### CONFERENCE ON DISARMAMENT

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LETTER DATED 11 JUNE 2002 FROM THE PERMANENT REPRESENTATIVE OF THE NETHERLANDS TO THE CONFERENCE ON DISARMAMENT ADDRESSED TO THE SECRETARY-GENERAL OF THE CONFERENCE TRANSMITTING A SUMMARY OF THE OPEN-ENDED INFORMAL MEETING ON A TREATY BANNING THE PRODUCTION OF FISSILE MATERIAL FOR NUCLEAR WEAPONS AND OTHER NUCLEAR EXPLOSIVE DEVICES HELD IN GENEVA ON 7 JUNE 2002

I have the honour to forward to you a summary of the open-ended informal meeting on the issue of banning the production of fissile material for nuclear weapon and other nuclear explosive devices, which was organized in Geneva on Friday, 7 June 2002 by the delegation of the Kingdom of the Netherlands to the Conference on Disarmament.

The total number of participants in this meeting was well over 100. Over 40 countries attended this meeting as well as representatives from NGOs, some international organizations as well as the IAEA in Vienna.

In his introduction, Dr. Barnaby – a well-known nuclear physicist and former director of SIPRI in Stockholm – outlined the need for such a treaty. The CTBT – apart from being an efficient non-proliferation instrument – sets a qualitative limit to the development of nuclear weapons. The treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices will set a quantitative limit on the production of fissile material. It therefore will be an important contribution towards non-proliferation and an essential next step towards nuclear disarmament. It will also contribute to reducing the risks of nuclear terrorism.

The discussion afterwards highlighted the need for a better understanding of the subject. Issues raised in the discussion included the risks of proliferation of plutonium and highly enriched uranium, the physical protection of fissile material stocks, reprocessing, MOX-ing, semi-military uses like naval-propulsion, nuclear terrorism and the feasibility of producing a so-called "dirty bomb" from highly enriched uranium.

Participants encouraged my delegation to continue this exercise. My delegation intends to organize the next meeting on substantive issues in this exercise mid-September.

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I would be grateful if you could issue this letter as well as the attachments to this letter as an official document of the Conference on Disarmament, and distribute it to all Member States of the Conference and non-member States participating in its work.

(<u>Signed</u>:)

Chris C. Sanders
Ambassador
Permanent Representative of the Netherlands
to the Conference on Disarmament

# Non-Paper on the Exercise on Banning the Production of Fissile Material for Nuclear Weapons and Other Nuclear Explosive Devices: an Essential Step Towards Nuclear Disarmament and Non-Proliferation

Organized by the Permanent Mission of the Netherlands to the Conference on Disarmament Geneva, 7 June 2002

Banning the production of fissile material for nuclear weapons and other nuclear explosive devices is an essential step towards nuclear disarmament and non-proliferation.

For several years now, the UN General Assembly has adopted – by consensus – a resolution, which calls for the immediate commencement in the Conference on Disarmament of negotiations on such a treaty. Although the mandate for these negotiations (CD/1299) dates back to 1995, these negotiations have still not yet begun because of the stalemate in the Conference on Disarmament.

Our first and foremost priority is, and will be, to reach a consensus on a Program of Work for the Conference on Disarmament, which is a vital instrument and the sole body for multilateral disarmament negotiations. Many Presidents of the Conference have made great endeavours to reach that consensus; unfortunately, however, up till now their efforts have not led to the desired result.

As long as the CD has not reached consensus on its Program of Work, we consider it important and necessary to address the important nuclear disarmament and non-proliferation issues in a constructive way. With that objective the Permanent Mission of the Netherlands to the Conference on Disarmament will organize a sequence of open-ended informal meetings of an informative and educational nature on the issue of fissile material for nuclear weapons and other nuclear explosive devices.

The purpose of this exercise is to better prepare delegations in Geneva for the actual negotiations in the Conference on Disarmament on a treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices.

This will be done through informative and educational briefings, followed by a discussion and exchange of views among participants in the exercise. The topics of these meetings will be of a general nature, concerning issues relevant to these negotiations.

The exercise is open to all Member States to the Conference on Disarmament, as well as to those States that have Observer Status to the Conference on Disarmament. Occasionally, experts from e.g. the IAEA, think tanks and NGOs will also be invited to participate in and contribute to this exercise.

This exercise will be organized in a fully transparent way. The Permanent Mission of the Netherlands to the Conference on Disarmament will provide brief summaries of topics discussed in the meetings of this exercise to all interested delegations.

Attendance at the informal meetings of this exercise, organized by the Permanent Mission of the Netherlands to the Conference on Disarmament, or participation in the discussions, will in no way affect your national position on the Program of Work of the Conference in general, nor on the future negotiations on a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices in particular.

