

A Proposal for an International Framework Convention on Fissile Materials

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Summary

The declaration at the 2000 NPT Review Conference of an "unequivocal undertaking by the nuclear weapon states to accomplish the total elimination of their nuclear arsenals" and other commitments made there to a plan of action for disarmament, have led to a call for ways in which these can be implemented.

In this paper, I propose that a beginning on some of these issues can be addressed by the NPT parties negotiating a Fissile Material Treaty which has the form of a framework agreement comparable to the earlier Vienna Convention for the Protection of the Ozone layer and the more recent United Nations Framework Convention on Climate Change. These Conventions involve a formal declaration of goals and principles as well as the establishment of a process for continued negotiations to generate the specific obligations required to meet these goals in a step by step manner.

A possible Framework Convention on Fissile Materials could consist of :

- a commitment to the complete elimination of nuclear weapons and nuclear weapons usable fissile materials and the permanent irreversible disposition under safeguards of these material,
- formal negotiating machinery for realising this commitment through a series of phased, inter-linked, overlapping stages, each involving targets on fissile material stockpile reductions that would have to be negotiated,
- initial register of and targets for fissile material stocks
- a regular public review, reporting, and implementation assessment procedure involving all the parties to the agreement

The Fissile Material Talks

On 23 March 1995, the Geneva based Conference on Disarmament (CD) agreed to a committee to negotiate a Fissile Material Treaty.¹ The Shannon mandate was to "negotiate a non-discriminatory, multilateral and internationally and effectively verifiable treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices."² However, as Shannon observed, "many delegations expressed

¹ The term Fissile Material Treaty (rather than Fissile Material Cut-off Treaty) does not prejudge whether the Treaty should only ban future production or also eliminate existing stockpiles of fissile material.

² for the text of Ambassador's Shannon's statement see <http://www.gn.apc.org/acronym/fmctdesc.htm>. See

concerns about a variety of issues relating to fissile material, including the appropriate scope of the convention."

The concerns about the mandate included that :

- it would permit consideration only of the future production of fissile material
- it would permit consideration not only of future but also of past production
- consideration should not only relate to production of fissile material (past or future) but also to other issues, such as the management of such material

The conflict over these issues was settled by agreeing to disagree, and creating the procedural space to work out the disagreements during the actual course of the negotiations: "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."

Despite this, there has been no real progress since the Shannon mandate. "By the beginning of March [1999] the Conference on Disarmament (CD) was still without a programme of work and had not begun negotiating the treaty banning the production of fissile materials (fissban) entrusted to it more than four years ago."³

The basic source of the impasse is easily identified. Annette Schaper has observed that "There is a great deal of deep disagreement about the substance, scope, purpose and even name of the Treaty. Different views of what the Treaty is primarily intended to represent a contribution to, disarmament or non-proliferation, have led to stalemate in the CD since the adoption of the Shannon mandate, and remain the biggest likely cause of further stalemate."⁴ Stephen Young concurs: "Conflict over nuclear disarmament continues to plague the Conference on Disarmament (CD) in Geneva, essentially preventing the group from commencing its work. At the heart of the matter is the persistent disagreement between the nuclear-weapon states and the Non-Aligned Movement (NAM) over the need for disarmament talks as well as the mandate for any such discussions."⁵

Disarmament

At the recent meeting of the Conference on Disarmament, while "many statements have called for the fissban committee to be convened... more and more delegations have argued that the CD cannot avoid discussing nuclear disarmament."⁶ This is something that the 5 permanent members of the UN Security Council (the P-5) refuse to consider. Instead, they all emphasise their commitment under Article VI of the Nuclear Non-Proliferation Treaty to nuclear disarmament. They reiterated this as part of the Principles

<http://www.isis-online.org/> for a history of proposals and steps towards controlling fissile materials

³ Rebecca Johnson, Frustration That the CD Isn't Working, Disarmament Diplomacy, No. 34, February 1999, <http://www.gn.apc.org/acronym/34genev.htm>

⁴ Annette Schaper, The Fissban: Stocks, Scope and Goals, Disarmament Diplomacy, No. 34, February 1999, <http://www.gn.apc.org/acronym/34fissban.htm>

⁵ Stephen W. Young, BASIC Reports No. 69, March 29, 1999, <http://www.nyu.edu/globalbeat/nuclear/Young032599.html>

⁶ Rebecca Johnson, Frustration That the CD Isn't Working, Disarmament Diplomacy, No. 34, February 1999, <http://www.gn.apc.org/acronym/34genev.htm>

and Objectives agreed to at the 1995 NPT Review and Extension Conference, which cited the ultimate goal as the "the complete elimination of nuclear weapons."⁷

This commitment has been reiterated subsequently and linked to the fissile material treaty, for example by John Holum at the CD: "the FMCT is the next practical step to be taken in multilateral arms control, and will also move the nuclear-weapon States one step farther along the road toward nuclear disarmament, in accordance with their commitments)."⁸ What is lacking is any mechanism to turn such a commitment into a negotiating process.

