
I have the honour to forward to you a summary of the sixth open-ended informal meeting in the framework of the Netherlands’ FMCT-Exercise on the issue of banning the production of fissile material for nuclear weapons and other nuclear explosive devices (FMCT). This meeting was organised on Friday April 2, 2004, by the delegation of the Kingdom of the Netherlands to the Conference on Disarmament.

The topic of this sixth meeting was, unlike previous meetings where we would have a specific topic to talk about, try once again to take a look at the FMCT as a whole and to come to an exchange of views on what should be – in very general terms – the contents of such a treaty, and to explore possibilities and obstacles when drafting a FMCT. At this meeting Mr. Paul Meyer, Canadian ambassador to the United Nations in Geneva and Mr. Arend J. Meerburg, Special adviser on nuclear issues to the Minister of Foreign Affairs of the Netherlands, both in their personal capacity, gave presentations on this issue.

The total number of participants in this meeting was well over 100. Over 45 countries and in addition a substantial number of representatives of Non Governmental Organisations attended this meeting.

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-members States participating in its work.

(Signed): Chris C. Sanders
Ambassador
Permanent Representative of the Netherlands
to the Conference on Disarmament
Summary of the sixth open-ended informal meeting in the framework of the Netherlands’ FMCT-Exercise on the issue of banning the production of fissile material for nuclear weapons and other nuclear explosive devices (FMCT)

Introduction

Ambassador Meyer commented in his presentation on the impediments to the advancement of negotiations of an Fissile Material Cut-off Treaty and on ways to overcome these difficulties. After identifying three key issues that might hinder negotiations of an FMCT and discussing the two draft treaty texts that were circulated prior to the meeting, Ambassador Meyer reiterated an earlier proposal of establishing an Experts Group, perhaps even in advance of beginning negotiations, to start considering a number of key issues for an FMCT. He ended his presentation with an appeal to all delegations to initiate the work on negotiations for an FMCT. (see his presentation in attachment for more detailed information).

Mr. Meerburg in his presentation focussed on the nuclear fuel cycle itself, both military and civilian and underlined the need for the international community to develop a general guideline on controlling nuclear non-proliferation. An FMCT is an essential element to achieve results in this regard. Further to this Mr. Meerburg stressed that decreasing stockpiles of fissile material (i.e. of Highly Enriched Uranium and/or Plutonium) should be an essential part of a treaty, since a treaty would otherwise put countries that have (large) stocks in a more favourable position over countries that do not have such stocks. Finally Mr. Meerburg discussed in his presentation a possible system of verifying an FMCT. (see his presentation in attachment for more detailed information).

Following the presentations of both speakers a debate about the topics that were tackled was started.

Negotiations on FMCT

With regard to the lack of progress in initiation of negotiations on an FMCT it was argued that delegations should try to convince capitals and political leaders of the priority of the matter. However, acquiring political attention has proven to be difficult. Still, consensus on a mandate was reached more than nine years ago. Why not make use of that?

It was also argued by some that negotiations in the Conference on Disarmament on an FMCT should not include topics concerning the fuel cycle. However, what if HEU from a military stock is (partially) transferred to a civilian stock? Conversely others argued that the nuclear fuel cycle and FMCT are complementary and that an FMCT relates very much to the Nuclear Weapon States.

In addition it was argued that pending an FMCT a unilateral moratorium should be promulgated by states-parties concerned.
Plutonium

On the matter of (the disposal of) plutonium different solutions were suggested. Solutions that were put forward were: burning it in reactors, if so desired mixed with other fissile material (mox) and storing the material. The latter solution however involves severe risks since it will take decades or even centuries, before radiation has decreased to a more or less harmless level. No matter what solution would be picked, the financial consequences would be great.

Role of the IAEA

The IAEA it was argued has the means to do reliable verifications without disclosing sensitive information. After successful completion of negotiations on an FMCT, the IAEA could play an important role with regard to verification and safeguarding production and stockpiling of fissile material and monitoring compliance with regulations of the FMCT.