## PUTTING A BAN ON THE PRODUCTION OF FISSILE MATERIALS FOR USE IN NUCLEAR WEAPONS INTO CONTEXT

Its role in nuclear proliferation, nuclear disarmament and nuclear terrorism

#### Frank Barnaby

When the Cold War ended, about 10 years ago, it was generally assumed that the importance given by political leaders to nuclear weapons would dramatically decrease, and many hoped that there would be fast progress in nuclear disarmament leading to the abolition of nuclear weapons. The first step in this direction would be a Comprehensive Test Ban Treaty (CTBT), closely followed by a ban on the production of fissile materials for use in nuclear weapons.

Unfortunately, this was not to be. In fact, nuclear weapons are now back on the agenda to an extent reminiscent to that at the height of the Cold War. For example, according to leaks to the press, the US Nuclear Policy Statement, completed at the end of 2001, describes the role of nuclear weapons well into the future, not as part of a nuclear deterrent policy but as part of America's war-fighting strategy. Apparently, the Pentagon is preparing contingency plans to use nuclear weapons against targets in seven or more countries – including China, Iran, Iraq, Libya, Russia and Syria.

And in March 2002, the British Minister of Defence announced, for the first time ever, that British nuclear weapons could be used in a first strike and against countries that used biological or chemical weapons against British forces or against targets in the UK. Both the American and British governments have now reneged on their security assurance guarantees not to use nuclear weapons against countries that do not have them and are not allied to a nuclear-weapon power.

These new policies have been adopted in spite of the "unequivocal undertaking to accomplish the total elimination" of their nuclear weapons entered into by the USA and the UK, along with the other established nuclear-weapon states (China, France and Russia) at the 2000 Review Conference of the Non-Proliferation Treaty (NPT).

One hundred and eighty-seven countries have ratified the NPT; making it the world's most comprehensive multilateral nuclear arms control treaty.

How could far-reaching nuclear disarmament be achieved?

It is hard to see far-reaching nuclear disarmament being achieved except by a phased programme of measures, which many believe should be a timed programme. The programme should first aim to prevent both horizontal nuclear proliferation (the spread of nuclear weapons to countries which do not now have them) and vertical nuclear proliferation (increases in the numbers and improvements in the quality of the nuclear weapons in the arsenals of the nuclear-weapon powers). It should then move to reducing the nuclear arsenals, eventually to zero.

This would involve the following major measures:

- (1) existing treaties, the most important of which are:
- the 1991 START I Treaty and the 1993 START II Treaty;
- the 1972 Anti-Ballistic Missile Treaty;
- the 1987 Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (INF Treaty);
- the 1968 Nuclear Non-Proliferation Treaty (NPT);
- the 1996 Comprehensive Nuclear Test Ban Treaty (CTBT);
- the four treaties creating nuclear-weapon-free zones (in Latin America [1967], in the South Pacific [1985], in South East Asia [1995], and in Africa [1996]); and
- (2) measures yet to be negotiated, including:
- further reductions in the American and ex-Soviet tactical and strategic nuclear arsenals below the levels so far bilaterally negotiated or unilaterally announced;
- \* reductions in the British, French, and Chinese nuclear arsenals by multilateral negotiations;
- the standardization of the nuclear-export policies of the nuclear suppliers that should be made legally enforceable with sanctions, preferably in a treaty;
- a treaty prohibiting the first use of nuclear weapons, ratified by all the nuclearweapon powers;
- a strengthening of the international nuclear safeguards system; and
- a ban on the further production of fissile materials for use in nuclear weapons.

Of the existing treaties, the START II Treaty has yet to be ratified by the USA and will not be during the Bush Presidency, if ever; the US will leave the ABM Treaty in June 2002; and the CTBT, fatally weakened by the failure of the US to ratify it, has yet to come into force.

It is generally assumed that the next nuclear arms control measure negotiated will be a multilateral treaty prohibiting the further production of fissile material for nuclear weapons (often called a Fissile Material Cut-Off Treaty, FMCT) and that the negotiations will take place in the Conference on Disarmament (CD) in Geneva.

#### American and Russian bilateral talks

The vast bulk of the 30,000 or so nuclear weapons in today's world are American or Russian (see table below). The other countries with nuclear weapons – China, France, the United Kingdom, India, Israel and Pakistan – have a total of about 1,200 in their nuclear arsenals.

Although the Bush Administration has announced its willingness and intention to cut the number of nuclear weapons it deploys, it is maintaining thousands of nuclear weapons in its core stocks and is planning the development of new nuclear weapons — a nuclear warhead able to penetrate deep into the ground, to destroy hardened underground targets like bunkers; a new intercontinental ballistic missile to be deployed in 2020; and a new bomber to be operational in 2040. By turning its back on the CTBT, the US may have signalled an intention to start nuclear testing again. There is also talk of putting nuclear warheads on anti-ballistic missiles as part of the US National Missile Defence programme. The pressure to use nuclear-typed anti-ballistic missiles will increase as more tests using conventional hit-to-kill anti-ballistic missiles fail.