To fill this gap, there are now five proposals on the table at the CD for addressing nuclear disarmament, all suggesting the creation of an ad hoc committee or working group⁹:

- an ad hoc committee to "deliberate upon practical steps for systematic and progressive efforts to eliminate nuclear weapons as well as to identify if and when one or more such steps should be the subject of negotiations in the Conference" [South Africa]
- an ad hoc committee to "commence negotiations on a phased programme of nuclear disarmament with the objective of the complete elimination of nuclear weapons" [Egypt]
- an ad hoc working group "to study ways and means of establishing an exchange of information and views within the Conference on endeavours towards nuclear disarmament" [NATO-5: Belgium, Germany, Italy, Netherlands and Norway]
- an ad hoc committee for the substantive discussion of nuclear disarmament issues with a view to identifying if and when one or more such issues might be negotiated multilaterally" [Canada]
- an ad hoc committee on nuclear disarmament "to start negotiations on a phased programme for the complete elimination of nuclear weapons with a specified framework of time, including a nuclear weapon convention" [Cuba for G-21 Group of Non-Aligned States]

This plethora of proposals suggests that a significant part of the problem may stem from the fact that there is no formal negotiating machinery for convening and completing talks on nuclear disarmament. The Conference on Disarmament rules specify only that it is "a disarmament negotiating forum."¹⁰ It is supposed to meet annually, has a membership that is reviewed at regular intervals, has to conduct its work and adopt its decisions by

⁷ "Principles and Objectives for Nuclear Non-Proliferation and Disarmament," decision 2 adopted by the 1995 Review and Extension Conference of the Parties to the NPT, 1995.

⁸ US statement to the CD, 21 January 1999, <http://www.gn.apc.org/acronym/cdholum.htm>

⁹ Rebecca Johnson, Frustration That the CD Isn't Working, Disarmament Diplomacy, No. 34, February 1999, <http://www.gn.apc.org/acronym/34genev.htm>

¹⁰ For the rules of procedure of the CD see <http://www.unog.ch/frames/disarm/cdproced.htm>

consensus, and may establish subsidiary bodies, such as ad hoc sub committees, working groups, technical groups or groups of governmental experts to further the "effective performance of its functions."

The problem is that there is nothing that determines what the CD has to talk about when it meets. At the beginning of its annual session, it is supposed to adopt an agenda for the year and this "shall take into account the recommendations made to it by the General Assembly, the proposals presented by member States of the Conference and the decisions of the Conference." The problem that this creates is clear from the case of the fissile material talks, and has led to delegates "openly questioning the CD's rules and structure," and concern that "the dysfunction is symptomatic of a deeper illness, requiring urgent action (and possibly some careful surgery on the CD's established rules and conventions)."¹¹

Stocks

The concrete expression of the problem over the nature of the fissile material treaty and its relationship to disarmament is to be found in the issue of how it will deal with the stockpiles of weapons-usable material that have been accumulated by the nuclear weapon states and by some non-nuclear weapons states (see Appendix I, for a discussion on the explosive properties of reactor grade plutonium). The three specific issues are:

1. Pre-existing stocks of directly weapons-usable fissile materials produced and stored outside international safeguards by nuclear weapon-states,
2. Nuclear facilities in the nuclear-weapon states which are outside the international regime currently monitoring all significant nuclear activities in non-nuclear weapon-states, and
3. The production and stockpiling under international safeguards of large quantities of directly weapons-usable fissile material - primarily plutonium - in some nuclear weapon-states and non-nuclear weapon-states.

