



INF

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**COMMUNICATION RECEIVED FROM CERTAIN MEMBER STATES
CONCERNING THEIR POLICIES REGARDING THE MANAGEMENT OF
PLUTONIUM**

1. The Director General has received notes verbales, dated 1 December 1997, from the Permanent Missions to the IAEA of Belgium, China, Germany, Japan, the Russian Federation, Switzerland, the United Kingdom of Great Britain and Northern Ireland and the United States of America, and a note verbale, dated 28 November 1997, from the Permanent Mission of France to the IAEA. The purpose of these notes verbales is to provide information on the policies which these governments have decided to adopt in the management of plutonium. These policies are set out in the notes verbales and are specified in a document "Guidelines for the Management of Plutonium" the text of which is attached to each of the notes verbales.

2. In light of the request expressed at the end of each note verbale, the texts of the notes verbales and a copy of their attachments containing the "Guidelines for the Management of Plutonium" are enclosed for the information of all Member States.

^{*/} The notes verbales (plus attachments) from the Permanent Missions of France and the Russian Federation have been received in the French and Russian languages respectively and are reproduced as such in this Information Circular. The remainder have been received in English.



AMBASSADE
DE
BELGIQUE

The Embassy/Permanent Mission of Belgium to the United Nations and the International Organisations in Vienna presents its compliments to the Director General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of Belgium has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of Belgium to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of Belgium has decided to apply to the management of plutonium.

In the field of non-proliferation, these policies form part of the Government of Belgium's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreements with Euratom and the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of Belgium believes that the management of highly enriched uranium should be subject to similar guidelines and intends to consult with other like-minded Governments in order to explore the possibility of establishing such guidelines.

The Government of Belgium expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of Belgium requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Embassy/Permanent Mission of Belgium avails itself of this opportunity to renew to the Director-General of the International Atomic Energy Agency the assurances of its highest consideration.

Vienna, 1 December 1997

Director-General
International Atomic Energy Agency
Vienna

中华人民共和国常驻国际原子能机构代表团
THE PERMANENT MISSION OF THE PEOPLE'S REPUBLIC OF CHINA
TO THE INTERNATIONAL ATOMIC ENERGY AGENCY

STEINFELDGASSE 3, A-1190 VIENNA, AUSTRIA, TELEPHONE: 374205, TELEFAX: 376626

The Permanent Mission of the People's Republic of China to the International Atomic Energy Agency presents its compliments to the Director General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of the People's Republic of China has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of the People's Republic of China to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information as specified in paragraphs 14(i) and (ii) of the guidelines on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of the People's Republic of China has decided to apply to the management of plutonium.

The Government of the People's Republic of China intends to take as soon as practicable such steps as may be necessary to submit to safeguards by the IAEA on a voluntary basis under its Safeguards Agreement with the Agency any plutonium transferred from military activities to peaceful nuclear activities.

The Government of the People's Republic of China intends to apply the paragraphs 14(i) and 14(ii) of the guidelines to plutonium designated by it as no longer required for defence purposes only after this material has been transferred to peaceful uses.

In the field of non-proliferation, these policies form part of the Government of the People's Republic of China's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons(NPT), of its Safeguards Agreement with the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of the People's Republic of China expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of the People's Republic of China requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission of the People's Republic of China avails itself of this opportunity to renew to the Director General of the International Atomic Energy Agency the assurances of its highest consideration.

1 December 1997

Permanent Mission of the People's Republic of China
Vienna

**PERMANENT MISSION OF THE FEDERAL REPUBLIC OF GERMANY
TO THE OFFICE OF THE UNITED NATIONS AND TO THE OTHER
INTERNATIONAL ORGANIZATIONS, VIENNA**

STÄNDIGE VERTRETUNG DER BUNDESREPUBLIK DEUTSCHLAND BEI DEM BURO DER
VEREINTEN NATIONEN UND BEI DEN ANDEREN INTERNATIONALEN ORGANISATIONEN, WIEN

MISSION PERMANENTE DE LA REPUBLIQUE FEDERALE D'ALLEMAGNE AUPRES DE
L'OFFICE DES NATIONS UNIES ET DE AUTRES ORGANISATIONS INTERNATIONALES, VIENNE

The Permanent Mission of the Federal Republic of Germany to the Office of the United Nations and to the other International Organizations, Vienna, presents its compliments to the Director-General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of the Federal Republic of Germany has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of the Federal Republic of Germany to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of the Federal Republic of Germany has decided to apply to the management of plutonium.