Terrorism

Several participants stressed the importance of a Fissile Material Cut-off Treaty as a means of preventing proliferation of fissile material and prevention of non-conventional terrorism. Mr. Meerburg pointed out that HEU is the most “attractive” material for possible nuclear terrorist attacks. Use of plutonium is more difficult. However this material can be used as a component of a radiological weapon (“dirty bomb”).

Radiological sources, to be found for instance in hospitals, used for medical treatment are often overlooked as a possible danger.

Ambassador Meyer stressed these were all different aspects of the same threat. There should be more recognition for dangers of nuclear materials of all kinds.
Annex I

The Fissile Material Cut-off Treaty: A Mandate in Search of a Mission

Presentation by Paul Meyer, Canadian Ambassador to the UN for Disarmament
FMCT “Exercise” organised by Dutch CD Delegation - Geneva, April 2, 2004

1. Pleased to be part of another in the series of “exercises” organised by the Dutch delegation to the CD with a view to ensuring that our minds continue to be active in considering the challenges posed by a FMCT, while we await the onset of a dedicated negotiation within the CD.

2. I have entitled this presentation - the FMCT: A Mandate in Search of a Mission, to recall that the goal of negotiating a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices, has been a shared goal amongst the members of the CD for some time. It has been encapsulated in a mandate agreed nine years ago last month and one which was actually operationalised for a few weeks of negotiation in 1998. This Shannon mandate, after an earlier Canadian Ambassador for Disarmament, has been for years, regularly re-affirmed in UNGA First Committee resolutions adopted by consensus. The final document of the 2000 NPT Review Conference also called for the “immediate commencement of negotiations” on the FMCT “with a view to their conclusion within five years”. Recent concerns about clandestine enrichment and reprocessing activities in certain states and black market procurement networks for related equipment and technology are of direct relevance to the FMCT issue as enrichment and reprocessing facilities would be a central focus of a FMCT. This non-proliferation concern coupled with fears over nuclear terrorism provide a further impetus for concluding a FMCT as an important instrument for limiting the quantity of fissile material in existence and strengthening controls over it.

3. The FMCT’s broad, might one say universal appeal, also reflected its crucial role in the systematic progress on advancing the nuclear disarmament and non-proliferation objectives of the NPT. As the CTBT would halt further proliferation or enhancement of nuclear weapons by prohibiting explosive testing, so would the FMCT turn off the tap of fissile material required for the production of such weapons in the first place. It is not a coincidence that the CTBT and FMCT figure number 1 and number 3 in the 13 practical steps for disarmament set out in the 2000 NPT Review Conference outcome. Why is it then that such an apparent high priority negotiation linked to a mandate adopted by consensus and regularly reaffirmed, has not been advanced in over 6 years? The easiest answer, of course, is to say that FMCT negotiations have been held hostage by the protracted disagreement over a program of work in the CD. This as they say is a necessary, but not a sufficient explanation. It is incumbent on us advocates of the FMCT to probe a little further into the matter to discern what the impediments are and to consider how they might be overcome as part of the development of a treaty. There are political-security concerns, which if left unaddressed, could militate against the conclusion, and indeed even the initiation, of a FMCT negotiation. Three key issues in this regard are i) scope, ii) verification and iii) the relationship with the NPT regime as a whole. Allow me to briefly take up each one of these in turn. I will then make a few comments on the draft treaty texts circulated prior to this meeting.
4. **Scope**: A chronic concern for the FMCT has been the question of whether or not it should embrace existing stockpiles of fissile material. With the overt nuclearisation of India and Pakistan and the express pursuit of a nuclear weapons program by the DPRK, this issue has taken on additional strategic significance. The Shannon mandate artfully avoided the issue of stocks while recognising that it could well return during the course of the negotiations. Various ideas have been put forward, including Canadian suggestions for “a separate but parallel process” involving a series of declarations and commitment of excess material under international control. Others have proposed unilateral confidence building measures that would ideally be reciprocated by other states or leaving an opening in any FMCT text to extend its coverage when circumstances permit. With the acute awareness currently of the risks of illegal trafficking of fissile material and its acquisition by terrorist or criminal organisations, there is additional impetus for arrangements that will extend to stocks. The cooperative threat reduction programs and activities like the Global Partnership directed against the spread of WMD materials may offer up other avenues for obtaining more accurate information on holdings that could complement a FMCT.

