

Information Circular

INFCIRC/718

Date: 3 January 2008

General Distribution

Original: English, Finnish, French, German, Greek, Italian,
Portuguese, Spanish, Swedish

Agreement between the French Republic, the European Atomic Energy Community and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean

- 1. The text of the Agreement (and the Protocols thereto) between the French Republic, the European Atomic Energy Community and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean is reproduced in this document for the information of all Members. The Board of Governors approved the Agreement on 11 June 1998. It was signed in Vienna on 21 March 2000 by the representative of the Government of the French Republic and the Director General of the IAEA, and on 26 September 2000 by the representative of the European Atomic Energy Community.
- 2. Pursuant to Article 23 of the Agreement, the Agreement entered into force on 26 October 2007, one month after the Agency has received notification from both France and the European Atomic Energy Community that their respective internal requirements for entry into force have been met. Pursuant to Article II of the Protocols, the Protocols entered into force on the same date.

Agreement between the French Republic, the European Atomic Energy Community and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean

WHEREAS the French Republic (hereinafter referred to as "France") is a party to Additional Protocol I of the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (hereinafter referred to as "the Tlatelolco Treaty") opened for signature at Mexico City on 14 February 1967;

WHEREAS Additional Protocol I of the Tlatelolco Treaty states, inter alia, that its parties have agreed to "undertake to apply the statute of denuclearization in respect of warlike purposes as defined in Articles 1, 3, 5 and 13 of the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean in territories for which, de jure or de facto, they are internationally responsible and which lie within the limits of the geographical zone established in that Treaty" (hereinafter referred to as "Protocol I territories");

WHEREAS Article 13 of the Tlatelolco Treaty states, inter alia, that "Each Contracting Party shall negotiate multilateral or bilateral agreements with the International Atomic Energy Agency for the application of its safeguards to its nuclear activities";

WHEREAS France is a party to the Treaty establishing the European Atomic Energy Community (hereinafter referred to as "the Community"), by virtue of which Treaty institutions of that Community exercise in their own right, in those areas for which they are competent, regulatory, executive and judicial powers which may take effect directly within the legal systems of the Member States;

WHEREAS the Treaty establishing the European Atomic Energy Community is applicable to non-European territories, including the Protocol I territories, under the jurisdiction of France;

WHEREAS, within this institutional framework, the Community has in particular the task of ensuring, through appropriate safeguards, that nuclear materials are not diverted to uses other than those for which they were intended;

WHEREAS these safeguards include declaration to the Community of the basic technical characteristics of nuclear facilities, maintenance and submission of operating records to permit nuclear materials accounting for the Community as a whole, inspections by officials of the Community, and a system of sanctions;

WHEREAS the Community has the task of establishing with other countries and international organizations such relations as will foster progress in the peaceful uses of nuclear energy and is expressly authorized to assume particular safeguarding obligations in an agreement concluded with a third State or an international organization;

WHEREAS the International Atomic Energy Agency (hereinafter referred to as "the Agency") is authorized, pursuant to Article III of its Statute, to conclude such agreements;

WHEREAS France in implementation of its obligations under Article l of Additional Protocol I of the Tlatelolco Treaty undertakes in this Agreement to accept the application of the safeguards of the Agency to all peaceful nuclear activities within French Protocol I territories;

NOTING the nature of the Agreement of 5 April 1973 and of the Protocol thereto between Austria, Belgium, Denmark, the Federal Republic of Germany, Finland, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, the Community and the Agency;

WHEREAS it is the desire of the Agency and the Community, having regard to the need to avoid unnecessary duplication of safeguards activities, to co-operate in the application of safeguards;

NOW, THEREFORE, France, the Community and the Agency have agreed as follows:

PARTI

BASIC UNDERTAKING

Article 1

France undertakes to accept safeguards, in accordance with the terms of this Agreement, on all source or special fissionable material in all peaceful nuclear activities within French Protocol I territories for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices.

APPLICATION OF SAFEGUARDS

Article 2

The Agency shall have the right and the obligation to ensure that safeguards will be applied, in accordance with the terms of this Agreement, on all source or special fissionable material in all peaceful nuclear activities within French Protocol I territories for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices.

Article 3

- (a) The Community shall, in applying its safeguards on source and special fissionable material in all peaceful nuclear activities within French Protocol I territories, co-operate with the Agency in accordance with the terms of this Agreement, with a view to ascertaining that such source and special fissionable material is not diverted to nuclear weapons or other nuclear explosive devices.
- (b) The Agency shall apply safeguards, in accordance with the terms of this Agreement, in such a manner as to enable it to verify, in ascertaining that there has been no diversion of such nuclear material from peaceful uses to nuclear weapons or other nuclear explosive devices, findings of the Community's system of safeguards. The Agency's verification shall include, inter alia, independent measurements and observations conducted by the Agency in accordance with the procedures specified in this Agreement. The Agency, in its verification, shall take due account of the effectiveness of the Community's system of safeguards in accordance with the terms of this Agreement.

CO-OPERATION BETWEEN FRANCE, THE COMMUNITY AND THE AGENCY

Article 4

France, the Community and the Agency shall co-operate, insofar as each Party is concerned, to facilitate the implementation of the safeguards provided for in this Agreement and shall avoid unnecessary duplication of safeguards activities.

IMPLEMENTATION OF SAFEGUARDS

Article 5

The safeguards provided for in this Agreement shall be implemented in a manner designed:

- (a) To avoid hampering the economic and technological development of French Protocol I territories or international co-operation in the field of peaceful nuclear activities, including international exchange of nuclear material;
- (b) To avoid undue interference in peaceful nuclear activities of French Protocol I territories, and in particular in the operation of facilities; and
- (c) To be consistent with prudent management practices required for the economic and safe conduct of nuclear activities.

Article 6

- (a) The Agency shall take every precaution to protect commercial and industrial secrets and other confidential information coming to its knowledge in the implementation of this Agreement.
- (b) (i) The Agency shall not publish or communicate to any State, organization or person any information obtained by it in connection with the implementation of this Agreement, except that specific information relating to the implementation thereof may be given to the Board of Governors of the Agency (hereinafter referred to as "the Board") and to such Agency staff members as require such knowledge by reason of their official duties in connection with safeguards, but only to the extent necessary for the Agency to fulfil its responsibilities in implementing this Agreement.
 - (ii) Summarized information on nuclear material subject to safeguards under this Agreement may be published upon decision of the Board if France or the Community, insofar as either Party is individually concerned, agrees thereto.

Article 7

- (a) In implementing safeguards pursuant to this Agreement, full account shall be taken of technological developments in the field of safeguards, and every effort shall be made to ensure optimum cost-effectiveness and the application of the principle of safeguarding effectively the flow of nuclear material subject to safeguards under this Agreement by use of instruments and other techniques at certain strategic points to the extent that present or future technology permits.
- (b) In order to ensure optimum cost-effectiveness, use shall be made, for example, of such means as:
 - (i) Containment as a means of defining material balance areas for accounting purposes;
 - (ii) Statistical techniques and random sampling in evaluating the flow of nuclear material; and

(iii) Concentration of verification procedures on those stages in the nuclear fuel cycle involving the production, processing, use or storage of nuclear material from which nuclear weapons or other nuclear explosive devices could readily be made, and minimization of verification procedures in respect of other nuclear material, on condition that this does not hamper the implementation of this Agreement.