In the field of non-proliferation, these policies form part of the Government of the Federal Republic of Germany's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreement with Euratom and the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of the Federal Republic of Germany believes that the management of highly enriched uranium should be subject to similar guidelines and intends to consult with other like-minded Governments in order to explore the possibility of establishing such guidelines.

The Government of the Federal Republic of Germany expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of the Federal Republic of Germany requests the Director-General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission of the Federal Republic of Germany to the Office of the United Nations and to the other International Organizations, Vienna, avails itself of this opportunity to renew to the Director-General of the International Atomic Energy Agency the assurances of its highest consideration.

Vienna, 1 December 1997

Director General
International Atomic Energy Agency
Vienna

PERMANENT MISSION OF JAPAN
V I E N N A

Prinz Eugen-Strasse 8 - 10
A-1040 Vienna
Austria

Telephone: (+ + 43) (1) 505 5467 - 0
Facsimile: (+ + 43) (1) 505 3740

The Permanent Mission of Japan to the International Organizations in Vienna presents its compliments to the Director General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of Japan has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of Japan to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of Japan has decided to apply to the management of plutonium.

In the field of non-proliferation, these policies form part of the Government of Japan's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreement with the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of Japan believes that the management of highly enriched uranium should be subject to similar guidelines and intends to consult with other like-minded Governments in order to explore the possibility of establishing such guidelines.

The Government of Japan expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of Japan requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission of Japan avails itself of this opportunity to renew to the Director General of the International Atomic Energy Agency the assurances of its highest consideration.

1 December 1997

Director General
International Atomic Energy Agency
Vienna



Unofficial translation ^{*/}

The Permanent Mission of the Russian Federation to the International Organizations in Vienna presents its compliments to the Director General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of the Russian Federation has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of the Russian Federation to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of the Russian Federation has decided to apply to the management of plutonium.

The Government of the Russian Federation intends to undertake together with the Government of the United States of America and the IAEA measures concerning verification of plutonium that it has designated as no longer required for defence purposes. The Government of the Russian Federation intends to take as soon as practicable such steps as may be necessary to submit to safeguards by the IAEA on a voluntary basis under its Safeguards Agreement with the Agency any plutonium transferred from military activities to peaceful nuclear activities.

The Government of the Russian Federation intends to apply paragraphs 14 (i) and 14 (ii) of the guidelines to plutonium designated as no longer required for defence purposes only after this material has been transferred to peaceful uses.

In the field of non-proliferation, these policies form part of the Government of the Russian Federation's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreement with the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of the Russian Federation expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of the Russian Federation requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission avails itself of this opportunity to renew to the Director General the assurances of its highest consideration.

Vienna, 1 December 1997

Director General
International Atomic Energy Agency
Vienna

^{*} The note verbale was received in the Russian language and is reproduced as such in this Information Circular. The English translation of the Russian text was provided by the Permanent Mission of the Russian Federation.



PERMANENT MISSION OF SWITZERLAND TO THE INTERNATIONAL ORGANIZATIONS

The Permanent Mission of Switzerland presents its compliments to the Director General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of Switzerland has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of Switzerland to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of Switzerland has decided to apply to the management of plutonium.

In the field of non-proliferation, these policies form part of the Government of Switzerland's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreement with the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of Switzerland believes that the management of highly enriched uranium should be subject to similar guidelines and intends to consult with other like-minded Governments in order to explore the possibility of establishing such guidelines.

