Treaty Banning the Production of Fissile Material for Use in Nuclear Weapons or Other Nuclear Explosive Devices

The States concluding this Treaty, hereinafter referred to as the "Parties to the Treaty",

Certain that weapons of mass destruction pose unparalleled dangers to humankind, and of the consequent need to strive towards the elimination of existing nuclear arsenals, the prevention of further proliferation of nuclear weapons and the prevention of nuclear terrorism,

Convinced that controls on fissile and fissionable materials would limit the manufacture of nuclear weapons and provide a mechanism for international verification related to nuclear disarmament and non-proliferation,

Concerned that the peaceful use of nuclear energy should not contribute to the manufacture of nuclear weapons; that fissile and fissionable material used for peaceful purposes should be protected from diversion or theft for use in the manufacture of nuclear weapons or other nuclear explosive devices; that hazardous radioactive material should not find use in radiological dispersal devices; and that nuclear installations or transport systems are protected against sabotage,

Confident that the participation of all States in a treaty banning the production of fissile and fissionable material for use in nuclear weapons and other nuclear explosives, on an equitable, non-discriminatory basis will serve to ensure peace, security and prosperity, and recalling United Nations General Assembly Resolution 48/75L of 16 December 1993 and subsequent Resolutions calling for a non-discriminatory multilateral and internationally and effectively verifiable treaty banning the production of fissile and fissionable material for nuclear weapons or other nuclear explosive devices,

Recognizing that 'banning production' includes:

- Ceasing plutonium and high enriched uranium production activities carried out for nuclear weapons manufacture prior to the entry into force of the treaty;
- Prohibiting the future production of weapon-usable fissile and fissionable material for nuclear weapons or other nuclear explosives;
- Submitting to verification under the treaty, fissile or fissionable material that could be used in nuclear weapons or other nuclear explosive devices that was produced prior to the entry into force of the treaty, including civil stocks and material which has been declared by a State Party to be excess to its military program requirements,
- Submitting to verification under the treaty, fissile or fissionable material that could be used in nuclear weapons or other nuclear explosive devices produced in peaceful nuclear applications prior to the entry into force of the treaty;
- Conducting all future production of fissile or fissionable material that could be used in nuclear weapons or other nuclear explosive devices for peaceful applications and non-explosive military applications under approved conditions and subject to verification; and
- Assuring that fissile material permitted under the treaty for peaceful use or for non-explosive military applications does not become available intentionally or unintentionally for use in the manufacture of nuclear weapons or other nuclear explosive devices by other States or sub-national entities,

Noting that States party to comprehensive Safeguards Agreements with the International Atomic Energy Agency (hereinafter referred to as "IAEA") are subject to de jure prohibitions on the production or acquisition of nuclear material except for peaceful use, and that in accordance with the terms of IAEA agreements, safeguards apply to all source or special fissionable material in all peaceful nuclear activities within the territory of each State, under its jurisdiction or carried out under its control anywhere, to verify that such material is not diverted to nuclear weapons or other nuclear explosive devices.

Acknowledging the ability of the IAEA to undertake the verification responsibilities of the Treaty and thereby coordinate the verification required under the Treaty with IAEA non-proliferation safeguards implemented under existing IAEA safeguards agreements, to provide for the convergence of those measures as progress towards nuclear disarmament occurs, and to assure that the verification of this

Treaty will be carried out in a non-discriminatory manner with minimum cost and intrusion into legitimate activities of the Parties,

Have agreed as follows:

A. OPERATION

Article I Basic Undertakings

- 1. Each Party to the Treaty undertakes not to produce, import or otherwise acquire from any source whatsoever fissile or fissionable material meeting the definition of material subject to this Treaty for use in nuclear weapons or in any other nuclear explosive device.
- 2. Each Party to the Treaty undertakes not to redirect the use of any stocks of fissile or fissionable material under its possession or control for use in nuclear weapons or in any other nuclear explosive device.
- 3. Each Party to the Treaty undertakes not to develop, manufacture, receive or otherwise obtain from any source whatsoever any facility, equipment, material or technology suitable for the production of material subject to this Treaty, except when such facility, equipment, material or technology has been approved for peaceful use by the Conference of States Parties.
- 4. Each Party to the Treaty undertakes not to transfer to any recipient whatsoever fissile or fissionable material meeting the definition of material subject to this Treaty for use in nuclear weapons or other nuclear explosive devices.
- 5. Each Party to the Treaty undertakes not to transfer to any recipient whatsoever any facility, equipment, material or technology suitable for the production or use of material subject to this Treaty, except for transfers to States when such facility, equipment, material or technology is approved for peaceful or non-explosive military use by the Conference of States Parties, and provided said material subject to this Treaty or facility, equipment, material or technology is subject to verification under the Treaty.
- 6. Each Party to the Treaty undertakes to prevent the theft or unauthorized use of any material subject to this Treaty or of any facility, equipment, material or technology suitable for the production or use of material subject to this Treaty, and to take all appropriate domestic and international measures, as relevant, to prevent the transport or use of any such material subject to this Treaty or of any facility, equipment, material or technology suitable for the production or use of material subject to this Treaty should these preventative measures fail.

Article II

Cessation of Production for Nuclear Weapons and Verification of Production Facilities and Excess Military Stocks

Cessation of Production

- 7. Within 90 days of entry into force of the Treaty, each State Party shall submit a declaration to the Director General providing information on all production facilities that were constructed in each State, including the name of each production facility, its address and geographical coordinates, its purpose, the date of its construction, the date(s) of operation, its operational status and plans for reconfiguring the production facility for non-proscribed purposes or decommissioning. This information shall include facilities that were constructed but were never put into operation.
- 8. Upon entry into force of the Treaty, all facilities used for, or intended for use for, of capable of the production of fissile material or fissionable material for the manufacture nuclear weapons shall either cease operations permanently, or shall be maintained on standby pending approval by a Conference of States Parties for the modification and operation of said facilities for legitimate and prudent peaceful use.

Verification of Production Facilities

9. All production facilities shall be subject to inspection by the IAEA to confirm that production remains stopped, or if subsequent operations are approved by the Conference of States Parties, to confirm that the operations remain in accordance with the approval, and that all fissile material or fissionable material which should be subject to the Treaty is submitted to verification under the Treaty.

Excess Materials Released from Military Use

- 10. Within 90 days of entry into force of the Treaty, each State shall declare to the IAEA its existing stocks of fissile material and fissionable material meeting the definition of material subject to the Treaty, which each State has determined to be excess to its military needs.
- 11. In conjunction with nuclear arms reductions after entry into force of the Treaty, each State shall identify proportionate amounts of fissile material or fissionable material meeting the definition of material subject to the Treaty to be declared as excess to its military needs. The implementation of these provisions shall be subject to review by the Conference of States Parties prior to implementation and the results attained shall be reported to the Conference.

Verification of Excess Materials

12. Within 18 months of entry into force of the Treaty, each State and the IAEA shall present for adoption by the Conference of States Parties a proposed plan to verify said excess material as material subject to the Treaty. The verification provisions shall ensure that no information classified by the State relevant to the design or manufacture of nuclear weapons shall be divulged through or as a result of the verification activities carried out.

Article III Peaceful Use

Peaceful Use Program Approval

- 13. Each State Party to the Treaty shall have the right to pursue peaceful applications of nuclear energy, provided that the activities a State selects comprise a rational and coherent nuclear energy program, and are introduced in a time frame that is consistent with the aims of this Treaty.
- 14. Within 90 days of entry into force, each State Party shall provide a description of its Peaceful Use Program for nuclear energy. That information shall include the role of each facility within that program and the future plans for each existing facility and for each new facility in planning or construction, including decommissioning plans.
- 15. Within three years of entry into force, a Committee of the Conference of States Parties shall review each State's peaceful nuclear energy program. As appropriate, consistent with the spirit of the Treaty, the Committee of the Conference of States Parties may recommend modifications, and it may, as deemed necessary, order the cessation of operations in whole or in part
- 16. Subsequent to the initial review, the State shall submit any plans for the construction of any new facility, or physical modification or change in operation of any existing facility intended to or capable of production, processing, storage, utilization or disposition of material subject to the Treaty. Where such construction or modifications involve importing material subject to the Treaty, or a facility, material, equipment or technology specified on the Nuclear Supplier's Group Guidelines, the exporting State and the importing State shall make representations to the Committee of the Conference of States Parties to assist in the determination. The IAEA shall present its analysis to the Committee of the Conference in those proceedings.
- 17. In the event that the findings of the Committee are not acceptable to the State, the State may appeal to the Conference of States Parties.