PROVISION OF INFORMATION TO THE AGENCY

Article 8

- (a) In order to ensure the effective implementation of safeguards under this Agreement, the Community shall, in accordance with the provisions set out in this Agreement, provide the Agency with information concerning nuclear material subject to safeguards under this Agreement and the features of facilities relevant to safeguarding such material.
- (b) (i) The Agency shall require only the minimum amount of information and data consistent with carrying out its responsibilities under this Agreement.
 - (ii) Information pertaining to facilities shall be the minimum necessary for safeguarding nuclear material subject to safeguards under this Agreement.
- (c) If France so requests, the Agency shall be prepared to examine on premises of the Community or of French Protocol I territories design information which France regards as being of particular sensitivity. Such information need not be physically transmitted to the Agency provided that it remains readily available for further examination by the Agency on such premises.

AGENCY INSPECTORS

Article 9

- (a) (i) The Agency shall secure the consent of France and the Community to the designation of Agency inspectors to French Protocol I territories.
 - (ii) If France or the Community, either upon proposal of a designation or at any other time after a designation has been made, objects to the designation, the Agency shall propose to France and the Community an alternative designation or designations.
 - (iii) If, as a result of the repeated refusal of France or the Community to accept the designation of Agency inspectors, inspections to be conducted under this Agreement would be impeded, such refusal shall be considered by the Board, upon referral by the Director General of the Agency (hereinafter referred to as "the Director General"), with a view to its taking appropriate action.
- (b) France and the Community shall take the necessary steps to ensure that Agency inspectors can effectively discharge their functions under this Agreement.

- (c) The visits and activities of Agency inspectors shall be so arranged as:
 - (i) To reduce to a minimum the possible inconvenience and disturbance to French Protocol I territories and the Community and to the peaceful nuclear activities inspected; and
 - (ii) To ensure protection of industrial secrets or any other confidential information coming to the knowledge of Agency inspectors.

PRIVILEGES AND IMMUNITIES

Article 10

France shall accord to the Agency (including its property, funds and assets) and to its inspectors and other officials, performing functions under this Agreement, the same privileges and immunities as those set forth in the relevant provisions of the Agreement on the Privileges and Immunities of the International Atomic Energy Agency.

TERMINATION OF SAFEGUARDS

Article 11

Consumption or dilution of nuclear material

Safeguards under this Agreement shall terminate on nuclear material upon determination by the Community and the Agency that the material has been consumed, or has been diluted in such a way that it is no longer usable for any nuclear activity relevant from the point of view of safeguards, or has become practicably irrecoverable.

Article 12

<u>Transfer of nuclear material</u> out of French Protocol I territories

The Community shall give the Agency advance notification of intended transfers of nuclear material subject to safeguards under this Agreement out of French Protocol I territories in accordance with the provisions set out in this Agreement. The Agency shall terminate safeguards on nuclear material under this Agreement when the recipient State has assumed responsibility therefor, as provided for in Part II of this Agreement. In the case of transfers out of French Protocol I territories of such nuclear material which is to remain the responsibility of France and the Community, the Agency shall terminate safeguards on the nuclear material under this Agreement when the material leaves French Protocol I territories, and shall thereupon make it subject to the Agreement of 27 July 1978 between France, the European Atomic Energy Community and the Agency. The Agency shall maintain records indicating each transfer and, where applicable, the re-application of safeguards to the transferred nuclear material.

<u>Provisions relating to nuclear material to be used in</u> non-nuclear activities

If France wishes to use nuclear material subject to safeguards under this Agreement in non-nuclear activities, such as the production of alloys or ceramics, the Community shall agree with the Agency, before the material is so used, on the circumstances under which the safeguards on such material may be terminated.

FINANCE

Article 14

Each Party shall bear its own expenses incurred in implementing its responsibilities under this Agreement. However, if France, the Community or persons under the jurisdiction of either of them, incur extraordinary expenses as a result of a specific request by the Agency, the Agency shall reimburse such expenses provided that it has agreed in advance to do so. In any case the Agency shall bear the cost of any additional measuring or sampling which Agency inspectors may request.

THIRD PARTY LIABILITY FOR NUCLEAR DAMAGE

Article 15

France and the Community shall ensure that any protection against third party liability in respect of nuclear damage, including any insurance or other financial security which may be available under their laws or regulations, shall apply to the Agency and its officials for the purpose of the implementation of this Agreement, in the same way as that protection applies to nationals of the relevant French Protocol I territory.

INTERNATIONAL RESPONSIBILITY

Article 16

Any claim by France or the Community against the Agency or by the Agency against France or the Community in respect of any damage resulting from the implementation of safeguards under this Agreement, other than damage arising out of a nuclear incident, shall be settled in accordance with international law.

MEASURES IN RELATION TO VERIFICATION OF NON-DIVERSION

Article 17

If the Board, upon report of the Director General, decides that an action by France or the Community is essential and urgent in order to ensure verification that nuclear material while subject to safeguards under this Agreement is not diverted to nuclear weapons or other nuclear explosive devices, the Board may call upon France or the Community, insofar as either Party is individually concerned, to take the required action without delay, irrespective of whether procedures have been invoked pursuant to Article 21 of this Agreement for the settlement of a dispute.

Article 18

If the Board, upon examination of relevant information reported to it by the Director General, finds that the Agency is not able to verify that there has been no diversion of nuclear material while required to be safeguarded under this Agreement to nuclear weapons or other nuclear explosive devices, it may make the reports provided for in paragraph C of Article XII of the Statute of the Agency (hereinafter referred to as "the Statute") and may also take, where applicable, the other measures provided for in that paragraph. In taking such action the Board shall take account of the degree of assurance provided by the safeguards measures that have been applied and shall afford France or the Community, insofar as either Party is individually concerned, every reasonable opportunity to furnish the Board with any necessary reassurance.

INTERPRETATION AND APPLICATION OF THE AGREEMENT AND SETTLEMENT OF DISPUTES

Article 19

At the request of France, the Community or the Agency, there shall be consultation about any question arising out of the interpretation or application of this Agreement.

Article 20

France and the Community shall have the right to request that any question arising out of the interpretation or application of this Agreement be considered by the Board. The Board shall invite France and the Community to participate in the discussion of any such question by the Board.

Any dispute arising out of the interpretation or application of this Agreement, except a dispute with regard to a finding by the Board under Article 18 or an action taken by the Board pursuant to such a finding, which is not settled by negotiation or another procedure agreed to by France, the Community and the Agency shall, at the request of any one of them, be submitted to an arbitral tribunal composed of five arbitrators. France and the Community shall each designate one arbitrator, the Agency shall designate two arbitrators, and the four arbitrators so designated shall elect a fifth, who shall be the Chairman. If, within thirty days of the request for arbitration, France, the Community or the Agency shall have failed to make such a designation, France, the Community or the Agency may request the President of the International Court of Justice to make the designation. The same procedure shall apply if, within thirty days of the designation or appointment of the fourth arbitrator, the fifth arbitrator has not been elected. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall require the concurrence of at least three arbitrators. The arbitral procedure shall be fixed by the tribunal. The decisions of the tribunal shall be binding on France, the Community and the Agency.

AMENDMENT OF THE AGREEMENT

Article 22

- (a) France, the Community and the Agency shall, at the request of any of them, consult each other on amendment to this Agreement.
- (b) All amendments shall require the agreement of France, the Community and the Agency.
- (c) The Director General shall promptly inform all Member States of the Agency of any amendment to this Agreement.
- (d) France, the Community and the Agency shall agree on the date of entry into force of any such amendments.