The Government of Switzerland expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of Switzerland requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission of Switzerland avails itself of this opportunity to renew to the Director General of the International Atomic Energy Agency the assurances of its highest consideration. I

Vienna, 1 December 1997

Director General
International Atomic Energy Agency
Vienna

Note

The Permanent Mission of the United Kingdom of Great Britain and Northern Ireland to the United Nations and the International Organisations in Vienna presents its compliments to the Director-General of the International Atomic Energy Agency and has the honour to present information on the policies which the Government of the United Kingdom of Great Britain and Northern Ireland has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of the United Kingdom of Great Britain and Northern Ireland to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of the United Kingdom of Great Britain and Northern Ireland has decided to apply to the management of plutonium.

The Government of the United Kingdom of Great Britain and Northern Ireland intends to take as soon as practicable such steps as may be necessary to submit to safeguards by the IAEA on a voluntary basis under its Safeguards Agreement with the Agency and Euratom, or by the Commission of the European Community under the Euratom Treaty, all plutonium in peaceful nuclear activities, including any plutonium transferred from military activities to peaceful nuclear activities.

In the field of non-proliferation, these policies form part of the Government of the United Kingdom of Great Britain and Northern Ireland's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreements with Euratom and the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of the United Kingdom of Great Britain and Northern Ireland believes that the management of highly enriched uranium should be subject to similar guidelines and intends to consult with other like-minded Governments in order to explore the possibility of establishing such guidelines.

The Government of the United Kingdom of Great Britain and Northern Ireland expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of the United Kingdom of Great Britain and Northern Ireland requests the Director-General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission of the United Kingdom of Great Britain and Northern Ireland avails itself of this opportunity to renew to the Director-General of the International Atomic Energy Agency the assurances of its highest consideration.

1 December 1997

United Kingdom Mission
Vienna

Note

The Permanent Mission of the United States to International Organizations in Vienna presents its compliments to the Director General of the International Atomic Energy Agency (IAEA) and has the honor to present information on the policies which the Government of the United States of America has decided to adopt in the management of plutonium as specified in the attached guidelines.

It is the continuing intention of the Government of the United States of America to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely and effectively in accordance with its international commitments and in ways which will reduce the risk of the proliferation of nuclear weapons and ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.

The guidelines attached to this note set out the specific policies which the Government of the United States of America has decided to apply to the management of plutonium.

The Government of the United States of America intends to undertake together with the Government of the Russian Federation and the IAEA measures concerning verification of plutonium that it has designated as no longer required for defense purposes. The Government of the United States of America also intends to take as soon practicable such steps as may be necessary to submit to safeguards by the IAEA on a voluntary basis under its Safeguards Agreement with the Agency all plutonium in peaceful nuclear activities, including any plutonium transferred from military activities to peaceful nuclear activities.

In the field of non-proliferation, these policies form part of the Government of the United States of America's continuing implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its Safeguards Agreement with the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-Proliferation and Disarmament adopted at the NPT Review and Extension Conference in New York in May 1995.

The Government of the United States of America believes that the management of high enriched uranium should be subject to similar guidelines and intends to consult with other like-minded Governments in order to explore the possibility of establishing such guidelines.

The Government of the United States of America expresses its hope that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.

The Government of the United States of America requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

The Permanent Mission of the United States of America avails itself of the opportunity to renew to the Director General of the International Atomic Energy Agency the assurances of its highest consideration.