These new developments are planned to revitalize American nuclear forces to include a "new Triad of nuclear capabilities that combine nuclear and conventional offensive strikes with missile defences and nuclear-weapons infrastructure". They demonstrate that the Bush Administration believes that nuclear weapons will be an integral part of US military forces for at least the next 50 years.

The Americans have officially announced that they would like to reduce the number of their deployed strategic nuclear weapons from the current 7,000 or so nuclear warheads, most of which are on alert status able to be fired on 15 minutes notice, to between 1,700 and 2,200 deployed strategic nuclear weapons.

At the Bush-Putin summit, May 23 to 26, 2002, the Russians and Americans agreed to a Treaty reducing the numbers of deployed strategic nuclear warheads to between 1,700 and 2,200 by the year 2012. This is a considerable reduction in the current number of about 6,000 on each side.

But there are serious objections to the Treaty. There is no requirement to dismantle retired warheads; each side can return to any force level it chooses after 2012; each side can pull out of the Treaty with 90 day's notice; there are no controls on tactical nuclear weapons; and there are no commitments on the verification of the Treaty. And a major question is: Will the Russian Duma and the USA Senate ratify the Treaty?

The USA and Russia are likely to retain a stockpile of whole weapons and components that will allow them to deploy about 16,000 more nuclear weapons very rapidly if they take the political decision to do so.

The treaty is hardly a nuclear disarmament treaty. Rather it is an agreement to limit the number of deployed nuclear weapons kept on alert status. This is, of course, something to be pleased about. Given the current high level of trust between the USA and Russia, many observers argue that they could have irreversibly reduced their nuclear arsenals to a much greater extent.

#### The next steps

It is apparent that the Bush Administration sees no point in negotiating multilateral treaties. It prefers unilateral steps. The only multilateral treaty that the Bush Administration is really keen to maintain is the Non-Proliferation Treaty. It also wants negotiated a ban on the further production of fissile materials for use in nuclear weapons. This gives some hope that such a ban will in due course be negotiated.

#### What has happened so far

The concept of a FMCT dates back 56 years to the end of World War II, making it the first officially suggested nuclear arms control measure. A FMCT was part of American Baruch Plan. It was further advanced by President Dwight Eisenhower in his 'Atoms for Peace' speech at the United Nations General Assembly on 8 December, 1953, when he said: "The United States would seek more than the mere reduction or elimination of atomic materials for military purposes".

During the 1960s, when the negotiations for a NPT were in progress, a ban on the production of fissile materials for military purposes was included in a group of measures - together with a CTBT, reductions in the nuclear arsenals of the nuclear-weapon powers, and the international management, control, and storage of plutonium. After 1978, resolutions calling for a ban on the production of fissile materials for nuclear weapons were regularly passed by the General Assembly but there was little hope of progress while the Cold War was on.

With the end of the Cold War and the perceived need to make progress in arms control, the concept in its own right was given a considerable impetus by President Bill Clinton. In his speech to the General Assembly in September 1993 he said: "We will pursue new steps to control the materials for nuclear weapons. Growing global stockpiles of plutonium and highly enriched uranium are raising the danger of nuclear terrorism in all nations. We will press for international agreement that would ban production of these materials for ever." Strong American support seemed to make such a ban realistic and attainable.

In 1993, General Assembly Resolution 48/75L recommended the negotiation of a non-discriminatory, multilateral, and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons and other nuclear explosive devices. It requests the "International Atomic Energy Agency to provide assistance for examination of verification arrangements for such a treaty" but it does not say precisely what the role of the Agency should be. The treaty described in the Resolution would ban production but it says nothing about existing stocks of fissile materials. The Resolution was adopted by consensus.

As defined in the United Nations General Assembly Resolution, a treaty banning the production of fissile materials would cover the production of weapon-grade plutonium (plutonium containing more than 93 per cent of the isotope plutonium-239), weapon-grade highly-enriched uranium (uranium enriched to over 90 per cent uranium-235), and uranium-233 for nuclear weapons or other nuclear explosive devices, or outside of international safeguards.

On 25 January 1994, the members of the CD in Geneva agreed to appoint a Special Co-ordinator to "seek the views of its members on the most appropriate arrangement to negotiate" a FMCT. Although there was support for the negotiations of a FMCT to be conducted in the CD, it was soon apparent to the Special Co-ordinator, Canadian Ambassador Gerald E. Shannon, that a crucial political issue was the scope of the FMCT. Would it include the past production as well as the future production of fissile materials for nuclear weapons?

