its previous opposition to the June deadline for reaching agreement on the text. In a major shift, it also hinted that it may drop its insistence that the test ban treaty should permit nuclear explosions for civilian purposes. Observers say China may be ready to agree to a compromise that would outlaw such explosions, pending a review in 10 years' time. This face-saving device is tantamount to a ban, says Paine.

Russia last week helped to achieve a speedy conclusion of the negotiations by formally agreeing to a ban on all nuclear tests, however small. This brings it into line with the other four nuclear weapons states — the United States, China, France and the United Kingdom — which recently agreed to accept a so-called zero-yield treaty (see *Nature* 376, 540; 1995).

In the past, the nuclear weapons states had pressed to keep open a loophole in the treaty allowing them to carry out low-yield nuclear explosions of up to 1 kiloton (see *Nature* 376, 283; 1995). But non-nuclear-weapons states have opposed this, arguing that it would eliminate disarmament from the goals of the CTBT by allowing nuclear weapons states to continue modernizing their arsenals.

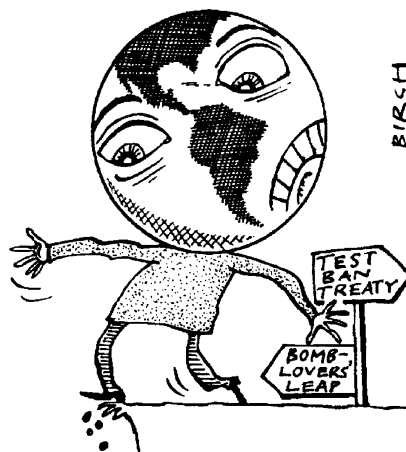
But the disarmament goals of the treaty remain the major sticking point. India in particular is concerned that although the

treaty would encourage non-proliferation, it would do little to prevent the five nuclear weapons states from keeping their weapons.

India feels that its ambitions to become a regional power depend either on becoming a nuclear weapons state or on shifting the global balance of power in its favour by persuading the existing ones to disarm. It therefore refuses to sign a treaty that lacks firm assurances from the five nuclear weapons states that they will eliminate their nuclear arsenals.

In particular, India wants the treaty to include a ban on any "qualitative" improvements in nuclear weapons, in order to prevent the nuclear weapons states from modernizing their arsenals using the computer and experimental simulation techniques to which they alone have access. (Nuclear powers argue that these techniques are needed to maintain the safety of their weapons stockpiles, see *Nature* 380, 8; 1996.) Similarly, India wants the treaty to specify a goal of achieving nuclear disarmament within ten years.

But many non-nuclear weapons states are concerned about India's strategy. Although sympathetic to India's complaints, they acknowledge that the nuclear weapons



states will not accept its demands, and feel that by pursuing them India could wreck the entire treaty. They advocate the more pragmatic approach of getting a test ban treaty first, and afterwards working further towards disarmament.

A ban on testing would prevent the five nuclear weapons states from developing more sophisticated arsenals, while freezing programmes in both non-nuclear-weapons states and the undeclared nuclear weapons states, India, Pakistan and Israel. By halting the arms race, supporters of this strategy argue, a test-ban treaty would set the stage for further rounds of weapons cuts.

At the same time, the nuclear weapons states may be undermining their attempts to convince others of the validity of this approach by investing massively in simula-

tion techniques to offset the effects of a ban. The United States, for example, is proceeding with a large programme of subcritical testing this year at its underground facilities at Nevada.

"They are giving the impression that they want to get away with as much as they can [within the treaty]," says one observer, who describes the US decision to proceed with underground subcritical testing as a "red rag to India".

One compromise would be to include India's demands in general terms within the preamble to the treaty but not within the treaty itself. Most states are expected to try to persuade India to accept this formula, and India may eventually drop its demands, having succeeded in emphasizing that the treaty is about disarmament as well as non-proliferation.

But another hypothesis is that India will use the inevitable refusal of the nuclear weapons states to accept its demands as an excuse for refusing to sign the agreement at all. Such speculation has intensified since the Hindu nationalist Bharatiya Janata Party won the most seats in the recent election, as its manifesto called for the deployment of nuclear weapons.

Indeed, many predict that India is poised to declare itself a nuclear weapons state. This could cause China and Pakistan to withdraw from the negotiations as well, leaving hopes of a treaty in tatters.

It remains unclear whether India will sign the treaty at all, whether the treaty could be agreed without it, and what value such a treaty would have. The United Kingdom has proposed that the treaty should take effect only if it is ratified by at least the five nuclear weapons states and the three threshold weapons states. Pakistan has since endorsed this proposal, and China and Russia are said to be coming around to this position.

But many other countries, including the United States, are said to be furious about this proposal, arguing that it would virtually legitimize the status of India, Pakistan and Israel as nuclear weapons states, while allowing any of the three countries to hold the entire treaty hostage. "Entry into force is turning into a central fight" in the negotiations, says Rebecca Johnston, from *Disarmament Intelligence Review*.

Others want the treaty's entry into force to depend on its ratification by all 68 countries that have nuclear fuel cycles. But, as India may refuse to sign the treaty, others are keen to get the best agreement possible by next month, and to postpone the decision on who signs and when. Such tactics have been used in the past to overcome similar obstacles to the ratification of both the chemical weapons convention and the nuclear non-proliferation treaty.

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