Vienna, 1 December 1997

*Translated from French**

**PERMANENT MISSION OF FRANCE TO THE
UNITED NATIONS OFFICE AND THE
INTERNATIONAL ORGANIZATIONS**

1. The Permanent Mission of France to the United Nations Office and the International Organizations in Vienna presents its compliments to the Director General of the International Atomic Energy Agency and has the honour to present information on the policies that the Government of the Republic of France has decided to adopt in the management of plutonium as specified in the attached guidelines.
2. It is the firm intention of the Government of the Republic of France to ensure that holdings of plutonium under its jurisdiction, like those of other nuclear material, are managed safely in accordance with its international commitments and in such a way as to reduce the risk of the proliferation of nuclear weapons and to ensure the protection of workers, the general public and the environment. It also intends to publish regular information on the way in which it discharges these responsibilities.
3. The guidelines attached to this note set out the specific policies which the Government of the Republic of France has decided to apply to the management of plutonium.
4. The Government of the Republic of France intends to take as soon as possible such steps as may be necessary to submit to safeguards by the IAEA on a voluntary basis under its safeguards agreement with the Agency and EURATOM, or by the Commission of the European Community under the terms of the EURATOM Treaty, all plutonium in peaceful nuclear activities, including any plutonium transferred from military activities to peaceful nuclear activities.
5. In the field of non-proliferation, these policies form part of the Government of the Republic of France's implementation of its obligations under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), of its safeguards agreement with EURATOM and the Agency and of its other relevant commitments, and contribute to the achievement of the Principles and Objectives for Nuclear Non-proliferation and Disarmament adopted at the Review and Extension Conference of the Parties to the NPT in New York in May 1995.
6. The Government of the Republic of France believes that the management of highly enriched uranium should be subject to similar guidelines and intends to consult other like-minded governments in order to explore the possibility of establishing such guidelines.
7. The Government of the Republic of France hopes that other States which separate, hold, process or use plutonium in their civil nuclear activities will adopt similar policies.
8. The Government of the Republic of France requests the Director General of the International Atomic Energy Agency to circulate this note and its attachments, as well as any statements subsequently provided in accordance with the guidelines, to all Member States for their information.

Vienna, 28 November 1997

Mr. M. ElBaradei
Director General
IAEA, Vienna

* The note verbale was received in the French language and is reproduced as such in this Information Circular.

GUIDELINES FOR THE MANAGEMENT OF PLUTONIUM*

General¹

1. Each State has an inalienable right to develop research, production and use of nuclear energy for peaceful purposes. This right is accompanied by sovereign responsibility for the use and management of all nuclear materials under its jurisdiction. Materials, however, which can be used for the manufacture of nuclear explosive components without transmutation or further enrichment are particularly sensitive and require special precautions. This paper sets out guidelines for the responsible management by Governments of plutonium in all peaceful nuclear activities. Although these guidelines do not apply to the management of plutonium contained in spent fuel² or of highly enriched uranium, the Government of [.....] recognizes the sensitivity of those materials and the need to manage them with the same sense of responsibility as the plutonium covered by these guidelines.

2. Plutonium as referred to in the following guidelines means:-

- separated plutonium;
- plutonium contained in unirradiated mixed oxide fuel elements;
- plutonium contained in other unirradiated fabricated goods;
- plutonium in the course of manufacture or fabrication or contained in unirradiated goods in the course of manufacture or fabrication.

3. These guidelines apply to the management of all plutonium in all peaceful nuclear activities, and to other plutonium after it has been designated by the Government concerned as no longer required for defence purposes.

4. Notwithstanding the above, these guidelines do not apply to:-

- i. plutonium with an isotopic concentration of plutonium 238 exceeding 80%;
- ii. plutonium used in gram quantities or as a sensing component in instruments;
- iii. plutonium which has been exempted from safeguards by the International Atomic Energy Agency (IAEA) under the procedures set out in paragraph 37 of INFCIRC 153 and the corresponding [(France), (China), (Russia), (UK), (US) comparable] paragraph of the Safeguards Agreement between the IAEA [(France), (UK), (Belgium), (Germany) Euratom] and the Government of [.....];
- iv. plutonium on which IAEA safeguards have been terminated under the procedures set out in paragraphs 11, 13 and 35 of INFCIRC 153 and the corresponding [(France), (China), (Russia), (UK), (US) comparable] paragraph of the Safeguards Agreement between the IAEA [(France), (UK), (Belgium), (Germany), Euratom] and the Government of [.....].

Non-Proliferation and International Safeguards

5. Plutonium will continue to be handled in accordance with the Government of [.....]'s obligations under the Treaty on the Non-Proliferation of Nuclear Weapons, [(Belgium), (Germany), (France), (UK) its obligations under the Euratom Treaty], its Safeguards Agreement(s) with the IAEA, and its other nuclear non-proliferation commitments.

