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## **Securing a Global Fissile Material Production Cutoff: Options for the Conference on Disarmament and Beyond**

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Ending the production of fissile material—plutonium and highly enriched uranium—for weapons purposes has been on the international arms control and nonproliferation agenda for decades. A fissile material cutoff treaty (FMCT) would reinforce the nuclear Nonproliferation Treaty (NPT) and lock in the halt on production of fissile material for weapons appropriately observed by all five original nuclear-weapon states: China, France, Russia, the United Kingdom, and the United States. Perhaps more significantly, a verifiable FMCT would cap the production of bomb by NPT holdouts India, Pakistan, and Israel.

There has been a near-critical mass of support for the FMCT for several years. Four of the five original nuclear-weapon states have publicly declared they have suspended fissile production for weapons purposes. The fifth, China, is believed to have halted such production. India and Pakistan continue to produce plutonium and highly enriched uranium, but have stated that they support negotiation of a verifiable, nondiscriminatory global FMCT. Israel's fissile production activity is not well known, but it has not publicly expressed opposition to a multilateral and verifiable FMCT. North Korea restarted production of relatively small quantities of plutonium for weapons purposes, but has agreed to verifiably halt such production in the past, and again under the September 2005 Joint Statement from the six-party talks.

There is an unprecedented opportunity to cutoff global fissile material production for weapons.

Unfortunately, the Conference on Disarmament is deadlocked and has been for nearly a decade. As a result, multilateral negotiations toward a global FMCT have been stymied.

### **Old Difficulties and New Opportunities**

Early in 1995 the CD reached consensus on the Shannon mandate for the negotiation of an effectively verifiable global FMCT. In May, at the 1995 nuclear Nonproliferation Treaty (NPT) Review and Extension Conference, states-parties listed the conclusion of a global treaty to cut off the production of fissile material for weapons purposes as one of the main items in the final "Principles and Objectives" conference document. In 1996, the CD concluded negotiations on the Comprehensive Test Ban Treaty. Negotiations on the FMCT were expected to become the next major negotiating priority for the CD. But since then, differences over negotiating priorities have blocked formal negotiations but for a few brief weeks in 1998.

While the CD's increasingly large membership and consensus decision-making process are often blamed for the impasse, the fundamental problem lies in the competing goals of a small group of key states. Frustrated by the failure of the nuclear-weapon states to fulfill their 1995 and 2000 NPT Review Conference commitments, Nonaligned states support the initiation of discussions

on nuclear disarmament and legally-binding negative nuclear security assurances. Most Western states prioritize a ban on the production of fissile material for weapons. Russia and China, which are concerned about U.S. ballistic missile defense capabilities, want the CD to make progress toward a treaty to Prevent an Arms Race in Outer Space (PAROS).

Over the years, proposals have been put forward for a CD work program that addresses the major priorities of the major players.

In 2003, China shifted its position at the Conference on Disarmament and said it would discuss (rather than negotiate) on PAROS. But the next year, the United States broke with its own longstanding support for a “verifiable” FMCT and announced that it would not support negotiations based on the Shannon mandate. A July 29, 2004 Bush administration press release said: “Effective verification of an FMCT would require an inspection regime so extensive that it could compromise key signatories’ core national security interests and so costly that many countries will be hesitant to accept it.”

On May 18, 2006, then-Acting U.S. Assistant Secretary for International Security and Nonproliferation Stephen Rademaker urged conference members to devote their energies to the FMCT and offered a draft FMCT text that would establish a declaratory ban on fissile production for weapons that would enter into force when the five original nuclear-weapon states deposit their instruments of ratification. With regard to verification, Rademaker said it would be up to states to monitor each other’s compliance, and if a serious problem arose, the UN Security Council could be requested to look into the matter. He told reporters afterward that the draft U.S. agreement was not a “take it or leave it” proposition and that the United States believed that it could be negotiated within a year.

Furthermore, Rademaker said the United States sees “no need...for the negotiation of new multilateral agreements on nuclear disarmament, outer space, or negative security assurances.” Other states, including China and Russia insist that the CD should pursue a “balanced program” of action.