The US has indicated that "we will not agree to any restrictions on existing stocks in a cut-off treaty."¹² Egypt on the other hand argued the treaty "should... include all fissile materials potentially usable in the manufacturing of nuclear weapons or other nuclear explosive devices across the world."¹³ Indonesia's CD ambassador previously had argued that "brushing aside the issue of stockpiles, would, once again, render the cut-off treaty a mere non-proliferation measure...[with] no added value to date."¹⁴

¹¹ Rebecca Johnson, Frustration That the CD Isn't Working, Disarmament Diplomacy, No. 34, February 1999, <http://www.gn.apc.org/acronym/34genev.htm>

¹² US statement to the CD, 21 January 1999, <http://www.gn.apc.org/acronym/cdholum.htm>

¹³ Egypt's statement to the CD is at <http://www.gn.apc.org/acronym/33genev.htm>

¹⁴ Agus Tarmidzi, Indonesian ambassador to the CD, Geneva, February 20, 1997, CD/PV.756.

Table 1. Stockpiles of Directly Weapons-usable Fissile Materials in 1996
(metric tons)

Nuclear-weapon state	Weapon-grade U (declared excess)	Pu for weapons (declared excess)	Separated civilian Pu
U.S.	580±10% (174)	99.5 (50)	0
Russia	1050±30% (500)	131±20%(50)	33
Britain	21.9	7.6 (4.4)	51.3 (12/31/97)
France	25±30%	5± 30%	35 (12/31/96)
China	20±25%	4±50%	0.0
Israel	?	0.5±30%	0.0
India	?	0.33±30%	0.45 (end of 1998)
<u>Pakistan</u>	<u>0.2±25%</u>	<u>0.0</u>	<u>0.0</u>
TOTALS	1700±20%	230±15%	130

Frank von Hippel, The FMCT and Cuts in Fissile Material Stockpiles, UNIDIR Disarmament Forum, no. 2, 1999, pp. 35-44

To justify its position the US claims "An FMCT would help produce a climate conducive to continued, long-term progress on reducing nuclear weapons and nuclear weapon material."¹⁵ As evidence of progress in dealing with their stocks of fissile material the US points to:

- The US and Russia have each declared hundreds of tons of fissile material in excess of defense needs
- they are putting excess plutonium under international safeguards and IAEA verification of down-blending of HEU
- there are US-Russia agreements to blend down excess high-enriched uranium for use in civil power reactors, to convert old production reactors, to construct storage facilities for weapons material and to dispose of excess plutonium

These measures, and the FMT proposals from the US, however leave intact the very large stocks of fissile material in the nuclear weapon states and no identifiable means of dealing with them except the set of declarations and joint understandings arrived at between the US and Russia. These are however all "soft law" measures. Soft law refers to the use of unilateral or joint declarations, common rules of conduct, guidelines, understandings and so forth, as opposed to "hard law" which is taken to be legally binding international agreements.¹⁶ The obvious value of "soft law" measures is that they are not subject to ratification, can take effect instantly and allow states to respond to changing circumstances, and so the nuclear weapons states can set their own pace. Since the nuclear weapons states have already ceased the production of fissile material for nuclear weapons, an FMT which does not deal with their accumulated stocks leaves open the possibility there may be no further negotiations towards reducing existing stocks,

¹⁵ US statement to the CD, 21 January 1999, <http://www.gn.apc.org/acronym/cdholium.htm>

¹⁶ for soft law and hard law, see Peter H. Sand: Lessons Learned in Global Environmental Governance, WRI, New York, 1990, p. 16

except and unless the nuclear weapons states so choose. Like the NPT, CTBT and the US proposals for the FMT, progress is identified as the "hardening" of soft law agreements into international treaties.

To summarise, the problems that beset the CD and the fissile material talks arise from the fact that even though the larger goal of nuclear disarmament may be shared, and is in fact legally binding (under Article VI of the NPT), there is no means for proceeding towards it in a formally systematic manner. Instead, the timing and content of nuclear disarmament talks is determined by an ad hoc, if not arbitrary process at the CD. The past behaviour of the nuclear weapon states in not upholding their commitments and in offering arms control treaties that seem designed only to further strengthen their nuclear capabilities with regard to the non-nuclear weapon states, combined with the insistence on "soft law" by the nuclear weapon states, which relies ultimately on good faith rather than international law, leaves the prospects for disarmament dim.