Responsible Handling

6. Plutonium will continue to be handled in accordance with current internationally recognised standards for radiological protection³ and nuclear safety⁴, as accepted by the Government of [.....], and its other relevant international commitments⁵, at all stages of production, separation, processing, fabrication, use, transport, storage and disposal.

Physical Protection

7. In applying measures for the physical protection of plutonium in use, storage or transport (including international transport), the Government of [.....] will apply as appropriate the requirements of the Convention on the Physical Protection of Nuclear Material and the note on "Levels of Physical Protection" attached to this paper as Annex A, taking account of the recommendations on the Physical Protection of Nuclear Material published by the IAEA as INFCIRC 225, Rev.3.

8. Until they are used (including use for research or development) or disposed of, holdings of separated plutonium in excess of 15 grams will only be stored at reprocessing plants, at fabricating plants, or at sites authorised by the Government of [.....] for that purpose. In authorising storage sites, the Government of [.....] will bear in mind the desirability on security grounds of limiting the number of sites where such material is held.

Nuclear Material Accountancy and Control

9. Plutonium will be subject to an effective system of nuclear material accountancy and control, based on a system of material balance areas⁶. Such a system will require the keeping for each material balance area of accounting records of regular physical inventories⁶ and the measurement results used in determining them, of all inventory changes⁶, in such detail as to permit the book inventory⁶ to be determined at any time, and of any adjustments⁶ and corrections made in respect of physical inventories and book inventories. It will also make provision for:

- a) a measurement system for the determination of the quantities of plutonium received, produced, shipped, lost, or otherwise removed from inventory and the quantities on inventory. This system will either conform to the latest international standards or be equivalent in quality to such standards;
- (b) the evaluation of the precision and the accuracy of measurements and the estimation of measurement uncertainty;
- (c) procedures for identifying, reviewing and evaluating differences in shipper/receiver measurements;
- (d) procedures for taking a physical inventory⁶;
- (e) procedures for the evaluation of accumulations of unmeasured inventory and unmeasured losses;
- (f) a system of records and reports showing, for each material balance area, the inventory of plutonium and the changes in that inventory including receipts into and transfers out of the material balance area; and
- (g) provisions to ensure that the accounting procedures and arrangements are being operated correctly.

Provision will also be made for the regular verification of accountancy records.

*International Transfers*⁷

10. Before authorising transfers of plutonium for peaceful purposes to any non-nuclear weapon State, exceeding 50 grams to one recipient⁸ country in any period of 12 months, the Government of [.....] will require formal assurances from the Government of the recipient State that:-

- i. the plutonium will be used exclusively for peaceful purposes and will not be put to any use which would result in any nuclear explosive device;
- ii. the plutonium will be subject to IAEA Safeguards under an agreement whose duration corresponds at least to the actual use of the plutonium in the recipient State and which provides that the rights and obligations of the parties continue to apply in connection with that plutonium and any special fissionable material produced, processed or used in connection with it until the Agency has terminated safeguards on them in accordance with its normal procedures;
- iii. the plutonium will be placed under effective physical protection in accordance with the requirements of paragraph 7 of these guidelines in order to prevent unauthorised use and handling. Responsibilities for the transport of the plutonium will be clearly defined in accordance with the requirements of the Convention on the Physical Protection of Nuclear Material;
- iv. the plutonium will not be further transferred to a third country without the prior consent of the Government of [.....]. Any such further transfers are to be subject to the requirements of this paragraph and of paragraphs 11 and 12 below.

11. In addition, before any shipment of separated plutonium exceeding 50 grams to one recipient country in any period of 12 months is undertaken, the Government of [.....] will require the provision by the intended recipient of a certificate stating, besides the quantity, the approximate date of delivery, the final destination and end-use, and the timetable foreseen for utilisation. The recipient Government will confirm the correctness of this information.