ENTRY INTO FORCE AND DURATION

Article 23

This Agreement shall enter into force one month after the Agency has received notification from both France and the Community that their respective internal requirements for entry into force have been met, and the Director General shall promptly notify France and the Community of the date on which it is to enter into force. The Director General shall also promptly inform all Member States of the Agency of the entry into force of this Agreement. This Agreement shall remain in force as long as France is party to Protocol I of the Tlatelolco Treaty.

PROTOCOLS

Article 24

The Protocols attached to this Agreement shall be an integral part thereof. The term "Agreement" as used in this instrument means the Agreement and the Protocols together.

PART II

INTRODUCTION

Article 25

The purpose of this part of the Agreement is to specify the procedures to be applied in the implementation of the safeguards provisions of Part I.

OBJECTIVE OF SAFEGUARDS

Article 26

The objective of the safeguards procedures set forth in this Agreement is the timely detection of diversion of significant quantities of nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices or for purposes unknown, and deterrence of such diversion by the risk of early detection.

Article 27

For the purpose of achieving the objective set forth in Article 26, material accountancy shall be used as a safeguards measure of fundamental importance, with containment and surveillance as important complementary measures.

Article 28

The technical conclusion of the Agency's verification activities shall be a statement, in respect of each material balance area, of the amount of material unaccounted for over a specific period, and giving the limits of accuracy of the amounts stated.

THE COMMUNITY'S SYSTEM OF SAFEGUARDS

Article 29

Pursuant to Article 3 the Agency, in carrying out its verification activities, shall make full use of the Community's system of safeguards.

The Community's system of accounting for and control of all nuclear material subject to safeguards under this Agreement shall be based on a structure of material balance areas. The Community, in applying its safeguards, will make use of and, to the extent necessary, make provision for, as appropriate and specified in the Subsidiary Arrangements, such measures as:

- (a) A measurement system for the determination of the quantities of nuclear material received, produced, shipped, lost or otherwise removed from inventory, and the quantities on inventory;
- (b) The evaluation of precision and 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 inventory;
- (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 nuclear material and the changes in that inventory including receipts into and transfers out of the material balance area;
- (g) Provisions to ensure that the accounting procedures and arrangements are being operated correctly; and
- (h) Procedures for the provision of reports to the Agency in accordance with Articles 57 to 67.

STARTING POINT OF SAFEGUARDS

Article 31

Safeguards under this Agreement shall not apply to material in mining or ore processing activities.

Article 32

(a) When any material containing uranium or thorium which has not reached the stage of the nuclear fuel cycle described in paragraph (c) is directly or indirectly exported from French Protocol I territories to a non-nuclear-weapon State, the Community shall inform the Agency of its quantity, composition and destination, unless the material is exported for specifically non-nuclear purposes;

- (b) When any material containing uranium or thorium which has not reached the stage of the nuclear fuel cycle described in paragraph (c) is imported into French Protocol I territories, the Community shall inform the Agency of its quantity and composition, unless the material is imported for specifically non-nuclear purposes; and
- (c) When any nuclear material of a composition and purity suitable for fuel fabrication or for isotopic enrichment leaves the plant or the process stage in which it has been produced, or when such nuclear material, or any other nuclear material produced at a later stage in the nuclear fuel cycle, is imported into French Protocol I territories, the nuclear material shall become subject to the other safeguards procedures specified in this Agreement.

TERMINATION OF SAFEGUARDS

Article 33

- (a) Safeguards shall terminate on nuclear material subject to safeguards under this Agreement, under the conditions set forth in Article 11. Where the conditions of that Article are not met, but France considers that the recovery of safeguarded nuclear material from residues is not for the time being practicable or desirable, the Community and the Agency shall consult on the appropriate safeguards measures to be applied.
- (b) Safeguards shall terminate on nuclear material subject to safeguards under this Agreement, under the conditions set forth in Article 12, in accordance with the provisions of Articles 89 to 92 inclusive.
- (c) Safeguards shall terminate on nuclear material subject to safeguards under this Agreement, under the conditions set forth in Article 13, provided that the Community and the Agency agree that such nuclear material is practicably irrecoverable.

EXEMPTIONS FROM SAFEGUARDS

Article 34

At the request of the Community, who shall make such a request if so required by France, the Agency shall exempt nuclear material from safeguards under this Agreement as follows:

- (a) Special fissionable material, when it is used in gram quantities or less as a sensing component in instruments:
- (b) Nuclear material, when it is used in non-nuclear activities in accordance with Article 13, if such nuclear material is recoverable; and
- (c) Plutonium with an isotopic concentration of plutonium-238 exceeding 80%.

At the request of the Community, who shall make such a request if so required by France, the Agency shall exempt from safeguards under this Agreement nuclear material that would otherwise be subject to safeguards, provided that the total quantity of nuclear material which has been exempted in all French Protocol I territories in accordance with this Article may not at any time exceed:

- (a) One kilogram in total of special fissionable material, which may consist of one or more of the following:
 - (i) Plutonium;
 - (ii) Uranium with an enrichment of 0.2 (20%) and above, taken account of by multiplying its weight by its enrichment; and
 - (iii) Uranium with an enrichment below 0.2 (20%) and above that of natural uranium, taken account of by multiplying its weight by five times the square of its enrichment:
- (b) Ten metric tons in total of natural uranium and depleted uranium with an enrichment above 0.005 (0.5%);
- (c) Twenty metric tons of depleted uranium with an enrichment of 0.005 (0.5%) or below; and
- (d) Twenty metric tons of thorium;

or such greater amounts as may be specified by the Board for uniform application.

Article 36

If exempted nuclear material is to be processed or stored together with nuclear material subject to safeguards under this Agreement, provision shall be made for the re-application of safeguards thereto.

SUBSIDIARY ARRANGEMENTS

Article 37

In furtherance of this Agreement, the Community, represented by a delegation comprising representatives of the Commission of the European Communities and France, shall make with the Agency Subsidiary Arrangements which shall specify in detail, to the extent necessary to permit the Agency to fulfil its responsibilities under this Agreement in an effective and efficient manner, how the procedures laid down in this Agreement are to be applied. The entry into force of the Subsidiary Arrangements shall be subject to the agreement of France. The Subsidiary Arrangements may be extended or changed in the same manner without amendment of this Agreement.

Subject to the provisions of Article 37, the Subsidiary Arrangements shall enter into force at the same time as, or as soon as possible after, the entry into force of this Agreement. France, the Community and the Agency shall make every effort to achieve their entry into force within ninety days of the entry into force of this Agreement; an extension of that period shall require agreement between France, the Community and the Agency. The Community shall provide the Agency promptly with the information required for completing the Subsidiary Arrangements. Upon the entry into force of this Agreement, the Agency shall have the right to apply the procedures laid down therein in respect of the nuclear material listed in the inventory provided for in Article 39, even if the Subsidiary Arrangements have not yet entered into force.

INVENTORY

Article 39

On the basis of the initial report referred to in Article 60, the Agency shall establish a unified inventory of all nuclear material in French Protocol I territories subject to safeguards under this Agreement, irrespective of its origin, and shall maintain this inventory on the basis of subsequent reports and of the results of its verification activities. Copies of the inventory shall be made available to France and to the Community at intervals to be agreed.

DESIGN INFORMATION

General provisions

Article 40

Pursuant to Article 8, design information in respect of existing facilities shall be provided to the Agency by the Community during the discussion of the Subsidiary Arrangements. The time limits for the provision of design information in respect of the new facilities shall be specified in the Subsidiary Arrangements and such information shall be provided as early as possible before nuclear material is introduced into a new facility.