### **Scope and Verifiability of An FMCT**

Even if the deadlock over the CD’s agenda can be resolved and an ad hoc working group is authorized to negotiate text, there are ongoing differences between the United States and most other CD members on the substance of a fissile material cutoff treaty. The two most significant issues of contention are whether the treaty should address existing stockpiles and whether it should have verification measures.

Several countries assert that a treaty on fissile materials should not only end future production for weapons but also prevent existing stockpiles from being used to build new weapons. Pakistani Ambassador Masood Khan further argued May 16 that stockpiles had to be dealt with because “inequalities should not be frozen and perpetuated.” The U.S. draft would exclude stockpiles. China and Russia agree with such an exclusion.

In response to the ongoing U.S. opposition to negotiating verification measures for an FMCT, several delegations, including Australia, Brazil, Canada, India, South Africa, the United Kingdom and Japan, have expressed their preference for an effectively verifiable FMCT. To

work around differences with the U.S. on verification, some states have proposed the start of negotiations on the FMCT “without prejudice to the final outcome on verification.”

Most states, including India and Canada, continue to argue that the FMCT can and should be effectively verifiable. Canadian Ambassador Paul Meyer warned May 16 that “an FMCT which proves ultimately to be merely a vague declaratory statement of good intentions about future production does the international community a disservice.” On May 17, India's Ambassador Jayant Prasad said “we believe that an FMCT should incorporate a verification mechanism in order to provide the assurance that all States party to it are complying with their obligations.”

As most people familiar with international safeguards realize, verifying that a few key states are not producing weapons-grade plutonium and highly-enriched uranium at less than a dozen known production facilities worldwide is a difficult but technically possible and feasible task. (For more discussion, see: “Can a Fissile Material Cut Off Treaty Be Effectively Verified?” by John Carlson, *Arms Control Today*, January/February 2005.) The United States is in the minority on the verifiability of an FMCT and should be more flexible with respect to achieving a verification and transparency regime that would satisfy other states.

Even if negotiations on the FMCT were to begin without prejudice to the outcome on verification, it is clear that it could take years to achieve a consensus on what level of verification and transparency would be necessary to achieve confidence that states are complying with the treaty. Given the U.S. position on verification alone, it will take three years or more to reach agreement on a fissile material production cutoff at the CD.

### **Moving Forward**

The situation in Geneva is troubling and perhaps intractable unless national positions and CD strategies are adjusted. The ideal outcome would be a 2007 CD work program that would include: a negotiating mandate for an effectively verifiable FMCT; a discussion mandate for PAROS; and a discussion mandate for nuclear disarmament through which states might explore options for legally-binding security assurances. All key constituencies of the CD could claim that their priority issue was being addressed.

While the United States is not the only party guilty of blocking progress, it could do the most to move the FMCT forward by agreeing to a “balanced” CD work program and agreeing to negotiate toward an effectively verifiable FMCT. However, barring substantial pressure on Washington from allies, the current leadership at the State Department and the National Security Council are not likely going to adjust the current U.S. opposition to discussions on PAROS and nuclear disarmament at the CD.

On the other hand, while it is theoretically possible that China and Russia might drop their insistence on ad hoc discussion groups on the subject of the prevention of an arms race on outer space, this is not likely given they have already dropped their earlier position that the CD should hold “negotiations” on these issues. It is also unlikely that NAM states at the CD will drop their support for an ad hoc discussion group on nuclear disarmament given that this has been the longstanding goal of these states.

Given these political realities, I see three possible scenarios for moving forward:

### ***Scenario 1: Big Power Deadlock; Tactical Adjustments at the CD***

The most likely scenario will be continued deadlock at the CD that prevents consensus on the establishment of an ad hoc committee with a mandate to negotiate an FMCT, even without prejudice to the outcome on verification.