12. Any such proposed shipment of separated plutonium will be discussed between the supplying and recipient Governments in the light of their non-proliferation commitments, the information published by the recipient Government on its holdings of separated plutonium and its strategy for plutonium use, the intended recipient's certificate of end-use, and other relevant circumstances.

Policies for the Management of Plutonium

13. The Government of [.....] is committed to management of plutonium in ways which are consistent with its national decisions on the nuclear fuel cycle and which will ensure the peaceful use or the safe and permanent disposal of plutonium. The formulation of that strategy will take into account: the need to avoid contributing to the risks of nuclear proliferation, especially during any period of storage before the plutonium is either irradiated as fuel in a reactor or permanently disposed of; the need to protect the environment, workers and the public; the resource value of the material, the costs and benefits involved and budgetary requirements; and the importance of balancing supply and demand, including demand for reasonable working stocks for nuclear operations, as soon as practical.

Publication of Information

14. With a view to increasing the transparency and public understanding of the management of plutonium, the Government of [.....] will therefore publish:-
- i. occasional brief statements explaining its national strategy for nuclear power and the nuclear fuel cycle and, against that background, its general plans for managing national holdings of plutonium; and
 - ii. an annual statement, in the format set out at Annex B, of its holdings of all plutonium subject to these guidelines; and
 - iii. an annual statement, in the format set out in Annex C, of its estimate of the plutonium contained in its holdings of spent civil reactor fuel.
15. The Government of [.....] is willing to exchange experience in implementing these guidelines with other governments who implement similar guidelines and, as appropriate, to cooperate with them in seeking solutions to any practical problems which may emerge. It will be ready to join with them in reviewing these guidelines in the light of experience with their application and changing circumstances at an agreed time not less than five years after the date on which these guidelines are notified to the Director General of the Agency.

1 December 1997

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1. These guidelines should be read in conjunction with the Note Verbale, dated [.....], communicating them to the Director General of the International Atomic Energy Agency (IAEA).
 2. Except for the publication of estimated amounts of plutonium contained in spent civil fuel which is envisaged in paragraph 14(iii) below.
 3. Notably the IAEA's Basic Standards of Radiological Protection, and the standards derived from them.
 4. Notably the IAEA's Fundamentals of Nuclear Safety and the standards derived from them, as well as the regulations of the IAEA and those of the IMO and other international organisations for the safe transport of nuclear materials.
 5. For example, the International Convention on Nuclear Safety and various international conventions dealing with the safe transport of nuclear materials etc.
 6. This term has the same definition as in paragraphs 98-116 of IAEA Document INFCIRC 153 ("The Structure and Content of Agreements between the Agency and States required in connection with the Treaty on the Non-Proliferation of Nuclear Weapons").
 7. As a Member of the European Community, the Government of the [.....], so far as transfers within the Community are concerned, will implement this guideline in the light of its legal obligations under the Euratom Treaty.
 8. The "recipient" country or State is the country or State to which the intended recipient (importer) belongs; the "recipient Government" is the government of that country or State. The "supplier Government" is the Government responsible for authorising the export; the "supplier country" or "supplier State" is the country or State governed by the "supplier Government".
- * French and Russian texts of these Guidelines were provided by the Permanent Missions of France and the Russian Federation as attachments to their respective notes verbales and are reproduced as such in this Information Circular. /[GUIDELINE]

LEVELS OF PHYSICAL PROTECTION

1. The purpose of physical protection of nuclear materials is to prevent unauthorised use and handling of these materials. This note records consensus among Governments who have adopted the Guidelines on the Management of Plutonium on the levels of protection to be ensured in relation to the amount of plutonium, and equipment and facilities containing it, taking account of international recommendations.

2. Implementation of measures of physical protection in each country is the responsibility of the Government of that country. Where the international transfer of plutonium is involved, the levels of physical protection on which these measures are to be based should be the subject of an agreement between supplier and recipient Governments. In this context these requirements should apply to transfers to all States.

3. The document INFCIRC/225 of the International Atomic Energy Agency entitled "The Physical Protection of Nuclear Material" and similar documents which from time to time are prepared by international groups of experts and updated as appropriate to reflect changes in the state of the art and state of knowledge with regard to physical protection of nuclear material are a useful basis for guiding States in designing a system of physical protection measures and procedures.