Article 41

The design information to be provided to the Agency shall include, in respect of each facility referred to in Article 8, when applicable:

- (a) The identification of the facility, stating its general character, purpose, nominal capacity and geographic location, and the name and address to be used for routine business purposes;
- (b) A description of the general arrangement of the facility with reference, to the extent feasible, to the form, location and flow of nuclear material and to the general layout of important items of equipment which use, produce or process nuclear material;
- (c) A description of features of the facility relating to material accountancy, containment and surveillance; and

(d) A description of the existing and proposed procedures at the facility for nuclear material accountancy and control, with special reference to material balance areas established by the operator, measurements of flow and procedures for physical inventory taking.

Article 42

Other information relevant to the application of safeguards shall also be provided to the Agency in respect of each facility, in particular on organizational responsibility for material accountancy and control. France shall provide the Community and the Agency with supplementary information on the health and safety procedures which the Agency shall observe and with which the Agency inspectors shall comply at the facility.

Article 43

The Agency shall be provided by the Community with design information in respect of a modification relevant for safeguards purposes, for examination, and shall be informed by the Community of any change in the information provided to it under Article 42, sufficiently in advance for the safeguards procedures to be adjusted when necessary.

Article 44

Purposes of examination of design information

The design information provided to the Agency shall be used for the following purposes:

- (a) To identify the features of facilities and nuclear material relevant to the application of safeguards to nuclear material in sufficient detail to facilitate verification;
- (b) To determine material balance areas to be used for accounting purposes under this Agreement and to select those strategic points which are key measurement points and which will be used to determine flow and inventory of nuclear material; in determining such material balance areas the following criteria, inter alia, shall be used:
 - (i) The size of the material balance area shall be related to the accuracy with which the material balance can be established;
 - (ii) In determining the material balance area advantage shall be taken of any opportunity to use containment and surveillance to help ensure the completeness of flow measurements and thereby to simplify the application of safeguards and to concentrate measurement efforts at key measurement points;
 - (iii) A number of material balance areas in use at a facility or at distinct sites may be combined in one material balance area to be used for Agency accounting purposes when the Agency determines that this is consistent with its verification requirements; and
 - (iv) A special material balance area may be established at the request of France or the Community around a process step involving commercially sensitive information:

- (c) To establish the nominal timing and procedures for taking of physical inventory of nuclear material for Agency accounting purposes;
- (d) To establish the records and reports requirements and records evaluation procedures;
- (e) To establish requirements and procedures for verification of the quantity and location of nuclear material; and
- (f) To select appropriate combinations of containment and surveillance methods and techniques and the strategic points at which they are to be applied.

The results of the examination of the design information shall be included in the Subsidiary Arrangements.

Article 45

Re-examination of design information

At the request of any of the Parties to this Agreement, design information shall be re-examined by the Community, represented as prescribed in Article 37, and the Agency in the light of changes in operating conditions, of developments in safeguards technology or of experience in the application of verification procedures, with a view to modifying action taken pursuant to Article 44.

Article 46

Verification of design information

The Agency, in co-operation with France and the Community, may send inspectors to facilities referred to in Article 8 to verify the design information provided to the Agency pursuant to Articles 40 to 43, for the purposes stated in Article 44.

INFORMATION IN RESPECT OF NUCLEAR MATERIAL OUTSIDE FACILITIES

Article 47

The Agency shall be provided by the Community with the following information when nuclear material subject to safeguards under this Agreement is to be customarily used in French Protocol I territories outside facilities, as applicable:

- (a) A general description of the use of the nuclear material, its geographic location, and the user's name and address for routine business purposes; and
- (b) A general description of the existing and proposed procedures for nuclear material accountancy and control, including organizational responsibility for material accountancy and control.

The Agency shall be informed by the Community, on a timely basis, of any change in the information provided to it under this Article.

The information provided to the Agency pursuant to Article 47 may be used, to the extent relevant, for the purposes set out in Article 44(b)-(f).

RECORDS SYSTEM

General provisions

Article 49

Records shall be kept in respect of each material balance area, determined in accordance with Article 44(b). The records to be kept and the person responsible for them shall be specified in the Subsidiary Arrangements.

Article 50

France shall make arrangements to facilitate the examination of records by Agency inspectors.

Article 51

Records shall be retained for at least five years.

Article 52

Records shall consist, as appropriate, of:

- (a) Accounting records of all nuclear material subject to safeguards under this Agreement;
- (b) Operating records for facilities containing such nuclear material.

Article 53

The system of measurements on which the records used for the preparation of reports are based shall either conform to the latest international standards or be equivalent in quality to such standards.

Accounting records

Article 54

The accounting records shall set forth the following in respect of each material balance area:

- (a) All inventory changes, so as to permit a determination of the book inventory at any time;
- (b) All measurement results that are used for determination of the physical inventory; and
- (c) All adjustments and corrections that have been made in respect of inventory changes, book inventories and physical inventories.

For all inventory changes and physical inventories the records shall show, in respect of each batch of nuclear material subject to safeguards under this Agreement: material identification, batch data and source data. The records shall account for uranium, thorium and plutonium separately in each batch of nuclear material. For each inventory change, the date of the inventory change and, when appropriate, the originating material balance area and the receiving material balance area or the recipient, shall be indicated.

Article 56

Operating records

The operating records shall set forth, as appropriate, in respect of each material balance area:

- (a) Those operating data which are used to establish changes in the quantities and composition of nuclear material;
- (b) The data obtained from the calibration of tanks and instruments and from sampling and analyses, the procedures to control the quality of measurements and the derived estimates of random and systematic error;
- (c) A description of the sequence of the actions taken in preparing for, and in taking, a physical inventory, in order to ensure that it is correct and complete; and
- (d) A description of the actions taken in order to ascertain the cause and magnitude of any accidental or unmeasured loss that might occur.

REPORTS SYSTEM

General provisions

Article 57

The Community shall provide the Agency with reports as detailed in Articles 58 to 63 and 65 to 67 in respect of nuclear material subject to safeguards under this Agreement.

Article 58

Reports shall be made in French.

Article 59

Reports shall be based on the records kept in accordance with Articles 49 to 56 and shall consist, as appropriate, of accounting reports and special reports.

Accounting reports

Article 60

The Agency shall be provided by the Community with an initial report on all nuclear material subject to safeguards under this Agreement. The initial report shall be dispatched by the Community to the Agency within thirty days of the last day of the calendar month in which this Agreement enters into force, and shall reflect the situation as of the last day of that month.

Article 61

The Community shall provide the Agency with the following accounting reports for each material balance area:

- (a) Inventory change reports showing all changes in the inventory of nuclear material. The reports shall be dispatched as soon as possible and in any event within the time limits specified in the Subsidiary Arrangements; and
- (b) Material balance reports showing the material balance based on a physical inventory of nuclear material actually present in the material balance area. The reports shall be dispatched as soon as possible and in any event within the time limits specified in the Subsidiary Arrangements.

The reports shall be based on data available as of the date of reporting and may be corrected at a later date, as required.

Article 62

Inventory change reports shall specify identification and batch data for each batch of nuclear material, the date of the inventory change and, as appropriate, the originating material balance area and the receiving material balance area or the recipient. These reports shall be accompanied by concise notes:

- (a) Explaining the inventory changes, on the basis of the operating data contained in the operating records provided for under Article 56(a); and
- (b) Describing, as specified in the Subsidiary Arrangements, the anticipated operational programme, particularly the taking of a physical inventory.

Article 63

The Community shall report each inventory change, adjustment and correction, either periodically in a consolidated list or individually. Inventory changes shall be reported in terms of batches. As specified in the Subsidiary Arrangements, small changes in inventory of nuclear material, such as transfers of analytical samples, may be combined in one batch and reported as one inventory change.