What seems to be required is a formal arrangement that will:

1. recognise the problem of the existence of nuclear weapons and fissile materials and express appropriate concern
2. commit to eliminate these weapons and these materials as soon as practicably possible
3. identify the fundamental political and scientific issues involved in meeting such a goal
4. provide a mechanism to tackle these issues in a systematic step by step manner through a scheduled negotiating process

These requirements are very similar to the kinds of structures found in recent international conventions dealing with environmental problems. The example discussed below, the Vienna Convention on protection of the Ozone layer and the UN Framework Convention on Climate Change, dealt with chemicals that constituted a grave and urgent danger to society, were largely produced and consumed in a minority of states, and were of great significance to them, but required international agreement to deal with them.

As in these conventions, agreement on a fissile material framework agreement or convention would set up an on-going process for dealing with these materials, with a clear goal of eliminating them from national inventories. This does not mean that it would be a time-bound agreement. It would require only that its objective should be achieved in a prescribed and systematic way through a regular scheduled negotiating process. This would allow negotiations to create a time-frame for decision making through protocols that would permit states to implement the agreement in a manner that would not create additional environmental and security risks and recognise the significant economic costs that may be incurred.

An additional benefit from a framework agreement would be a greater possibility of a shorter negotiating period. The fissile material treaty may take years to negotiate, because

of the problems identified above. The Climate Change Convention was negotiated and signed by 165 states in a little over two years.

The Vienna Convention

The 1985 Vienna Convention for the Protection of the Ozone layer (see Appendix II for details¹⁷) expressed concern about the "potentially harmful impact on human health and the environment through modification of the ozone layer" and recognised the role of CFCs in such modification. While it set no quantitative targets for reducing CFC emissions, it did provide a framework for sharing information on emissions and concentrations of CFCs, explicitly allowed for additional protocols that would control ozone modifying substances, and specified that parties would meet again at regular intervals to work on the problem.

The discovery of the Ozone hole led to the first such Montreal Protocol (signed in 1987, took effect in 1989) which specified a timetable for reducing the production and consumption of CFCs and halons, and restricted trade in them.¹⁸ The Montreal Protocol sets limits on the production and consumption of "controlled substances, whether existing alone or in a mixture " which were listed in a series of annexes. It also distinguished between developed and developing countries, by including Article 5 (Special Situation of Developing Countries). Crucially, it create a mechanism for an on-going process. Its Article 11 dealt with subsequent meetings of the Parties:

1. The Parties shall hold meetings at regular intervals. The secretariat shall convene the first meeting of the Parties not later than one year after the date of the entry into force of this Protocol..
2. Subsequent ordinary meetings of the parties shall be held, unless the Parties otherwise decide, in conjunction with meetings of the Conference of the Parties to the Convention. Extraordinary meetings of the Parties shall be held at such other times as may be deemed necessary by a meeting of the Parties, or at the written request of any Party, provided that, within six months of such a request being communicated to them by the secretariat, it is supported by at least one third of the Parties.

The process worked in so far as subsequent meetings further tightened restrictions. The Montreal Protocol was further amended in London in June 1990 and at Copenhagen, in November 1992, where it was agreed to eliminate the production and consumption of CFCs and halons.

¹⁷ For the text see <http://www.greenpeace.org/~intlaw/vien-htm.html>

¹⁸ for the text see <http://www.greenpeace.org/~intlaw/mont-htm.html>

Table 2: The changing requirements of the Ozone Convention¹⁹

Montreal, 1987	London, 1990	Copenhagen, 1992
freeze CFCs at 1986 levels by mid 1989	freeze in mid 1989	freeze in mid 1989
20% cut in 1993	50% cut by 1995	75% reduction by 1994
50% cut in 1998	100% reduction by 2000	100% reduction by 1996

Negotiating Climate Change

The issues associated with a treaty eliminating fissile materials is more than matched in complexity and scope by those that arise when looking at international agreement to deal with climate change. It was clear even before the Climate Change Convention treaty was negotiated that traditional international agreements could not encompass the problem and the solutions that would need to be found. It was suggested that "the sheer breadth and complexity of the greenhouse problem means that the first step in a comprehensive international process has to be a framework convention. This would develop common ground on the nature and seriousness of the scientific and political issues involved, and would establish the international monitoring and research co-ordination. It would lay the basis for approaching a range of quantified, binding, and perhaps costly commitments expressed through various protocols to the convention."²⁰

The UN Framework Convention on Climate Change (see appendix III for details) was negotiated in 1992 and came into force in March 1994.²¹ It was initially described as "containing more platitudes than substance."²² This was not surprising. It did little beyond state that the signatories were "Concerned that human activities have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind," and that they were "determined to protect the climate system for present and future generations."²³

The obligations for the parties extended to taking "precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects" and to "develop, periodically update, publish and make available to the Conference of the Parties... national inventories...using comparable methodologies." The only target in the Convention was for Annex I countries (the developed states) "the aim of returning individually or jointly to their 1990 levels" their emissions of carbon dioxide and other greenhouse gases.