That does not mean that the CD cannot make substantive progress on exchanging views and ideas on an FMCT. States could:

- Build upon last year's effort to hold a structured debate on key issues. Any such initiative should, however, provide more time to the conference to explore each issue and give states time to respond substantively to specific national proposals and/or treaty texts.
- Go further and establish one or more non-negotiating subsidiary bodies to focus activity on selected issues. Nothing in the CD's rules of procedure equate the establishment of an ad hoc committee with acceptance of a negotiating mandate. The chairs of the ad hoc committees or working groups could organize work at the appropriate pace for each issue, including the FMCT. Such activity could be useful in advancing discussion and developing technical proposal on FMCT verification options.

Under any scenario, sessions should have official status so that progress can be built upon from meeting to meeting and is appropriately recorded.

With or without the establishment of such subsidiary bodies or further "structured debate," individual EU states or the EU as a whole could respond formally, with counterproposals of their own to the U.S. draft FMCT treaty text tabled last May. Such an approach would create a *de facto* public negotiation on major issues and would keep the pressure on the CD and national governments to shift their positions and break the current deadlock.

Furthermore, CD member states should initiate a series of technical discussion and workshops on strategies to verify a fissile cutoff to help develop consensus on the scope of prohibited activities, the most appropriate and effective verification and monitoring strategies, and associated costs of various verification models. Such workshops should involve International Atomic Energy Agency safeguards experts and top experts from inside and outside government.

However useful such work might be, discussions do not a negotiation, let alone a treaty, make.

### ***Scenario 2: Leveraging U.S. Acceptance for a Broader CD Workplan***

The current U.S. position opposing consensus on a broader CD workplan may be subject to influence and pressure. On May 18, Stephen Rademaker, then acting assistant secretary of state for international security and nonproliferation, said the U.S. delegation "believes that the CD could continue to discuss other, so-called traditional issues as it conducts FMCT negotiations." This stance could be compatible with a program of work that would combine negotiation of an FMCT with discussion of PAROS, nuclear disarmament, and possibly nuclear security assurances.

How could the United States be nudged in this direction? The key point of leverage is the Bush administration's proposal for an India-specific exemption from the rules of nuclear commerce established by the Nuclear Suppliers Group (NSG) that restrict trade with states that do not accept full-scope IAEA safeguards. Because the NSG operates by consensus (and because the recently approved U.S. legislation on the subject requires NSG consensus approval), some of NSG members could attach conditions to the proposed U.S.-Indian deal before providing their consent to changes in the NSG rules.

Some NSG members could insist that, as a condition of their support:

- The United States drop its opposition to discussion on PAROS and disarmament, which could allow the start of negotiations on an FMCT; and/or
- India suspend the production of fissile material for weapons purposes pending the finalization of a global, verifiable fissile material production cutoff treaty, or the conclusion of a multilateral fissile material production halt by states that have tested nuclear weapons and produced fissile material for weapons; and/or
- There be established a broader set of nonproliferation and disarmament criteria for civil nuclear commerce with India, Pakistan, or Israel.

### *Scenario 3: Multilateral FMCT Discussions Outside the CD*

If the Conference on Disarmament fails by the end of 2007 to take up the new U.S. proposal on the FMCT, the United States, members of the European Union, and other states should consider a new approach to break the deadlock.

The United States, China, France, Russia, the United Kingdom, India, Pakistan, and perhaps Israel should be invited to a diplomatic conference to initiate negotiations toward a multilateral treaty with modest verification and transparency provisions banning the further production of fissile material production for weapons purposes as a first step toward a verifiable global fissile material cutoff treaty. A useful starting point might be the May 2006 U.S. draft FMCT proposal.

A seven- or eight-party dialogue might, in the very least, explore how the current moratoria could be extended, how and when current production by India and Pakistan might be curtailed or halted, and how the parties might gain sufficient confidence that all side are complying with a multilateral moratorium on fissile material production for weapons. As this initiative is pursued, further work at the CD on the FMCT and/or other issues could move forward. This concept was endorsed by Sen. Christopher Dodd (D-CT) in a speech delivered to the U.S. Senate during the November debate on the U.S.-India nuclear trade legislation.