Article 64

The Agency shall provide the Community and France with semi-annual statements of book inventory of nuclear material subject to safeguards under this Agreement, for each material balance area, as based on the inventory change reports for the period covered by each such statement.

Material balance reports shall include the following entries, unless otherwise agreed in the Subsidiary Arrangements:

- (a) Beginning physical inventory;
- (b) Inventory changes (first increases, then decreases);
- (c) Ending book inventory;
- (d) Shipper/receiver differences;
- (e) Adjusted ending book inventory;
- (f) Ending physical inventory; and
- (g) Material unaccounted for.

A statement of the physical inventory, listing all batches separately and specifying material identification and batch data for each batch, shall be attached to each material balance report.

Article 66

Special reports

The Community shall make special reports without delay:

- (a) If any unusual incident or circumstances lead the Community to believe that there is or may have been loss of nuclear material subject to safeguards under this Agreement that exceeds the limits specified for this purpose in the Subsidiary Arrangements; or
- (b) If the containment has unexpectedly changed from that specified in the Subsidiary Arrangements to the extent that unauthorized removal of nuclear material subject to safeguards under this Agreement has become possible.

Article 67

Amplification and clarification of reports

If the Agency so requests, the Community shall provide it with amplifications or clarifications of any report, in so far as relevant for the purpose of safeguards.

INSPECTIONS

Article 68

General provisions

The Agency shall have the right to make inspections as provided for in this Agreement.

Purposes of inspections

Article 69

The Agency may make ad hoc inspections in order to:

- (a) Verify the information contained in the initial report on the nuclear material subject to safeguards under this Agreement;
- (b) Identify and verify changes in the situation which have occurred between the date of the initial report and the date of entry into force of the Subsidiary Arrangements in respect of a given facility; and
- (c) Identify, and if possible verify the quantity and composition of, such nuclear material in accordance with Articles 92 and 94, before its transfer out of or upon its transfer into French Protocol I territories.

Article 70

The Agency may make routine inspections in order to:

- (a) Verify that reports are consistent with records;
- (b) Verify the location, identity, quantity and composition of all nuclear material subject to safeguards under this Agreement; and
- (c) Verify information on the possible causes of material unaccounted for, shipper/receiver differences and uncertainties in the book inventory.

Article 71

Subject to the procedures laid down in Article 75, the Agency may make special inspections:

- (a) In order to verify the information contained in special reports; or
- (b) If the Agency considers that information made available by the Community and France, including explanations from the Community and France and information obtained from routine inspections, is not adequate for the Agency to fulfil its responsibilities under this Agreement.

An inspection shall be deemed to be special when it is either additional to the routine inspection effort provided for in Articles 76 to 80 or involves access to information or locations in addition to the access specified in Article 74 for ad hoc and routine inspections, or both.

Scope of inspections

Article 72

For the purposes specified in Articles 69 to 71, the Agency may:

(a) Examine the records kept pursuant to Articles 49 to 56;

- (b) Make independent measurements of all nuclear material subject to safeguards under this Agreement;
- (c) Verify the functioning and calibration of instruments and other measuring and control equipment;
- (d) Apply and make use of surveillance and containment measures; and
- (e) Use other objective methods which have been demonstrated to be technically feasible.

Within the scope of Article 72, the Agency shall be enabled:

- (a) To observe that samples at key measurement points for material balance accountancy are taken in accordance with procedures which produce representative samples, to observe the treatment and analysis of the samples and to obtain duplicates of such samples;
- (b) To observe that the measurements of nuclear material at key measurement points for material balance accountancy are representative, and to observe the calibration of the instruments and equipment involved;
- (c) To make arrangements with the Community and, to the extent necessary, with France to provide that, if necessary:
 - (i) Additional measurements are made and additional samples taken for the Agency's use;
 - (ii) The Agency's standard analytical samples are analysed;
 - (iii) Appropriate absolute standards are used in calibrating instruments and other equipment; and
 - (iv) Other calibrations are carried out;
- (d) To arrange to use its own equipment for independent measurement and surveillance, and if so agreed and specified in the Subsidiary Arrangements, to arrange to install such equipment;
- (e) To apply its seals and other identifying and tamper-indicating devices to containments, if so agreed and specified in the Subsidiary Arrangements; and
- (f) To make arrangements with France or the Community for the shipping of samples taken for the Agency's use.

Access for inspections

Article 74

- (a) For the purposes specified in Article 69(a) and (b) and until such time as the strategic points have been specified in the Subsidiary Arrangements, Agency inspectors shall have access to any location where the initial report or any inspections carried out in connection with it indicate that nuclear material is present;
- (b) For the purposes specified in Article 69(c), Agency inspectors shall have access to any location of which the Agency has been notified in accordance with Articles 91(d)(iii) or 93(d)(iii);
- (c) For the purposes specified in Article 70, Agency inspectors shall have access only to the strategic points specified in the Subsidiary Arrangements and to the records maintained pursuant to Articles 49 to 56; and
- (d) In the event of France or the Community concluding that any unusual circumstances require extended limitations on access by the Agency, France and the Community and the Agency shall promptly make arrangements with a view to enabling the Agency to discharge its safeguards responsibilities in the light of these limitations. The Director General shall report each such arrangement to the Board.

Article 75

In circumstances which may lead to special inspections for the purposes specified in Article 71, France, the Community and the Agency shall consult forthwith. As a result of such consultations the Agency may:

- (a) Make inspections in addition to the routine inspection effort provided for in Articles 76 to 80; and
- (b) Obtain access, in agreement with France and the Community, to information or locations in addition to those specified in Article 74. Any disagreement concerning the need for additional access shall be resolved in accordance with Articles 20 and 21; in case action by France or the Community, insofar as either party is individually concerned, is essential and urgent, Article 17 shall apply.

Frequency and intensity of routine inspections

Article 76

The number, intensity and duration of routine inspections, applying optimum timing, shall be kept to the minimum consistent with the effective implementation of the safeguards procedures set forth in this Agreement, and optimum and most economical use of available inspection resources under the Agreement shall be made.

The Agency may carry out one routine inspection per year in respect of facilities and material balance areas outside facilities with a content or annual throughput, whichever is greater, of nuclear material not exceeding five effective kilograms.

Article 78

The number, intensity, duration, timing and mode of routine inspections in respect of facilities with a content or annual throughput of nuclear material exceeding five effective kilograms shall be determined on the basis that in the maximum or limiting case the inspection regime shall be no more intensive than is necessary and sufficient to maintain continuity of knowledge of the flow and inventory of nuclear material, and the maximum routine inspection effort in respect of such facilities shall be determined as follows:

- (a) For reactors and sealed storage installations the maximum total of routine inspection per year shall be determined by allowing one sixth of a man-year of inspection for each such facility;
- (b) For facilities, other than reactors or sealed storage installations, involving plutonium or uranium enriched to more than 5%, the maximum total of routine inspection per year shall be determined by allowing for each such facility $30 \times \sqrt{E}$ man-days of inspection per year, where E is the inventory or annual throughput of nuclear material, whichever is greater, expressed in effective kilograms. The maximum established for any such facility shall not, however, be less than 1.5 man-years of inspection; and
- (c) For facilities not covered by paragraphs (a) or (b), the maximum total of routine inspection per year shall be determined by allowing for each such facility one third of a man-year of inspection plus 0.4 x E man-days of inspection per year, where E is the inventory or annual throughput of nuclear material, whichever is greater, expressed in effective kilograms.

France, the Community and the Agency may agree to amend the figures for the maximum inspection effort specified in this Article, upon determination by the Board that such amendment is reasonable.