It established a Conference of the Parties (COP) that "shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference

¹⁹ Arjun Makhijani and Kevin Gurney, *Mending The Ozone Hole*, MIT Press, 1995

²⁰ Michael Grubb, *The Greenhouse Effect: Negotiating Targets*, RIIA, 1989

²¹ For the text of the Climate Change Convention see <http://www.unfccc.de/fccc/conv/conv.htm>

²² Ian Rowlands, *Political warming*, *Alternatives Journal*, vol. 23, no. 2, 1997

²³ Climate Change Convention see <http://www.unfccc.de/fccc/conv/conv.htm>

of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention." The COP was required to meet "not later than one year after entry into force of the Convention [and] every year unless otherwise decided."

The First Conference of the parties, held in Berlin. At Berlin, three significant principles were established.²⁴ The first was the recognition that Annex I parties current commitments were not adequate. The second principle was that new commitments from these countries did not have to wait for either the implementation of their current commitments, or the agreement of new commitments by non-annex 1 parties. Thirdly, a timeline for the negotiation of new commitments was established. The aim of a protocol to the Convention that could be adopted at the third Conference of the parties was agreed to.

The need for new commitments by the industrialised countries went hand in hand with a call for "elaborate policies and measures" that would "set quantified limitation and reduction objectives within specified time-frames, such as 2005, 2010 and 2020 for their anthropogenic emissions by sources and removals by sinks of greenhouse gases."²⁵ For this purpose an Ad Hoc Group on the Berlin Mandate was created. .

This proposed protocol was adopted at the third conference of the Parties, held at Kyoto in December 1997.²⁶

There was a fourth meeting in Buenos Aires in November 1998.²⁷ The Buenos Aires Plan of Action includes a work program and firm deadlines for addressing the Kyoto Protocol mechanisms, for finance and technology transfer, the mitigation of adverse effects arising from implementation of the Climate Change Convention and the Kyoto Protocol, among other things.²⁸ The efficacy of the Climate Change Convention and its associated protocols is yet to be seen. There is however no suggestion, so far, that the Convention will collapse. Rather, its difficulties reflect the strength of the approach.

Conclusion

This will be a difficult process, given the unevenness among the nuclear weapons states of arsenals of active weapons, and their stocks of fissile materials and facilities to produce them. The non-NPT nuclear weapons states, Israel, India and Pakistan, add to the

²⁴ Jacob Werksmen and Farhana Yasmin, Carrying Forward the Berlin Mandate: Protocol Negotiations and Activities Implemented Jointly, in Kilparti Ramakrishna, Andrew Deutz and Linda Jacobsen (eds.), The Ad Hoc Process to Strengthen the Framework Convention on Climate Change, Conference Report from The Woods Hole Research Center, 1995

²⁵ Kilparti Ramakrishma and Oran R. Young, International conference on the Ad Hoc Process to Strengthen the Framework Convention on Climate Change, in Kilparti Ramakrishna, Andrew Deutz and Linda Jacobsen (eds.), The Ad Hoc Process to Strengthen the Framework Convention on Climate Change, Conference Report from The Woods Hole Research Center, 1995

²⁶ For the Kyoto Protocol see <http://www.unfccc.de/resource/docs/cop3/protocol.html>

²⁷ For COP-4 see <http://www.cop4.org/>

²⁸ for Buenos Aires Plan of Action see FCCC/CP/1998/16 at <http://www.unfccc.de/resource/cop.htm#4an>

complications, as do the countries with nuclear power facilities and those who only have small research reactors, but nonetheless produce limited quantities of plutonium in spent fuel, even if it is not separated. The proposed Convention recognises this complexity by seeking only to commit states to the goal of elimination from national stockpiles all fissile materials and nuclear weapon usable materials, and establishing a negotiating procedure for setting and staging the interim targets for ending new production, recycling and drawing down stocks. This structure permits the necessary flexibility as different states struggle with domestic political factors and other pressures to shape their compliance.