Facility Design Information

18. Within 90 days of entry into force of the Treaty, each State Party shall submit to the Director General design information on all existing and new facilities described in the Peaceful Use Program of the State that produce, process, store, utilize and dispose of the fissile or fissionable material defined as material subject to the Treaty, or could carry out such functions on said material.

Facility design information should be provided in preliminary form for new facilities, and for modifications of existing facilities as early as possible, before the commencement of any construction, and should be revised as the facility is built or modified.

Facility Design Information Verification

19. Each facility shall be subject to verification over its entire life cycle, including during construction, commissioning, operation, modification, upgrade and decommissioning. The objectives of facility design information verification are to establish the verification approach for material subject to the Treaty and to provide assurance that all fissile and fissionable material stored, processed or used in that facility is and remains subject to verification. Facility design information verification shall confirm that the physical features and technical capabilities of the facilities conform to the design information provided by the State; confirm the performance of facility systems and equipment for use in the control of and accounting for material subject to the Treaty, confirm that all operations carried out conform to information declared by the facility operator and the State and remain in accordance with the approval granted by the Conference of States Parties; and confirm that all fissile material or fissionable material which should be subject to the Treaty is submitted to verification under the Treaty.

Specified Equipment Design Information

20. Within 90 days of entry into force of the Treaty, each State Party shall submit to the Director General design information on all existing specified equipment. The Conference of States Parties shall determine which design information on proliferation-sensitive equipment may be withheld for security reasons. A registry shall be established by the State for each type and item of such equipment, indicating their design features, date and place of manufacture, location, use and status. The registry shall be maintained for each such item from manufacture to destruction.

Specified Equipment Design Information Verification

21. Each item of specified equipment shall be subject to verification over its entire life cycle, including during its development, manufacturing, testing, operation, modification, upgrade and decommissioning. The objectives of specified equipment design information verification are to establish the verification methods and procedures relevant to each item of specified equipment, to track each item of equipment over its life cycle, and to confirm that that equipment is used exclusively in accordance with approvals granted by the Conference of States Parties.

Initial Inventory of Material Subject to the Treaty and Inventory Changes

- 22. Within 90 days of entry into force of the Treaty, each State Party shall submit to the Director General a declaration of all material subject to the Treaty on the territory of the State or under its control anywhere. The declaration shall be listed by location, type and characteristics of said material, and shall include the amount, isotopic composition, physical and chemical form, the dates and methods used to establish the declared amounts and composition, and the combined uncertainty of all measurements and calculations used to determine the amounts and composition declared.
- 23. Each State Party shall submit inventory change reports on a monthly basis for each type of material subject to the Treaty, for each facility and for the State as a whole, showing the book inventory at the end of the previous reporting period, additions and removals during that period, and the resulting ending book inventory. The removals shall include radioactive decay of plutonium 238 and 241, where the amounts of these materials are sufficient to affect their accountancy. The estimates of book inventory, additions and removals shall include estimates of the random and systematic uncertainty of all measurements and calculations used to determine the amounts and compositions declared.
- 24. Each State Party shall ensure that all material subject to the Treaty is maintained at all times under effective control and accounting arrangements, that the locations and amounts are known at all times, that the amounts are determined by measurement and supporting computations, and that the information is acquired, processed, reported and archived in such a manner as to facilitate verification.

Spent Fuel Registry

25. Within 90 days of entry into force of the Treaty, each State Party shall provide a declaration to the

Director General providing information on all irradiated fuel assemblies discharged from nuclear power and research reactors within the State, including the identification of each fuel assembly, the date of last discharge, the initial and final composition of fissile material and fissionable material, the disposition of that fuel assembly and its present location. Thereafter, the State shall provide periodic updates on the relocation and disposition of the fuel assemblies already declared and information on irradiated fuel assemblies discharged after the entry into force of the Treaty.