4. The categorisation of nuclear material presented below, as it may be up-dated from time to time by consensus among States implementing these guidelines, is to serve as the agreed basis for designating specific levels of physical protection in relation to different amounts of plutonium.

5. The levels of physical protection to be ensured in the use, storage and transport of plutonium will, as a minimum, include protection characteristics according to the amount involved as follows:-

a) where the amount of plutonium is more than 15 grams but less than 500 grams:-

- **use and storage** within an area to which access is controlled;
- **transport** under special precautions including prior arrangements among sender, recipient and carrier, and, in case of international transport, prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient Governments respectively, specifying time, place and procedures for transferring transport responsibility;

b) where the amount of plutonium is more than 500 grams but less than 2 kilograms:-

- use and storage within a protected area to which access is controlled, i.e. an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection;
- transport under special precautions including prior arrangements among sender, recipient and carrier, and, in case of international transport, prior agreement between entities subject to the jurisdiction and regulation of supplier and recipient Governments respectively, specifying time, place and procedures for transferring transport responsibility;

c) where the amount of plutonium is 2 kilograms or more:-

- **protection** with highly reliable systems against unauthorised use as follows:
- **use and storage** within a highly protected area, i.e. a protected area, as defined in (b) above to which, in addition, access is restricted to persons whose trustworthiness has been determined, and which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorised access or unauthorised removal of material;
- **transport** under the precautions for transport as identified in (a) and (b) above and, in addition, under constant surveillance by escorts and under conditions which assure close communication with appropriate response forces.

6. In the case of an international transfer, the supplier, together with the recipient, should take the steps necessary to confirm that the agencies or authorities having national responsibility for ensuring that prescribed levels of physical protection are adequately met and for coordinating recovery and response operations in the event of unauthorised handling or use of plutonium are in touch with one another. These national agencies should consult and cooperate as appropriate to secure the safe completion of the transfer.

ANNUAL FIGURES FOR HOLDINGS OF CIVIL UNIRRADIATED PLUTONIUM

National Totals

as of 31 Dec. 199..

(Previous year's
figures in brackets)
Rounded to 100 kg
plutonium with
quantities less than
50 kg reported as such

1. Unirradiated separated plutonium in product stores at reprocessing plants.	_____	(____)
2. Unirradiated separated plutonium in the course of manufacture or fabrication and plutonium contained in unirradiated semi-fabricated or unfinished products at fuel or other fabricating plants or elsewhere.	_____	(____)
3. Plutonium contained in unirradiated MOX fuel or other fabricated products at reactor sites or elsewhere.	_____	(____)
4. Unirradiated separated plutonium held elsewhere.	_____	(____)

Note:

(i) Plutonium included in lines 1-4 above belonging to foreign bodies.	_____	(____)
(ii) Plutonium in any of the forms in lines 1-4 above held in locations in other countries and therefore not included above.	_____	(____)
(iii) Plutonium included in lines 1-4 above which is in international shipment prior to its arrival in the recipient State.	_____	(____)

**ESTIMATED AMOUNTS OF PLUTONIUM CONTAINED IN SPENT CIVIL
REACTOR FUEL**

National Totals

as of 31 Dec. 199..

(Previous year's
figures in brackets)
Rounded to 1000 kg
plutonium with
quantities less than
500 kg reported as such

1.	Plutonium contained in spent fuel at civil reactor sites.	_____	(_____)
2.	Plutonium contained in spent fuel at reprocessing plants.	_____	(_____)
3.	Plutonium contained in spent fuel held elsewhere.	_____	(_____)

Note:

- i) The treatment of material sent for direct disposal will need further consideration when specific plans for direct disposal have taken concrete form.

Definitions:

- Line 1: covers estimated amounts of plutonium contained in fuel discharged from civil reactors;
- Line 2: covers estimated amounts of plutonium contained in fuel received at reprocessing plants but not yet reprocessed.