Article 79

Subject to Articles 76 to 78, the criteria to be used for determining the actual number, intensity, duration, timing and mode of routine inspections in respect of any facility shall include:

- (a) The form of the nuclear material, in particular, whether the nuclear material is in bulk form or contained in a number of separate items; its chemical composition and, in the case of uranium, whether it is of low or high enrichment; and its accessibility;
- (b) The effectiveness of the Community's safeguards, including the extent to which the operators of facilities are functionally independent of the Community's safeguards; the extent to which the measures specified in Article 30 have been implemented by the Community; the promptness of reports provided to the Agency; their consistency with the Agency's independent verification; and the amount and accuracy of the material unaccounted for, as verified by the Agency;

- (c) <u>Characteristics of France's nuclear fuel cycle in French Protocol I territories</u>, in particular, the number and types of facilities containing nuclear material subject to safeguards, the characteristics of such facilities relevant to safeguards, notably the degree of containment; the extent to which the design of such facilities facilitates verification of the flow and inventory of nuclear material; and the extent to which information from different material balance areas can be correlated;
- (d) <u>International interdependence</u>, in particular, the extent to which nuclear material is received from or sent to other States for use or processing; any verification activities by the Agency in connection therewith; and the extent to which nuclear activities in French Protocol I territories are interrelated with those of other States outside of French Protocol I territories; and
- (e) <u>Technical developments in the field of safeguards</u>, including the use of statistical techniques and random sampling in evaluating the flow of nuclear material.

France, the Community and the Agency shall consult if France or the Community considers that the inspection effort is being deployed with undue concentration on particular facilities.

Notice of inspections

Article 81

The Agency shall give advance notice to the Community and to France before arrival of Agency inspectors at facilities or material balance areas outside facilities, as follows:

- (a) For ad hoc inspections pursuant to Article 69(c), at least 24 hours; for those pursuant to Article 69(a) and (b) as well as the activities provided for in Article 46, at least one week;
- (b) For special inspections pursuant to Article 71, as promptly as possible after France, the Community and the Agency have consulted as provided for in Article 75, it being understood that notification of arrival will normally have been considered during those consultations; and
- (c) For routine inspections pursuant to Article 70, at least 24 hours in respect of the facilities referred to in Article 78(b) and sealed storage installations containing plutonium or uranium enriched to more than 5%, and one week in all other cases.

Such notice of inspections shall include the names of the Agency inspectors and shall indicate the facilities and the material balance areas outside facilities to be visited and the periods during which they will be visited. If the Agency inspectors are to arrive from outside French Protocol I territories, the Agency shall also give advance notice of the place and time of their arrival in such territories.

Notwithstanding the provisions of Article 81, the Agency may, as a supplementary measure, carry out without advance notification a portion of the routine inspections pursuant to Article 78 in accordance with the principle of random sampling. In performing any unannounced inspections, the Agency shall fully take into account any operational programme provided to it pursuant to Article 62(b). Moreover, whenever practicable, and on the basis of the operational programme, it shall advise France and the Community periodically of its general programme of announced and unannounced inspections, specifying the general periods when inspections are foreseen. In carrying out any unannounced inspections, the Agency shall make every effort to minimize any practical difficulties for the Community, for France and for facility operators, bearing in mind the relevant provisions of Articles 42 and 87. Similarly France and the Community shall make every effort to facilitate the task of Agency inspectors.

Designation of Agency inspectors

Article 83

The following procedures shall apply to the designation of Agency inspectors:

- (a) The Director General shall inform France and the Community in writing of the name, qualifications, nationality, grade and such other particulars as may be relevant, of each Agency official he proposes for designation as an Agency inspector for French Protocol I territories;
- (b) France and the Community shall inform the Director General within thirty days of the receipt of such a proposal whether the proposal is accepted;
- (c) The Director General may designate each official who has been accepted by France and the Community as one of the Agency inspectors for French Protocol I territories, and shall inform France and the Community of such designations; and
- (d) The Director General, acting in response to a request by France or the Community or on his own initiative, shall immediately inform France and the Community of the withdrawal of the designation of any official as an Agency inspector for French Protocol Lterritories.

However, in respect of Agency inspectors needed for the activities provided for in Article 46 and to carry out ad hoc inspections pursuant to Article 69(a) and (b), the designation procedures shall be completed if possible within thirty days after the entry into force of this Agreement. If such designation appears impossible within this time limit, Agency inspectors for such purposes shall be designated on a temporary basis.

Article 84

France shall grant or renew as quickly as possible appropriate visas, where required, for each Agency inspector designated for French Protocol I territories.

Conduct and visits of Agency inspectors

Article 85

Agency inspectors, in exercising their functions under Articles 46 and 69 to 73, shall carry out their activities in a manner designed to avoid hampering or delaying the construction, commissioning or operation of facilities, or affecting their safety. In particular Agency inspectors shall not operate any facility themselves or direct the staff of a facility to carry out any operation. If Agency inspectors consider that in pursuance of Articles 72 and 73, particular operations in a facility should be carried out by the operator, they shall make a request therefor.

Article 86

When Agency inspectors require services available in French Protocol I territories, including the use of equipment, in connection with the performance of inspections, France and the Community shall facilitate the procurement of such services and the use of such equipment by Agency inspectors.

Article 87

The Community and France shall have the right to have Agency inspectors accompanied during their inspections by Community inspectors and by representatives of France, provided that Agency inspectors shall not thereby be delayed or otherwise impeded in the exercise of their functions.

STATEMENTS ON THE AGENCY'S VERIFICATION ACTIVITIES

Article 88

The Agency shall inform France and the Community of:

- (a) The results of its inspections, at intervals to be specified in the Subsidiary Arrangements; and
- (b) The conclusions it has drawn from its verification activities in French Protocol I territories, in particular by means of statements in respect of each material balance area, which shall be made as soon as possible after a physical inventory has been taken and verified by the Agency and a material balance has been struck.

INTERNATIONAL TRANSFERS

Article 89

General provisions

Nuclear material subject or required to be subject to safeguards under this Agreement which is transferred into or out of French Protocol I territories shall, for purposes of this Agreement, be regarded as being the responsibility of the Community and of France:

- (a) In the case of imports into French Protocol I territories from other States, from the time that such responsibility ceases to lie with the exporting State, and no later than the time at which the material reaches its destination; and
- (b) In the case of exports out of French Protocol I territories to other States, up to the time at which the recipient State assumes such responsibility, and no later than the time at which the nuclear material reaches its destination.

The point at which the transfer of responsibility will take place shall be determined in accordance with suitable arrangements to be made by the Community and France, on the one hand, and the State to which or from which the nuclear material is transferred, on the other hand. Neither the Community, France nor any other State shall be deemed to have such responsibility for nuclear material merely by reason of the fact that the nuclear material is in transit on or over its territory, or that it is being transported on a ship under its flag or in its aircraft.