Verification of Material Subject to the Treaty Arising From Peaceful Use

- 26. Within 180 days of entry into force of the Treaty, inspections shall commence in each State Party of all material subject to the Treaty to verify that said material remains properly accounted for and is not diverted or misused for the undeclared production of fissile or fissionable material or for purposes unknown.
- 27. Upon entry into force of the Treaty, the IAEA together with each State Party to the Treaty shall establish agreed arrangements to assure that all fissile material or fissionable material meeting the definition of material subject to the Treaty produced or imported subsequent to the entry into force of the Treaty is declared by the State Party to the Treaty to the Director General and is subject to verification thereafter.
- 28. Upon entry into force, the IAEA and each State Party to the Treaty shall agree upon additional measures to provide assurance of the absence of undeclared production or imports of fissile material or fissionable material meeting the definition of material subject to the Treaty. The registry of irradiated fuel assemblies declared under §25 shall be used, inter alia, in planning such additional measures.
- 29. The Conference of States parties shall approve of prioritization and phased implementation as may be practically necessary during the initial period of implementation of the Treaty.
- 30. The Director General shall prepare guidelines for such arrangements for approval by the Conference of States Parties, and shall report on the arrangements agreed.
- 31. The Director General shall report to the Conference of States Parties on an annual basis on the implementation of the verification provisions and the findings obtained, separately for each State Party to the Treaty.

Proliferation Resistance

- 32. States Party to the Treaty shall pursue peaceful applications of nuclear energy in a manner intended to prevent or inhibit the misuse of such applications for the development or production of nuclear weapons or other nuclear explosive devices. States intending to develop nuclear capabilities shall proceed in measured steps that are clearly consistent with prudent and legitimate peaceful use.
- 33. Nuclear reactors and associated fuel cycles shall be selected, designed, deployed and operated so as to achieve robust proliferation resistance:
 - a. Nuclear energy systems shall be designed to the extent practicable to avoid the use or production of separated fissile or fissionable material meeting the definition of material subject to this Treaty. Recognizing the special risks associated with highly enriched uranium, the enrichment of uranium used in nuclear power reactors and research reactors shall be below the values stipulated for fissile material meeting the definition of material subject to this Treaty. Future naval propulsion reactors should be designed using lower enrichment uranium to the extent possible.
 - b. Intrinsic features shall be incorporated into each nuclear energy application to physically inhibit the diversion of nuclear material; to inhibit undeclared production of fissile or fissionable material meeting the definition of fissile or fissionable material meeting the definition of material subject to this Treaty; and to incorporate physical structures, instruments, monitoring systems and data collection systems to facilitate verification as required under the Treaty.
 - c. Nuclear energy systems shall be deployed under institutional and commercial arrangements that include extrinsic proliferation resistance measures to inhibit their misuse as a means to acquire fissile or fissionable material for use in nuclear weapons or other nuclear explosive devices. Transfers of isotopic enrichment technology and reprocessing or other technologies for separating and purifying fissile or fissionable material meeting the definition of material subject to this Treaty

- should be discouraged and deferred. Other States or Groups of States under proliferation-resistant arrangements should meet the needs of States for fresh fuel and for the management of radioactive wastes arising from nuclear energy applications, wherever possible.
- d. Nuclear energy systems shall be operated in such a manner as to avoid the accumulation of material subject to this Treaty in excess of specific requirements and approved schedules.
- 34. The Conference of States Parties shall determine the adequacy of proliferation resistance in new projects and modifications to existing projects in each State Party to the Treaty, taking into account the national energy demand, the existing nuclear capability, the incremental change in the State's proliferation capability that would result from the proposed project, the technical, legal and financial infrastructure, and proliferation risk.

Article IV Non-Explosive Military Use

- 35. Each Party to the Treaty shall have the right to produce and employ material subject to the Treaty for non-explosive military applications, noting the requirements of §33.a, according to these provisions:
 - a. Within 90 days of the entry into force of this provision of the Treaty, existing stocks of fissile material or fissionable material intended for non-explosive military applications shall be declared to the IAEA and shall be subject to IAEA verification thereafter.
 - b. At least two years prior to actual need, each State shall request the approval of the Conference of States Parties for the release of a specified amount of material subject to the Treaty for a specified non-explosive military application. The amount specified shall be indicated in terms of the specific intended use, including, as appropriate, the name and model of any vessel or space craft to be powered by the use of such material. The amount requested shall include reasonable amounts for the process requirements corresponding to a maximum of 18 months of fuel manufacturing operations, including anticipated scrap and waste.
 - c. At least two years prior to the commencement of production, each State shall request the approval of the Conference for the production of material subject to the Treaty for use in specified non-explosive military applications. The fissile or fissionable material to be produced shall be subject to IAEA verification and shall be released in accordance with the provisions above. The amounts of fissile material or fissionable material to be produced for non-explosive military use shall not exceed the amounts necessary for more than five years of processing and use.
- 36. Upon completion of a process campaign, the remaining unused material (feed, intermediate products and any scrap material) shall be resubmitted to IAEA verification.
- 37. The IAEA shall carry out managed access inspections of all processing and storage facilities used in conjunction with non-explosive applications of material subject to the Treaty, using appropriate inspection methods to confirm, to the extent possible taking into account the classification of information for such military programs, that the material subject to the Treaty has not been diverted for use in nuclear weapons or other nuclear explosive devices, or for purposes unknown.
- 38. The IAEA shall carry out managed access visits to vessels or other locations where the military applications are carried out, or to install monitoring systems intended to limit inspector access, for the purposes of confirming that such applications are in fact carried out.