5. **Verification**: The high standard of a internationally and effectively verifiable treaty has arguably been another factor that has constrained the onset of negotiations. While many may say that there is nothing in the realm of verification that cannot be achieved with the right combination of political will, diplomatic ingenuity and practical arrangements - the FMCT does pose substantial verification challenges. As has been considered in a previous FMCT “exercise” the question of how fissile material for non-explosive military purposes and in particular naval nuclear propulsion fuel could be covered by a verification regime requires careful consideration. There have been some ingenious proposals, but they require a willingness on the part of the users of such naval propulsion system to accept a degree of oversight and monitoring that hitherto they were free of. Are the high standards of secrecy attached to what is after all a non-explosive military use with no proliferation risk still warranted in contemporary circumstances? Here again fundamental issues of the overall benefits to be achieved by conclusion of a FMCT as against sectoral interests within the national security establishment of certain states will need to be weighted and trade-offs made. Similarly, judgments will have to be exercised as to the costs associated with a verification regime and the level of performance required of it. Examining synergies and economies that could arise from associating FMCT verification with the oversight exercised by the IAEA pursuant to the international safeguards system is a crucial area. Despite the absence of an active negotiation or specific invitation by concerned states, the IAEA has expressed its openness to assuming verification responsibilities for an FMCT. This is an area that could benefit from a renewal of earlier feasibility studies and revised modelling by the IAEA to share with interested states.

6. **Relationship to the NPT regime**: Another factor that may be inhibiting some countries from embracing the FMCT relates to the overall state of the NPT and the role of the FMCT within it. States outside the NPT, especially those engaged in an active program of nuclear weaponisation may reject any constraint on their production of fissile material. Even some NPT NWS may be reluctant to foreclose the option of future production if they deem that strategic developments may oblige them to build-up nuclear deterrent forces. The reaction of China for example to the deployment of missile defences that could potentially neutralise its modest nuclear deterrent will bear watching in this regard. If the perception grows that the NPT is beginning to fray around the edges and the proliferation dynamic quickens, commitment to concluding a FMCT may weaken accordingly as states hedge their strategic bets. If this scenario is not to be played out, some countervailing pressures have to be brought to bear. The essential inter-dependency of the major
components of the NPT-centered nuclear disarmament and non-proliferation regime - including the CTBT and the FMCT, needs to be re-affirmed. The non-proliferation structure will be dangerously undermined, if its disarmament supports are neglected and allowed to rot. Alternatively, the FMCT can be seized upon as a potential vehicle for a comprehensive multilateral nuclear control regime that covers for the first time both the military and civilian sectors and provide a solid basis for the eventual movement towards a nuclear weapon free world.

It is this brighter scenario that I hope can be developed over the next months reflecting today’s heightened proliferation concerns and the need to reinforce our international defences against it. In this regard, the commencement of FMCT negotiations could help generate a powerful positive momentum to advance common nuclear disarmament and non-proliferation goals.

7. Draft Treaties: Having set a broader policy context, I will now turn to the theme of this exercise which was to consider the FMCT as a whole. While the previous Exercises have focussed on particular key elements, it is useful to take again a more holistic approach, reflecting on the range of issues that will need to be addressed. The two texts that were circulated for this meeting offer a wealth of interesting, even at times controversial ideas about elements for a FMCT. I will not go into these texts in any depth as I am sure that many of you will want to comment on various provisions. Let me just refer to each draft briefly.

8. Tom Shea has provided an extensive, detailed text, coupled with most useful commentary and explanations. Whether or not one agrees with his proposals or rationales, he does provide a wealth of ideas that merit serious reflection and study. What I find particularly useful is the very concrete focus of how a Treaty would actually be operationalized and implemented. This reminds us that, as an integral part of any negotiation, we must always bear in mind how the resulting product will actually function in a practical sense. An example of an issue that not many of us have considered, I suspect, is the governance structures associated with an FMCT and the nature of the Conference of States Parties, a body to which he ascribes considerable policy and approval powers. He has provided some interesting ideas about entry into force, suggesting an approach that ensures a “critical mass” so to speak of states possessing military fissile material, while not allowing any single state to exercise a veto over entry into force. A useful part of his text covers specific technical issues, such as technical features and physical protection, areas that negotiators will need to be mindful of. His innovative proposal for financing through a surcharge on nuclear energy production (which our debt-ridden nuclear power firms might have some problems embracing), has at least brought to our attention the increasingly important issue of how to fund complex treaty-related implementation activity. I will not comment further on the various provisions, but look forward to hearing the discussion.