This approach, like scenario 2, would have the added value of addressing one of the deep flaws in the proposal for lifting restrictions on nuclear trade with NPT-hold out India.

The proposed U.S.-Indian nuclear cooperation arrangement is premised on the idea that India is prepared to "assume the same responsibilities and practices" as other nuclear-weapon states. Unfortunately, the existing terms of the proposal would not oblige New Delhi to undertake the same practices as the five original nuclear-weapon states, including signature of the CTBT and actively work toward an "early cessation of the nuclear arms race" and disarmament, as Article VI of the NPT requires of its states-parties. It also overlooks UN Security Council Resolution 1172 of June

1998, which among other things, calls upon India and Pakistan to halt fissile material production for weapons.

Worse still, absent an Indian commitment to halt its fissile material production, the supply of foreign nuclear fuel to India would also free-up India's existing and somewhat limited capacity to produce plutonium and highly enriched uranium for weapons. This could allow for the rapid expansion of India's nuclear arsenal from the current annual rate of some 6-10 bombs to several dozen if India chooses to do so.

India would be hard pressed to maintain, let alone increase, the rate of production of fissile material for weapons while expanding its nuclear energy output, unless it can significantly expand domestic uranium mining and milling, and/or get access to the international nuclear fuel market.

India currently produces about 300 tons of uranium annually, which is almost two-thirds of what is needed to run its current heavy-water power reactors, support its production of highly enriched uranium for its nuclear submarine program and its current weapons grade plutonium production rate. It has had to rely on stocks of previously mined and processed uranium to meet the shortfall. The addition of new energy production reactors in the near future will increase the total demand for uranium beyond projected increases in domestic uranium production.

There are several scenarios that could allow India to utilize foreign nuclear fuel supplies to help it increase fissile material production for weapons purposes. For instance, if India builds a new plutonium-production reactor (as it is reportedly planning to do) or decides to use one or more of the eight existing heavy water reactors that would be excluded from IAEA safeguards to augment its two existing military plutonium production reactors (CIRUS and Dhruva), the additional increased consumption of domestic uranium supplies for plutonium production would be compensated for by access to imported uranium for safeguarded power reactors.

While the Bush administration claims it has no intention to aid India's bomb program, the issue is not one of just intent. It is also a legal matter. Article I of the NPT obligates the recognized nuclear-weapon powers, including the United States, to “not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.”

Legally-speaking, civil nuclear assistance to India might be structured in a way that does not violate Article I of the NPT, but it under the formulation proposed by the Bush administration, it would clearly violate the intent of Article I.

The strongest guarantee that expanded civil nuclear trade with India would not contribute to its nuclear weapons program or stimulate further arms competition in Asia would be for the Nuclear Suppliers Group to defer a decision to alter its restrictions on civil nuclear trade with India until such time as India, as a matter of public policy, is no longer producing fissile material for nuclear weapons purposes, or has entered into a multilateral arrangement to stop fissile material production for weapons purposes, or has joined a global verifiable fissile material production cutoff treaty.

India would of course object to such an approach because it says it does not yet have a “minimal nuclear deterrent”—a claim Indian leaders have made for a decade. India leaders should be

reminded, however, that the negotiation and entry into force of such an agreement would take some time—time enough for it to continue to produce additional fissile material for its arsenal. It should also recognize that by joining such an agreement, opposition at the NSG to changes in export restrictions now affecting India would evaporate.

For China, such a multilateral fissile production cutoff arrangement may also be difficult to accept because it too wants to keep its fissile production options open. But it should recognize that it would help cap the growth of India's nuclear weapons program and reduce Pakistan's drive to keep pace with its larger and more capable neighbor.

If the world's leading governments—including the members of the European Union—are genuinely interested in halting the growth and the development of the world's nuclear stockpiles and ending the stagnation in the global nuclear disarmament and nonproliferation process, now is the time to make their rhetoric a reality through creative action on a fissile material cutoff.