Appendix 1

There are good reasons why any agreement on fissile material should include all separated plutonium, not just material designated as "weapon-grade." It has been argued by nuclear weapons experts that "at all burn-up levels and at any time following discharge the critical mass of reactor grade plutonium is intermediate between that of Pu-239 and Pu-240, which is more reactive than weapons-grade plutonium."²⁹ (See Table 2)

Table 2: Bare critical masses for Plutonium and U-235

isotope	bare critical mass, kg
Pu-238	10
Pu-239	10
Pu-240	40
Pu-241	10
Pu-242	100
U-235	52

J. Carson Mark, *Explosive Properties of Reactor-Grade Plutonium*, Science and Global Security, vol. 4, 1993, pp. 111-128

Moreover, it has been suggested that "advanced nuclear weapon states such as the U.S. and Russia, using modern designs, could produce weapons from reactor-grade plutonium having reliable explosive yields, weight, and other characteristics generally comparable to those of weapons made from weapon-grade plutonium."³⁰

²⁹ J. Carson Mark, *Explosive Properties of Reactor-Grade Plutonium*, Science and Global Security, vol. 4, 1993, pp. 111-128

³⁰ *Nonproliferation and Arms Control Assessment of Weapons-Usable Fissile Material Storage and Excess Plutonium Disposition Alternatives* (U.S. Department of Energy report DoE/NN-0007, January 1997), p. 39. [This report references a classified report: W.G. Sutcliffe and T.J. Trapp, eds, *Extraction and Utility of Reactor-grade Plutonium for Weapons*, (Lawrence Livermore National Laboratory, UCRL-LR-115542, 1994 (S/RD).] cited in von Hippel 1999 UNIDIR

Appendix II

The 1985 Vienna Convention on the Protection of the Ozone Layer³¹

The key sections of the Vienna Convention are as follows:

Preamble

Aware of the potentially harmful impact on human health and the environment through modification of the ozone layer.

Determined to protect human health and the environment against adverse effects resulting from modifications of the ozone layer,

Article 2 General Obligations

1. The Parties shall take appropriate measures in accordance with the provisions of this Convention and of those protocols in force to which they are party to protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer.

2. To this end the Parties shall, in accordance with the means at their disposal and their capabilities:

(a) Co-operate by means of systematic observations, research and information exchange in order to better understand and assess the effects of human activities on the ozone layer and the effects on human health and the environment from modification of the ozone layer

(b) Adopt appropriate legislative or administrative measures and co-operate in harmonising appropriate policies to control, limit, reduce or prevent human activities under their jurisdiction or control should it be found that these activities have or are likely to have adverse effects resulting from modification or likely modification of the ozone layer;

(c) Co-operate in the formulation of agreed measures, procedures and standards for the implementation of this Convention, with a view to the adoption of protocols and annexes;

(d) Co-operate with competent international bodies to implement effectively this Convention and protocols to which they are party.

Article 6 Conference of the Parties

1. A Conference of the Parties is hereby established. The first meeting of the Conference of the Parties shall be convened by the secretariat designated on an interim basis under Article 7 not later than one year after entry into force of this Convention. Thereafter, ordinary meetings of the Conference of the Parties shall be held at regular intervals to be determined by the Conference at its first meeting.

³¹ For the text see <http://www.greenpeace.org/~intlav/vien-htm.html>

2. Extraordinary meetings of the Conference of the Parties shall be held at such other times as may be deemed necessary by the Conference, or at the written request of any party, provided that, within six months of the request being communicated to them by the secretariat, it is supported by at least one third of the Parties.

The Conference of the Parties shall by consensus agree upon and adopt rules of procedure and financial rules for itself and for any subsidiary bodies it may establish, as well as financial provisions governing the functioning of the secretariat.