9. The Greenpeace text looks very much like the type of treaty we are used to. It is very broad and general, leaving much to be added or amplified. An approach here that might prove constructive is to elaborate on the verification provisions in an Annex. Along the model of the CWC, such an approach provides both a legal basis and the flexibility to make changes, based on experience or new technological or other developments.

These two drafts provide a wealth of policy and practical ideas to aid our reflection of what we want in an FMCT. Shea’s draft in particular highlights a fundamental aspect of an FMCT - i.e. the highly technical and complex nature of many of the issues involved. These go well beyond the competence and knowledge of most of us here. In this regard, we should give serious
thought to the idea that has earlier been proposed of establishing an Experts Group. Bringing together technical experts - perhaps even in advance of beginning negotiations, should these be delayed in the CD - would provide a valuable forum in which to start considering a number of key issues for an FMCT.

As I noted at the beginning of my remarks we have long had a FMCT mandate in hand. We now have to be entrusted with the mission to initiate our work. The discussions today have further stimulated our desire to move from seminar to negotiating mode. Thank you.
Annex II

FISSILE MATERIAL CUT-OFF TREATY (FMCT)

Outline of the statement made by Arend J. Meerburg

Geneva, April 2, 2004

It gives me great pleasure to be able to contribute to the discussion on FMCT in this informal gathering, organized by the Netherlands delegation to the Conference on Disarmament (CD). For a long time I did not think much about this old subject. I once drafted a speech on the cut-off for my then deputy Minister of Foreign Affairs, in 1974, as preparation for the first Review Conference of the NPT in 1975. Some years ago the issue was raised again and in the meantime a lot of important preparatory technical work has been done by, inter alia, the Oxford Research Group, Tom Shea, Greenpeace, Annette Schaper from Germany, Joern Harry from The Netherlands and others, as well as during the five earlier meetings of this character. I am happily stealing ideas from these contributions! Hopefully, negotiations can start soon on this important subject, which gives all the more relevance to our present meeting.

1. Nuclear non-proliferation is in the forefront of international thinking and actions nowadays. A broad approach is necessary, both with respect to proliferation to States as well as to sub-national groups. Strengthening the NPT, entry into force of the CTBT, NWFZ’s or other regional arrangements, improved safeguards, stricter export regulations etc. are part of multilateral and international efforts to tackle the problem. The Proliferation Security Initiative and the upcoming SC resolution also part of the actions.

2. One important element of a broad policy is looking to the nuclear fuel cycle itself, both the military and the civilian, concentrating on those materials which can be used for a nuclear explosive: highly enriched uranium (HEU) and separated plutonium. We had an extensive study at the end of the Seventees, the International Nuclear Fuel Cycle Evaluation INFCE, on this matter. Recently, new ideas have been popping up by the DG of the IAEA and by the President of the USA, in particular on uranium enrichment technology (which can be used to produce HEU) and on the separation of plutonium in reprocessing plants.

3. I think that we should start by developing a much broader look to this question than those particular proposals. A kind of general guideline what the international community should be aiming for. Subsequently, we can further develop the various elements in different international or multilateral fora or by taking appropriate national measures. The Fissile Material Cut-Off Treaty FMCT is one of the essential elements of this approach. Let me explain.