Article 90

- (a) Nuclear material subject to safeguards under this Agreement may be transferred or retransferred out of French Protocol I territories to a State, other than France (including the territories to which the Agreement of 27 July 1978 between France and the Community and the Agency applies) or another Member State of the Community, only if:
 - (i) It is returned to the State that originally supplied it, provided that if any special fissionable material has been produced through the use of that nuclear material, such produced material is:
 - (1) retained in French Protocol I territories or returned to French Protocol I territories; or
 - (2) subject to Agency safeguards in that State or in any other State to which such produced material is transferred; or
 - (ii) It will be subject to Agency safeguards in the State to which it will be transferred.
- (b) Nuclear material subject to safeguards under this Agreement may, in accordance with paragraph (c), be transferred out of French Protocol I territories to France (including the territories to which the Agreement of 27 July 1978 between France and the Community and the Agency applies) or to another Member State of the Community.
- (c) Any nuclear material subject to safeguards under this Agreement which is transferred outside French Protocol I territories pursuant to paragraph (b) shall be subject to the Agreement of 27 July 1978 between France, the Community and the Agency, the 1973 Agreement between the Community, its Non-Nuclear Weapon Member States and the Agency or the 1976 Agreement between the United Kingdom of Great Britain and Northern Ireland, the Community and the Agency, as appropriate, and to any further Agreement amending or replacing in whole or in part any of the above-mentioned Agreements.

Transfers out of French Protocol I territories

Article 91

- (a) The Community shall notify the Agency of any intended transfer out of French Protocol I territories of nuclear material subject to safeguards under this Agreement, if the shipment exceeds one effective kilogram, or if, within a period of three months, several separate shipments are to be made to the same State, each of less than one effective kilogram but the total exceeds one effective kilogram.
- (b) Such notification shall be given to the Agency after the conclusion of the contractual arrangements leading to the transfer and normally at least two weeks before the nuclear material is to be prepared for shipping.
- (c) The Agency and the Community may agree on different procedures for advance notification.
- (d) The notification shall specify:
 - (i) The identification and, if possible, the expected quantity and composition of the nuclear material to be transferred, and the material balance area from which it will come;
 - (ii) The State for which the nuclear material is destined;
 - (iii) The dates on and locations at which the nuclear material is to be prepared for shipping;
 - (iv) The approximate dates of dispatch and arrival of the nuclear material; and
 - (v) For transfers of nuclear material which will not remain the responsibility of France and the Community, at what point of the transfer the recipient State will assume responsibility for the nuclear material for the purpose of this Agreement, and the probable date on which that point will be reached.

Article 92

The notification referred to in Article 91 shall be such as to enable the Agency to make, if necessary, an ad hoc inspection to identify, and if possible verify the quantity and composition of, the nuclear material before it is transferred out of French Protocol I territories and, if the Agency so wishes or the Community so requests, to affix seals to the nuclear material when it has been prepared for shipping. However, the transfer of the nuclear material shall not be delayed in any way by any action taken or contemplated by the Agency pursuant to such a notification.

Transfers into French Protocol I territories

Article 93

- (a) The Community shall notify the Agency of any expected transfer into French Protocol I territories of nuclear material required to be subject to safeguards under this Agreement if the shipment exceeds one effective kilogram, or if, within a period of three months, several separate shipments are to be received from the same State, each of less than one effective kilogram but the total of which exceeds one effective kilogram.
- (b) The Agency shall be notified as much in advance as possible of the expected arrival of the nuclear material in a French Protocol I territory, and in any case not later than the date on which the nuclear material arrives, or the date on which France and the Community assume responsibility for the nuclear material if it is being transferred from outside France into a French Protocol I territory.
- (c) The Agency and the Community may agree on different procedures for advance notification.
- (d) The notification shall specify:
 - (i) The identification and, if possible, the expected quantity and composition of the nuclear material;
 - (ii) If the nuclear material is being transferred from outside France, at what point of the transfer France and the Community will assume responsibility for the nuclear material for the purpose of this Agreement, and the probable date on which that point will be reached; and
 - (iii) The expected date of arrival, the location where, and the date on which, the nuclear material is intended to be unpacked.

Article 94

The notification referred to in Article 93 shall be such as to enable the Agency to make, if necessary, an ad hoc inspection to identify, and if possible verify the quantity and composition of, the nuclear material at the time the consignment is unpacked. However, unpacking shall not be delayed by any action taken or contemplated by the Agency pursuant to such a notification.

Article 95

Special reports

The Community shall make a special report as envisaged in Article 66 if any unusual incident or circumstances lead the Community to believe that there is or may have been loss of nuclear material, including the occurrence of significant delay, during an international transfer.

DEFINITIONS

Article 96

For the purposes of this Agreement:

- (l) <u>Community</u> means the legal person created by the Treaty establishing the European Atomic Energy Community (EURATOM), Party to this Agreement. Where by virtue of this Agreement notice has to be given or any communication sent to the Community, it shall be sufficiently given or sent if given or sent to the Commission of the European Communities.
- (2) A. <u>Adjustment</u> means an entry into an accounting record or a report showing a shipper/receiver difference or material unaccounted for.
 - B. <u>Annual throughput</u> means, for the purposes of Articles 77 and 78, the amount of nuclear material transferred annually out of a facility working at nominal capacity.
 - C. <u>Batch</u> means a portion of nuclear material handled as a unit for accounting purposes at a key measurement point and for which the composition and quantity are defined by a single set of specifications or measurements. The nuclear material may be in bulk form or contained in a number of separate items.
 - D. <u>Batch data</u> means the total weight of each element of nuclear material and, in the case of plutonium and uranium, the isotopic composition when appropriate. The units of account shall be as follows:
 - (a) Grams of contained plutonium;
 - (b) Grams of total uranium and grams of contained uranium-235 plus uranium-233 for uranium enriched in these isotopes; and
 - (c) Kilograms of contained thorium, natural uranium or depleted uranium.

For reporting purposes the weights of individual items in the batch shall be added together before rounding to the nearest unit.

- E. <u>Book inventory</u> of a material balance area means the algebraic sum of the most recent physical inventory of that material balance area and of all inventory changes that have occurred since that physical inventory was taken.
- F. <u>Correction</u> means an entry into an accounting record or a report to rectify an identified mistake or to reflect an improved measurement of a quantity previously entered into the record or report. Each correction must identify the entry to which it pertains.
- G. <u>Effective kilogram</u> means a special unit used in safeguarding nuclear material. The quantity in effective kilograms is obtained by taking:
- (a) For plutonium, its weight in kilograms;

- (b) For uranium with an enrichment of 0.01 (1%) and above, its weight in kilograms multiplied by the square of its enrichment;
- (c) For uranium with an enrichment below 0.01 (1%) and above 0.005 (0.5%), its weight in kilograms multiplied by 0.0001; and
- (d) For depleted uranium with an enrichment of 0.005 (0.5%) or below, and for thorium, its weight in kilograms multiplied by 0.00005.
- H. <u>Enrichment</u> means the ratio of the combined weight of the isotopes uranium-233 and uranium-235 to that of the total uranium in question.
- I. Facility means:
- (a) A reactor, a critical facility, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant or a separate storage installation; or
- (b) Any location where nuclear material in amounts greater than one effective kilogram is customarily used.
- J. <u>Inventory change</u> means an increase or decrease, in terms of batches, of nuclear material in a material balance area; such a change shall involve one of the following:
- (a) Increases:
 - (i) Import;
 - (ii) Domestic receipt: receipts from other material balance areas, receipts from a non-safeguarded (non-peaceful) activity or receipts at the starting point of safeguards;
 - (iii) Nuclear production: production of special fissionable material in a reactor; and
 - (iv) De-exemption: re-application of safeguards on nuclear material previously exempted therefrom on account of its use or quantity.
- (b) Decreases:
 - (i) Export;
 - (ii) Domestic shipment: shipments to other material balance areas or shipments for a non-safeguarded (non-peaceful) activity;
 - (iii) Nuclear loss: loss of nuclear material due to its transformation into other element(s) or isotope(s) as a result of nuclear reactions;
 - (iv) Measured discard: nuclear material which has been measured, or estimated on the basis of measurements, and disposed of in such a way that it is not suitable for further nuclear use;
 - (v) Retained waste: nuclear material generated from processing or from an operational accident, which is deemed to be unrecoverable for the time being

but which is stored;