Article V Prevention of Theft or Unauthorized Use of Material Subject to the Treaty

- 39. States Parties to the Treaty shall remain accountable for establishing measures within their territory or anywhere under their control to conduct any operations defined within the Treaty in such a manner as to minimize opportunities for nuclear terrorism, to protect all installations and transport systems associated with the operation of the Treaty, to implement measures to detect acts of terrorism in time to prevent their effect, to respond with appropriate means to prevent their success, and to bring to justice those responsible for the planning, support and execution of such acts.
- 40. States Parties to the Treaty shall, under the auspices of the Treaty, cooperate and collaborate in exchanging information on threats of nuclear terrorism and on the mechanisms intended to prevent such acts. States Parties to the Treaty shall remain responsible for the countermeasures implemented within their respective territories and under their control.
- 41. States Parties to the Treaty shall accede to the Convention on the Physical Protection of Nuclear Material and shall implement the provisions of INFCIRC/225, "Recommendations for the Physical Protection of Nuclear Materials".
- 42. States Parties to the Treaty shall adopt and implement physical protection intrinsic features and extrinsic measures to:
 - a. minimize and control access to weapon-usable and other nuclear material, hazardous radioactive material, facilities and transport systems (e.g., through the use of personnel authorization systems, physical barriers, detection equipment, and other appropriate measures);
 - b. minimize the vulnerability of nuclear reactor plant systems to cyber attack;
 - c. provide immediate response, including use of force, if an act of nuclear terrorism is suspected or if unauthorized access to weapon-usable and other nuclear material, hazardous radioactive material, facilities and transport systems is anticipated or attempted;
 - d. take immediate action to recover any stolen material and minimize the consequences of any act of nuclear terrorism; and
 - e. protect vital equipment required to maintain radioactive materials in a safe state, in particular, for reactors the safety systems which provide reactivity control, decay heat removal, and radionuclide confinement.
- 43. There shall be created within the International Atomic Energy Agency a physical protection inspection service, which shall be staffed with qualified experts who shall carry out their duties in accordance with the strictest standards of confidentiality. States Parties to the Treaty may undertake this inspection service on a voluntary basis or as may be specified in legal arrangements concerning nuclear commerce.

B. VERIFICATION AGREEMENTS

Article VI

- 44. Within 180 days of the entry into force of the Treaty, the following verification agreements shall enter into force between each State and the IAEA:
 - a. A comprehensive safeguards agreement incorporating all articles of INFCIRC/153, without diminution, together with a Protocol Additional to the safeguards agreement incorporating all articles of INFCIRC/540, without diminution; and
 - b. A complementary verification agreement specific to the Treaty, setting out the obligations and responsibilities of each State and the IAEA for the exclusive purpose of verification of the fulfillment of its obligations assumed under this Treaty. This verification agreement shall

address separately the obligations arising from Articles I through IV of the Treaty.

- 45. For Parties to the Treaty having nuclear material at the time of entry into force of the Treaty which is not subject to IAEA safeguards, the complementary verification agreement specific to the Treaty shall have the effect of suspending relevant parts of the comprehensive safeguards agreement and Additional Protocol as necessary to prevent classified information relevant to the design or manufacture of nuclear weapons from being divulged through or as a result of the implementation of IAEA verification.
- 46. The Conference of States Parties shall consider steps appropriate to bring about the convergence over time of the verification requirements to a single, non-discriminatory system, with the ultimate goal of removing the suspensions noted in §45, at intervals not to exceed ten years, and upon the entry into force of any arms reductions or nuclear arms control measures.