It was not until 23 March 1995 that Ambassador Shannon was able to report consensus on the negotiating mandate for the fissile-material ban and the establishment of an "Ad hoc Committee to negotiate a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other explosive devices." The difficulty about defining the scope of the ban was not solved but the adoption of the mandate was achieved by a compromise (some would say a fudge).

In the words of Ambassador Shannon: "During the course of my consultation, many delegations expressed concerns about a variety of issues relating to fissile material,

including the appropriate scope of the convention. Some delegations expressed the view that this mandate would permit consideration in the Committee only of the future production of fissile material. Other delegations were of the view that the mandate would permit consideration not only of future but also of past production. Still others were of the view that consideration should not only relate to production of fissile materials (past or future) but also to other issues, such as the management of such material. It has been agreed by delegations that the mandate for the establishment of the ad hoc Committee does not preclude any delegation from raising for consideration in the ad Hoc Committee any of the above noted issues".

No further progress on discussions in the CD about a FMCT was made until after the 1998 Indian and Pakistani nuclear-weapon tests. Until then, a number of CD members, mainly non-aligned, wanted the negotiation of a FMCT to be linked with discussions of a phased timetable of nuclear disarmament. The established nuclear-weapon powers have consistently refused to agree to such a link.

At the end of its 1998 session, the CD did establish an *ad hoc* committee to start negotiations of a FMCT. Canadian Ambassador Mark Moher chaired the committee. The committee lasted only three weeks before the session ended.

#### Obstacles to a FMCT

No decision was possible at the CD to reconvene the committee in 1999. Major obstacles to getting the negotiation of treaty underway were conflicts over how to deal with existing military stockpiles of fissile materials and over the relation of a FMCT to nuclear disarmament, particularly to a timed programme of nuclear disarmament.

The attitudes of the India, Pakistan and Israel, all of them nuclear-weapon powers, to the negotiation of a FMCT are, of course, very important. Pakistan has announced its willingness to agree to the negotiations of a FMCT at the CD but wants stocks to be included. The five established nuclear-weapon states, India and Israel want stocks to be excluded. Israel agreed to the commencement of negotiations but stated that it "reserved its position on the substance" of the issues negotiated.

Currently (June 2002), a (if not the) main obstacle to the commencement of negotiations of a FMCT is the attitude of China. Other members of the CD who were demanding a linkage of a FMCT to a timed programme of nuclear disarmament appear to have dropped their demands.

China argues strongly that a treaty on the prevention of an arms race in outer space (PAROS) should be negotiated at the CD. And it will not agree to the reconvening of the *ad hoc* committee to negotiate a FMCT unless an *ad hoc* committee to negotiate a treaty on PAROS is also established. China would also like a third *ad hoc* CD committee to discuss nuclear disarmament, all three committees to work in parallel.

If China would drop its linkage of a FMCT with PAROS, there seems to be no reason why negotiations for a FMCT should not quickly begin

#### The benefits of a FMCT

In summary, a FMCT is needed to:

- Restart negotiations on further nuclear arms control and disarmament measures
   without a FMCT there is, to say the least, unlikely to be any progress in nuclear arms control and disarmament;
- Control the spread of nuclear weapons to countries that do not now have them;
- Encourage the control of fissile materials from which nuclear weapons or nuclear explosives can be fabricated;
- Increase the amount of weapon-usable fissile materials under international safeguards;
- Improve the effectiveness of nuclear export policies; and
- Reduce the risk of nuclear terrorism.

It should be noted that almost all plutonium, including that produced in civil nuclear reactors, could be used to produce effective nuclear weapons. The global stock of civil plutonium, separated from spent nuclear-power reactor fuel elements and kept in plutonium stores, is currently about 300 tonnes, enough to produce at least 60,000 nuclear weapons – twice the number now in the world's nuclear arsenals. A major issue is, therefore, whether or not a FMCT should somehow include civil plutonium within its scope.

In conclusion, an effective FMCT would reduce access to fissile materials by preventing the production of more of them for use in nuclear weapons and would

increase the amount of weapon-usable fissile materials under international safeguards. Both of these factors would make it more difficult to divert illegally fissile materials for the fabrication of nuclear weapons and explosives. The risk of both nuclear proliferation and nuclear terrorism would be reduced.

#### Table. THE NUCLEAR ARSENALS

Country total number of nuclear weapons deployed (strategic and tactical)

USA Russia China	Strategic 7,200 5,600 281	tactical 1,670 3,600* 120	total 8,870 9,200 401
France United Kingdom India	288 85	60 0	348 185 about 35 about 200
Israel Pakistan			about 36

TOTAL about 20,000\*\*

<sup>\*</sup> includes 1,200 nuclear warheads on anti-ballistic missiles around Moscow

<sup>\*\*</sup> in addition, there are over 10,000 nuclear weapons in reserve, mainly in the USA and Russia.