- (vi) Exemption: exemption of nuclear material from safeguards on account of its use or quantity; and
- (vii) Other loss: for example, accidental loss (that is, irretrievable and inadvertent loss of nuclear material as the result of an operational accident) or theft.
- K. <u>Key measurement point</u> means a location where nuclear material appears in such a form that it may be measured to determine material flow or inventory. Key measurement points thus include, but are not limited to, the inputs and outputs (including measured discards) and storages in material balance areas.
- L. <u>Man-year of inspection</u> means, for the purposes of Article 78, 300 man-days of inspection, a man-day being a day during which a single inspector has access to a facility at any time for a total of not more than eight hours.
- M. <u>Material balance area</u> means an area in or outside of a facility such that:
- (a) The quantity of nuclear material in each transfer into or out of each material balance area can be determined; and
- (b) The physical inventory of nuclear material in each material balance area can be determined when necessary, in accordance with specified procedures,

in order that the material balance for Agency safeguards purposes can be established.

- N. <u>Material unaccounted for</u> means the difference between book inventory and physical inventory.
- O. <u>Nuclear material</u> means any source or any special fissionable material as defined in Article XX of the Statute. The term source material shall not be interpreted as applying to ore or ore residue. Any determination by the Board under Article XX of the Statute after the entry into force of this Agreement which adds to the materials considered to be source material or special fissionable material shall have effect under this Agreement only upon acceptance by France and the Community.
- P. <u>Physical inventory</u> means the sum of all the measured or derived estimates of batch quantities of nuclear material on hand at a given time within a material balance area, obtained in accordance with specified procedures.
- Q. <u>Shipper/receiver difference</u> means the difference between the quantity of nuclear material in a batch as stated by the shipping material balance area and as measured at the receiving material balance area.
- R. <u>Source data</u> means those data, recorded during measurement or calibration or used to derive empirical relationships, which identify nuclear material and provide batch data. Source data may include, for example, weight of compounds, conversion factors to determine weight of element, specific gravity, element concentration, isotopic ratios, relationship between volume and manometer readings and relationship between plutonium produced and power generated.

- S. <u>Strategic point</u> means a location selected during examination of design information where, under normal conditions and when combined with the information from all strategic points taken together, the information necessary and sufficient for the implementation of safeguards measures is obtained and verified; a strategic point may include any location where key measurements related to material balance accountancy are made and where containment and surveillance measures are executed.
- T. <u>French Protocol I territories</u> means those territories for which, de jure or de facto, France is internationally responsible and which lie within the limits of the geographical zone established in Article 4 of the Tlatelolco Treaty.

DONE at Vienna in triplicate, in the Danish, Dutch, English, Finnish, French, German, Greek, Italian, Portuguese, Spanish and Swedish languages, the texts of which are equally authentic except that, in case of divergence, the text concluded in the French language shall prevail.

For the Government of the French Republic:

(signed)

Philippe Thiébaud Governor from France at the IAEA

21 March 2000

For the European Atomic Energy Community:

(signed)

Ulrich Dietmar Knüppel

Head of Delegation of the European Commission to the International Organizations in Vienna

26 September 2000

For the International Atomic Energy Agency:

(signed)

Mohamed ElBaradei Director General

21 March 2000

PROTOCOL 1

The French Republic (hereinafter referred to as "France"), the European Atomic Energy Community (hereinafter referred to as the "Community") and the International Atomic Energy Agency (hereinafter referred to as "the Agency") have agreed as follows:

- I. (A) Until such time as French Protocol I territories have, in peaceful nuclear activities,
 - (1) Nuclear material in quantities exceeding the limits stated, for the type of material in question, in Article 35 of the Agreement between France, the Community and the Agency for the Application of Safeguards in Connection with the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (hereinafter referred to as "the Agreement"), or
 - (2) Nuclear material in a facility as defined in the Definitions,

the implementation of the provisions of Part II of the Agreement shall be held in abeyance, with the exception of Articles 31, 32, 37, 40 and 89.

- (B) The information to be reported pursuant to paragraphs (a) and (b) of Article 32 of the Agreement may be consolidated and submitted in an annual report; similarly, an annual report shall be submitted, if applicable, with respect to the import and export of nuclear material described in paragraph (c) of Article 32.
- (C) In order to enable the timely conclusion of the Subsidiary Arrangements provided for in Article 37 of the Agreement, the Community shall notify the Agency sufficiently in advance of having nuclear material in peaceful nuclear activities in French Protocol I territories in quantities that exceed the limits or six months before nuclear material is to be introduced into a facility, as referred to in Section (A) hereof, whichever occurs first. At such time, procedures for co-operation in the application of the safeguards provided for under the Agreement shall be agreed upon, as necessary, between France, the Community and the Agency.
- II. This Protocol shall be signed by the representatives of France, the Community and the Agency and shall enter into force on the same date as the Agreement.

DONE at Vienna in triplicate, in the Danish, Dutch, English, Finnish, French, German, Greek, Italian, Portuguese, Spanish and Swedish languages, the texts of which are equally authentic except that, in case of divergence, the text concluded in the French language shall prevail.

For the Government of the French Republic:

(signed)

Philippe Thiébaud Governor from France at the IAEA

21 March 2000

For the European Atomic Energy Community:

(signed)

Ulrich Dietmar Knüppel Head of Delegation of the European Commission to the International Organizations in Vienna

26 September 2000

For the International Atomic Energy Agency:

(signed)

Mohamed ElBaradei Director General

21 March 2000

PROTOCOL 2

The French Republic (hereinafter referred to as "France"), the European Atomic Energy Community (hereinafter referred to as "the Community") and the International Atomic Energy Agency (hereinafter referred to as "the Agency") have agreed as follows:

- I. At such time as the Community notifies the Agency in accordance with Section I(C) of Protocol 1 of this Agreement that there is nuclear material in peaceful nuclear activities in French Protocol I territories in quantities that exceed the limits referred to in Section I(A)(1) of Protocol 1 of this Agreement or that nuclear material is to be introduced into a facility, as referred to in Section I(A)(2) of Protocol 1 of this Agreement, whichever occurs first, a Protocol for procedures for co-operation in the application of the safeguards provided for under the Agreement shall be agreed upon between France, the Community and the Agency. Such procedures will amplify certain provisions of the Agreement and, in particular, specify the conditions and means according to which the co-operation referred to above shall be implemented in such a way as to avoid unnecessary duplication of safeguards activities. The procedures shall be, to the extent practicable, based upon those then in force under Protocols to, and the subsidiary arrangements of, other safeguards agreements between Member States of the Community, the Community and the Agency, including the related special understandings agreed upon by the Community and the Agency.
- II. This Protocol shall be signed by the representatives of France, the Community and the Agency and shall enter into force on the same date as the Agreement.

DONE at Vienna in triplicate, in the Danish, Dutch, English, Finnish, French, German, Greek, Italian, Portuguese, Spanish and Swedish languages, the texts of which are equally authentic except that, in case of divergence, the text concluded in the French language shall prevail.

For the Government of the French Republic:

(signed)

Philippe Thiébaud Governor from France at the IAEA

21 March 2000

For the European Atomic Energy Community:

(signed)

Ulrich Dietmar Knüppel

Head of Delegation of the European Commission to the International Organizations in Vienna

26 September 2000

For the International Atomic Energy Agency:

(signed)

Mohamed ElBaradei Director General

21 March 2000