C. CONFIDENCE BUILDING MEASURES

Article VII Transparency

47. States Parties to this Treaty are expected to conduct all nuclear operations within their territory or anywhere under their control in an open manner, intended to maintain the support of their citizens and to assure neighboring States and the international community that the activities they carry out are consistent with the spirit of this Treaty and its provisions.

Article VIII Participation in Complementary Treaty Regimes

48. The provisions of this Treaty are intended to complement and extend the scope and provisions of the Treaty for the Non-Proliferation of Nuclear Weapons. States Parties to this Treaty are encouraged to conclude regional treaties in order to assure the total absence of nuclear weapons in their respective territories.

Article IX Cooperative Threat Reduction

- 49. In furtherance of the aims of this Treaty, States Parties are encouraged to resolve potential threats to the security of States under the auspices of the Treaty.
- 50. States Parties to the Treaty are encouraged to cooperate to address the security and safety of existing and future nuclear installations, systems and equipment, and including, where appropriate, the security and safety of nuclear weapons.

D. ADMINISTRATION

Article X Conference of States Parties

51. The Conference of States Parties shall determine the manner in which the Treaty is implemented, in accordance with the Articles below. Three years after the entry into force of this Treaty, the first Conference of States Parties to the Treaty shall be held in Vienna, Austria, to establish its rules and procedures to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realized. Thereafter, the Conference of States Parties to the Treaty shall convene at regular intervals to be established by the Conference to review implementation of the Treaty and the timing of transitional implementation measures. The Conference of States Parties to the Treaty may be convened on an urgent and essential basis upon

- the request of any Party, or upon the request of the Board of Governors of the IAEA (hereinafter referred to as the "Board of Governors").
- 51. The Conference of States Parties shall review and approve of the collection and disbursement of funds for the purposes of verification of the Treaty, for support to States Parties to the Treaty to facilitate, as necessary, the implementation of the Treaty, and for other purposes as may be approved by the Conference which are consistent with the aims of this Treaty.
- 52. The Conference of States Parties shall establish a mechanism to provide incentives to individuals and groups to come forward with information pertaining to non-compliance or the threat of nuclear terrorism. Such incentives shall include rewards to be paid for information which is deemed to be reliable and relocation for individuals and their families who might suffer as a result of making such information known.

Article XI Responsibilities of the IAEA

- 53. The Depository for the Treaty shall be the Director General of the IAEA (hereinafter referred to as the "Director General"). This Treaty, the Arabic, Chinese, French, English, Russian, and Spanish and Chinese texts of which are equally authentic, shall be deposited in the archives of the Director General. The Director General to the Governments of the signatory and acceding States shall transmit duly certified copies of this Treaty to all States Parties.
- 54. The verification and confidence building measures set forth in the Articles above shall be implemented by and through the Director General and the Secretariat of IAEA. Parties to the Treaty shall conclude verification agreements with the IAEA as specified in Article VII of the Treaty.
- 55. At periodic intervals to be established by the Conference of States Parties, the Director General shall report to the Conference of States Parties on the implementation of the Treaty separately for each State Party, in respect of the nuclear energy program agreed by the Conference of States Parties, information received from the State, the verification activities carried out and the conclusions drawn from those verification activities. The Board of Governors shall review such reports prior to their submission to the Conference of States Parties and shall take appropriate steps to implement any actions specified by the Conference arising from its consideration of such reports.
- 56. The Director General shall establish and maintain a special fund to be created for the purpose of collecting and disbursing funds for the implementation of this Treaty, under the supervision of the Conference of States Parties, as established in Article XI§45 above.
- 57. The Board of Governors shall recommend to the Conference of States Parties the budget for implementation of the Treaty, together with the organizational structure and staffing of the Secretariat of the IAEA for this purpose. The budget shall include the costs to the IAEA Secretariat for the implementation of the Treaty in all aspects, together with the costs of projects in States Parties meeting the provisions of Article XI§45 as necessary for the implementation of the Treaty.