4. To put it very simply, an optimal non-proliferation policy (taking into account the risk of terrorism) would involve eradicating HEU and separated plutonium from the face of the earth. This is, of course, not possible for a long time to come. In the meantime, we must see to it that:

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1 Arend J. Meerburg works for the Ministry of Foreign Affairs of The Netherlands. The views expressed here do not necessarily reflect the position of the Government of The Netherlands.
• there is the smallest possible amount of HEU and separated Pu;
• current stocks are, accordingly, destroyed wherever possible; for HEU by blending it to LEU, for Pu by burning it in reactors or finding a real safe system for long-term inaccessible storage;
• remaining stocks are strongly protected in a limited number of places;
• if these materials are used, they are transported as little as possible (for example MOX fuel fabrication takes place at the site of the reprocessing plant or storage place);
• if these materials are transported, they are in forms that are difficult to access (e.g. in a carbon matrix);
• ownership and management of reprocessing and enrichment facilities are not in the hands of individual countries so that breakout is more difficult;
• the IAEA has all relevant information to ensure transparency for the international community; full scope safeguards and the Additional Protocol are essential tools for bringing this about, but not necessarily the only ones;
• it is a political necessity to treat NWS and NNWS as evenhanded as possible.

5. Thus, this is a broad agenda on the fuel cycle, which in itself is part of a broader programme to tackle horizontal and vertical nuclear non-proliferation, including with respect to sub-national groups. The Fissile Material Cut-Off Treaty is one of the essential tools to tackle a number of the issues above, but one of the questions is: how many of these issues do you want to include in such a treaty. Thus, what is the scope of the FMCT?

6. The main purpose of such a treaty is, of course, that no HEU and Pu is being produced anymore for use in nuclear weapons. I think we all agree on that: setting a final cap on the amounts of fissile materials available for nuclear weapons. In my opinion, this means shutting down and dismantling of all military enrichment and reprocessing plants or converting these for use in the civilian nuclear fuel cycle. And military Pu-producing reactors should be shut down or converted for civilian purposes. This also gives an opportunity to apply safeguards in a much less discriminatory way than is happening now, since the states possessing nuclear weapons and the non-nuclear weapon states (NNWS) should ideally have to accept the same safeguards on their peaceful nuclear activities. Of course, this would have substantial consequences for the size of the inspectorate of the IAEA. I am coming back to that.

7. Since we are getting ourselves involved in a pretty complex negotiation in any case, one could easily argue that we can use the opportunity to achieve more goals. A rather obvious one is to aim for a more balanced outcome for the main parties, taking into account existing stockpiles of HEU and Pu. It is argued, of course, that under a FMCT those countries having large military stockpiles of HEU and Pu would have an advantage over countries not having such stockpiles. Moreover, stockpiles could be so large that a production cut-off does not have any meaning since the countries involved could still produce any number of nuclear weapon (NW) they like. Thus, decreasing the stockpiles should be an essential part of the treaty, in this view. Alternatively, one could tackle this question also in parallel. An example is the agreement between the USA and the Russian Federation to dispose of 34 tons of weapons-grade Pu on each side. A problem may be that states possessing nuclear weapons are probably not very forthcoming in declaring their stockpiles in an international forum like the CD. The question of stockpiles was discussed at length on April 4, 2003 in a similar forum as this, so I will not dwell too much upon it.
8. In both the draft treaties by Shea and Greenpeace many more goals are set. In my opinion, certainly Greenpeace is going too far. By banning the production of Pu-containing fuel, for example, it would be impossible to get rid of the existing stockpiles of Pu. We probably need MOX or other more advanced fuels to burn-up Pu, to get really rid of it. I do not know whether safe long term storage of Pu is possible. In any case, we should not close off options for the time being.

9. Tom Shea's draft treaty has many very interesting points. He tackles quite a lot of the issues I mention in paragraph 4 above, including how the peaceful nuclear fuel cycle would have to look like. There is one large advantage of his approach: the core of the FMCT itself is, of course, putting obligations on the states possessing NW. By having a substantial part in the treaty on the structure and management of sensitive parts of the civilian nuclear fuel cycle, there would be obligations for NNWS also: a kind of 'deal' with obligations from both sides. This is an important issue to take into account.