The Conference of the Parties shall keep under continuous review the implementation of this Convention, and, in addition, shall:

(a) Establish the form and the intervals for transmitting the information to be submitted in accordance with Article 5 and consider such information as well as reports submitted by any subsidiary body;

(b) Review the scientific information on the ozone layer, on its possible modification and on possible effects of any such modification;

(c) Promote, in accordance with Article 2 , the harmonisation of appropriate policies, strategies and measures for minimising the release of substances causing or likely to cause modification of the ozone layer, and make recommendations on any other measures relating to this Convention;

(d) Adopt, in accordance with Articles 3 and 4, programmes for research, systematic observations, scientific and technological co-operation, the exchange of information and the transfer of technology and knowledge;

(e) Consider and adopt, as required, in accordance with Articles 9 and 10, amendments to this Convention and its annexes;

(f) Consider amendments to any protocol, as well as to any annexes thereto, and, if so decided, recommend their adoption to the parties to the concerned;

(g) Consider and adopt, as required, in accordance with article 10, additional annexes to this Convention;

(h) Consider and adopt, as required, protocols in accordance with article 8;

(i) Establish such subsidiary bodies as are deemed necessary for the implementation of this Convention;

Article 8 Adoption of Protocols

1. The Conference of the Parties may at a meeting adopt protocols pursuant to Article 2 .

Article 9 Amendment of the Convention or Protocols

1. Any Party may propose amendments to this Convention or to any protocol. Such amendments shall take due account, inter alia, of relevant scientific and technical considerations.

2. Amendments to this Convention shall be adopted at a meeting of the Conference of the Parties. Amendments to any protocol shall be adopted at a meeting of the Parties to the protocol in question. The text of any proposed amendment to this Convention or to any protocol, except as may otherwise be provided in such protocol, shall be communicated to the Parties by the secretariat at least six months before the meeting at which it is proposed for adoption. The secretariat shall also communicate proposed amendments to the signatories to this Convention for information.

3. The Parties shall make every effort to reach agreement on any proposed amendment to this Convention by consensus. If all efforts at consensus have been exhausted, and no agreement reached, the amendment shall as a last resort be adopted by a three-fourth majority vote of the Parties present and voting at the meeting, and shall be submitted by the Depository to all Parties for ratification, approval or acceptance.

4. The procedure mentioned in paragraph 3 above shall apply to amendments to any protocol, except that a two-thirds majority of the parties to that protocol present and voting at the meeting shall suffice for their adoption.

The Montreal Protocol's Article 6 established a timetable for Assessment and Review of Control Measures³²: "Beginning in 1990, and at least every four years thereafter, the Parties shall assess the control measures provided for... on the basis of available scientific, environmental, technical and economic information. At least one year before each assessment, the Parties shall convene appropriate panels of experts qualified in the fields mentioned and determine the composition and terms of reference of any such panels. Within one year of being convened, the panels will report their conclusions, through the secretariat, to the Parties."

³² for the text see <http://www.greenpeace.org/~intl/mont-htm.html>

Appendix III The Climate Change Convention

UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

Preamble

The Parties to this Convention,

Acknowledging that change in the Earth's climate and its adverse effects are a common concern of humankind,

Concerned that human activities have been substantially increasing the atmospheric concentrations of greenhouse gases, that these increases enhance the natural greenhouse effect, and that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind,

Determined to protect the climate system for present and future generations,

Article 3

1....The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.

3....The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

Article 4

Annex I countries (developed countries) commit themselves to

(a)Develop, periodically update, publish and make available to the Conference of the Parties... national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties;

(b)Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change ...;

(c)Promote and co-operate in the development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases... in all relevant sectors, including the energy, transport, industry, agriculture, forestry and waste management sectors;

Article 7

The Conference of the Parties, as the supreme body of this Convention, shall keep under regular review the implementation of the Convention and any related legal instruments that the Conference of the Parties may adopt, and shall make, within its mandate, the decisions necessary to promote the effective implementation of the Convention. To this end, it shall:

- (a) Periodically examine the obligations of the Parties and the institutional arrangements under the Convention, in the light of the objective of the Convention, the experience gained in its implementation and the evolution of scientific and technological knowledge;
- (b) Promote and facilitate the exchange of information on measures adopted by the Parties to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention;
- (c) Facilitate, at the request of two or more Parties, the co-ordination of measures adopted by them to address climate change and its effects, taking into account the differing circumstances, responsibilities and capabilities of the Parties and their respective commitments under the Convention;
- (e) Assess, on the basis of all information made available to it in accordance with the provisions of the Convention, the implementation of the Convention by the Parties... and the extent to which progress towards the objective of the Convention is being achieved;
- (f) Consider and adopt regular reports on the implementation of the Convention and ensure their publication;

Article 8

The Conference of the Parties may, at any ordinary session, adopt protocols to the Convention.

Only Parties to the Convention may be Parties to a protocol.

Decisions under any protocol shall be taken only by the Parties to the protocol concerned.