Article XII Entry into Force

- 58. The Treaty shall enter into force in two steps. Upon ratification by 35 States, except for Articles II§10-11 and Article IV, the Treaty shall enter into force. Articles II§10-11 and Article IV shall enter into force when a minimum of five States, which possess material subject to the Treaty that is not subject to IAEA safeguards, deposit their instruments of ratification. Any State possessing such material may waive this provision and bring the remaining Articles into force before the minimum condition is met.
- 59. Any State that does not sign the Treaty before its entry into force may accede to it at any time thereafter.
- 60. This Treaty shall be subject to ratification by signatory States. Instruments of ratification and instruments of accession shall be deposited with the Director General. The Director General shall promptly inform all signatory and acceding States of the date of each signature, the date of deposit of each instrument of ratification or of accession, the date of the entry into force of this Treaty, and the date of receipt of any requests for convening a conference or other notices.

- 61. For States whose instruments of ratification or accession are deposited subsequent to the entry into force of this Treaty, it shall enter into force on the date of the deposit of their instruments of ratification or accession.
- 62. This Treaty shall be registered by the Director General pursuant to Article 102 of the Charter of the United Nations.
- 63. The Treaty shall remain in force indefinitely.

Article XIII Provisional Arrangements

64. In the period from the opening of the Treaty for signing and entry into force under the provisions of Article XII, the States signing the Treaty shall comprise an interim body to advise on the preparations for implementation. This Preparatory Conference of States Parties shall be empowered to review ongoing nuclear construction projects and to determine whether or not they meet the relevant considerations of Article III §15.

Article XIV Implementation by States Parties

65. Each party to the Treaty shall enact and enforce laws and regulations governing the implementation of the Treaty, including criminal proceedings against organizations and individuals found in violation of the provisions of Articles I through V of the Treaty.

Article XV Amendments

- 66. Any Party to the Treaty may propose amendments to this Treaty. The text of any proposed amendment shall be submitted to the Director General who shall circulate it to all Parties to the Treaty. Thereupon, if requested to do so by one-third or more of the Parties to the Treaty, the Director General shall convene a Conference of States Parties, to which they shall invite all the Parties to the Treaty, to consider such an amendment.
- 67. Any amendment to this Treaty shall be approved by a majority of the votes of all the Parties the Treaty. The amendment shall enter into force for each Party that deposits its instrument of ratification of the amendment upon the deposit of such instruments of ratification by a majority of all the Parties. Thereafter, it shall enter into force for any other Party upon the deposit of its instrument of ratification of the amendment.

Article XV Finance

- 68. Upon entry into force, each State Party to the Treaty shall commence the collection of a 1% surcharge on all electricity or other energy products produced within each State through the use of nuclear energy. The funds collected by each State shall be deposited at quarterly intervals in the special account established for this purpose under the provisions of Article XI§56 above.
- 69. If for any reason the funding provided through §68 is deemed to be insufficient to allow the Treaty to be implemented as intended, the Conference of States Parties shall determine whether to increase the rate from 1%, or to include the shortfalls in the regular budget of the IAEA, to be secured according to the procedures specified in the IAEA Statute.

Article XVI Non-Compliance

- 70. Any State Party to the Treaty, or the Director General, may convene a special meeting of the Conference of States Parties to raise a question of non-compliance by a State Party to the Treaty with any of the Treaty's provisions. Such a meeting would commence not less than 24 hours nor more than 48 hours following the notification to the States Parties, and to the Director General, as appropriate. In such cases, the States Parties participating in the special meeting shall constitute a quorum.
- 71. The special meeting of the Conference of States Parties shall hear the allegations and the response of the State Party or States Parties for which non-compliance is raised. This hearing shall be of a preliminary nature and shall not extend beyond 72 hours of the commencement of the special meeting.
- 72. The special meeting of the Conference of States Parties may decide to refer the allegation to the United Nations Security Council, or the special meeting of the Conference of States Parties may establish a judiciary panel for the purposes of determining the merit of the allegations and the remedies to be effected.
- 73. Such a panel would be comprised of nine senior justices or diplomats of ambassadorial rank or above. Three of the panel members shall be named by the State Party or States Parties or by the Director General, as appropriate, alleging the non-compliance. The State Party or States Parties alleged to be in non-compliance shall name three of the panel members. The final three panel members shall be chosen to be mutually acceptable to the State Party or States Parties or by the Director General, as appropriate, alleging the non-compliance, and to the State Party or States Parties alleged to be in non-compliance. In the event that the Parties are unable to agree upon the panel within 72 hours of the request, the Secretary General of the United Nations shall provide appropriate panelists.
- 74. One panel member of the latter group shall be selected to be the President of the Special Panel. Should the selection not be made within 48 hours, the Secretary General shall name the President of the Panel.
- 75. The Panel shall have the right to call witnesses and to receive any and all information supporting the allegation and the response, with the exception of information deemed to be sensitive in relation to the design or manufacture of nuclear weapons.
- 76. The Panel shall conclude its investigation as soon as possible. Its findings shall address the validity of the charges alleged and the remedies to be pursued.