10. However, I see also considerable disadvantages. After the proposals by the DG of the IAEA, Mohammed Al-Baradei, and other proposals to make the fuel cycle more proliferation resistant, we need time to analyse all the consequences of these ideas which have a substantial bearing on how nuclear business should be done in the future. As far as I know, the DG wants to start a process of consultations on these ideas in the form of an expert-group and subsequently maybe a governmental forum. Is it wise for the CD to dig itself into a complex discussion which probably belongs better in Vienna? We would load the FMCT discussion with another tricky matter which may hold up the main goal we want to achieve.

11. That does not mean I reject all ideas in the draft by Tom Shea. To the contrary. For example, one of the big problems we will have to encounter is the question of pretty high enriched uranium used for propulsion of submarines and other military vessels. This is not a prohibited activity but in view of the probable reluctance of the relevant NWS to bring such materials under safeguards, thereby divulging the percentage of enrichment and the amounts of such material being used, it may easily create a loophole in the verification system we need. It would be in the interest of all of us that no uranium enriched above 20% would be used for propulsion, but that may take quite a long time to achieve. In the long run, this seems technically possible, however. In the meantime, I suggest that the countries using nuclear propulsion for military vessels have large enough stocks of pretty high enriched uranium to last for many years, enabling the switch-over to at most 20% enriched fuel. (But maybe that is not true.)

12. I fully agree with Shea that the IAEA should take up the role of verifying the FMCT. It would seem somewhat silly to set up a new verification mechanism with substantial overlap with the safeguards regime, including the voluntary safeguards in NWS. Earlier, I suggested that the safeguards on the civilian fuel cycle should be the same for NNWS and states possessing NW. It would be the ideal situation to remove this existing discrimination, but it would mean that the safeguards workload of the IAEA would have to double or triple or maybe more. Thus, we may have to find a more focussed cost-effective system, taking into account that the purpose of verifying a FMCT is not the same as that of NPT safeguards. How could a simpler system look like?

13. First of all, of course, the IAEA should verify that all military enrichment and reprocessing plants are closed and as soon as possible dismantled. That may not be a too difficult task, although States with a NW capability may try to hide enrichment and/or reprocessing activities
in not-proscribed nuclear-weapon facilities where the IAEA has no access. Here is maybe a real
problem. Enrichment and reprocessing plants which are not closed should be transferred to the
civilian fuel cycle. The IAEA should verify that the enrichment plants which remain are
modified so that these can only produce enriched uranium under 20 % (and preferable a much
lower percentage) and stay that way. There is enough experience in the field to achieve this last
goal, including by short notice inspections. Plutonium separated in civilian reprocessing plants
should come under IAEA safeguards and stay there until it is burned in reactors or safely
disposed of. Of course, all already existing enrichment and reprocessing plants in the civilian
cycle should be treated in the same way.

14. And of course safeguards should cover all the fissile materials taken out of the military
stockpiles, either under the FMCT treaty itself, under parallel agreements by states possessing
nuclear weapons or unilaterally. It does not matter for the verification regime how the problem
of the stockpiles is being tackled. The IAEA, Russia and the USA have already developed a
safeguards-system for such sensitive material under a trilateral arrangement. As said earlier, such
stockpiles of fissile material directly usable in NW, should have the highest levels of physical
security and should be destroyed or safely disposed of as quickly as possible. To destroy HEU by
blending is not difficult. To get rid of separated Pu may take quite a long time of hard work. But
we should do it.

15. To come back to the IAEA, I am not worried about a much larger safeguards division of the
IAEA covering a much bigger part of nuclear activities in the world. I think that is good! It is
part and parcel of our ultimate common goal of 'General and Complete Disarmament under
Strict and Effective International Control' which we agreed in 1961. I am worried about the
strange situation that in Vienna some countries insist that the finances for safeguards should
always match the money for technical assistance. We should really get rid of that silly system.
Recently, somebody remarked that the IAEA should be split into a tough regulatory organisation
(including safeguards) and an agency to promote the peaceful uses of nuclear energy. I am not
sure this is a good idea, but it is certainly something to think about. Shea proposes another
solution by taxing the nuclear industry to pay for the increased amount of safeguards. In any
case, we have to solve it.

16. This brings me to the end of my contribution. I would like to thank Ambassador Chris
Sanders again for having organized this meeting and I am looking forward to questions.

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