Article XVII Withdrawal from the Treaty

77. Until such time as the total number of States Parties is 170 or less, each Party shall in exercising its national sovereignty have the right to withdraw from the Treaty if it decides that extraordinary events, related to the subject matter of this Treaty, have jeopardized the supreme interests of its country. It shall give notice of such withdrawal to all other Parties to the Treaty and to the United Nations Security Council three months in advance. Such notice shall include a statement of the extraordinary events it regards as having jeopardized its supreme interests.

- 78. Upon the entry into force of the 171st Party to the Treaty, the provisions of §77 shall no longer apply. Thereafter, each party to the Treaty shall remain a Party to the Treaty for as long as the Treaty remains in force.
- 79. In the event that a Party to the Treaty believes that it is compelled to consider withdrawing from the Treaty or of suspending its observance its undertakings under the Treaty, due to threats to its integrity by another State or group of States, the Party shall request the Conference of States Parties to address the situation with the intention of maintaining the spirit of the Treaty and the integrity of the regime it creates.

In witness whereof the undersigned, duly authorized, have signed this Treaty.

Done in duplicate, in Vienna, the <nth day of <Month>, two thousand and <year>.

Annex: Definitions

- 80. Fissile material shall mean any nuclear species that will fission when struck by a neutron of any kinetic energy; fissionable material shall mean any nuclear species that will fission when struck by a neutron of kinetic energy in excess of a threshold value.
- 81. Material subject to the Treaty shall mean fissile and fissionable materials which each State Party is required to include under its obligations to report and which the IAEA is required to verify, comprising all fissile and fissionable material separated from fission products which is not contained in deployed nuclear weapons or strategic reserves:
 - i. plutonium containing any combination of isotopes, except for plutonium containing 80% or more of the isotope 238 Pu;
 - ii. uranium containing any mixture of the isotopes 235 U and 233 U such that ($\%^{235}$ U + $^{5}/_{3}$ ($\%^{233}$ U)) $\geq 20\%$ U;
 - iii. neptunium; and
 - iv. americium.

Additional fissile or fissionable materials suitable for the manufacture of nuclear weapons or other nuclear explosive devices, or changes in these parametric values, may be modified by a simple majority of the Conference of States Parties.

- 82. Physical Protection shall mean the use of technical, administrative and operational measures to prevent the theft of material subject to the Treaty, theft of hazardous radioactive material for use in a radiological dispersal device or sabotage of a nuclear installation or transport system.
- 81. Production (of material subject to the Treaty) shall mean:
 - i. Enrichment of isotopes to produce uranium or plutonium with enhanced fission properties;
 - ii. Separation of any fissile or fissionable material from fission products through reprocessing or any other process, provided that the fissile or fissionable material separated qualifies as material subject to the Treaty under §69;
 - iii. Separation of americium from plutonium, except from plutonium produced prior to entry into

force which has not been submitted to verification under the Treaty.

A production facility shall mean any facility in which any production activity is carried out, or could be carried out.

- 82. Proliferation resistance shall mean the ability of a nuclear reactor and its associated fuel cycle to impede the diversion or undeclared production of fissile or fissionable material meeting the definition of material subject to the Treaty. Proliferation resistance shall include:
 - Intrinsic features: physical properties or characteristics of nuclear energy systems that are intended to reduce the usability of the nuclear material for nuclear weapons or nuclear explosive devices, restrict physical possibilities for diversion, prevent or inhibit undeclared production of fissile material or fissionable material, and facilitate verification; and
 - Extrinsic measures resulting from States' undertakings to: strengthen international norms against proliferation, reduce the incentives of States to acquire enrichment or reprocessing technologies, restrict access to sensitive nuclear materials and facilities, implement verification at the local, State, regional and international level, and provide for prompt and effective resolution of anomalies and violations.
- 83. Specified equipment shall mean equipment identified in Annex II of INFCIRC/540, as may be amended.

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