International Atomic Energy Agency
INFORMATION CIRCULAR

INF

INFCIRC/291
February 1982

GENERAL Distr.
ENGLISH
Original: SPANISH

THE TEXT OF THE AGREEMENT OF 1 APRIL 1981 BETWEEN SPAIN AND THE AGENCY FOR THE APPLICATION OF SAFEGUARDS RELATING TO FOUR NUCLEAR FACILITIES

1. The text [1] of the Agreement of I April 1981 between Spain and the Agency for the application of safeguards relating to four nuclear facilities is reproduced in this document for the information of all Members.

2. The Agreement entered into force, pursuant to Section 31, on 11 May 1981.

[1] The footnote to the text has been added in the present information circular.

AGREEMENT BETWEEN THE GOVERNMENT OF SPAIN AND THE INTERNATIONAL ATOMIC ENERGY AGENCY FOR THE APPLICATION OF SAFEGUARDS IN RELATION TO FOUR NUCLEAR FACILITIES

WHEREAS the International Atomic Energy Agency (hereinafter referred to as "the Agency") is authorized by its Statute to apply safeguards, at the request of the parties, to any bilateral or multilateral arrangement, or at the request of a State, to any of that State's activities in the field of atomic energy;

WHEREAS the Government of Spain (hereinafter referred to as "Spain") has requested the Agency to apply safeguards in relation to

- the Argos and Arbi Research Reactors at the Higher Technical Schools for Industrial Engineers at Barcelona and Bilbao, respectively;

- the M-1 pilot reprocessing plant at the Juan Vigón National Nuclear Energy Centre; and

- the Plant for fabrication of research reactor fuel element at the Juan Vigón National Nuclear Energy Centre;

WHEREAS the Board of Governors of the Agency (hereinafter referred to as "the Board") has acceded to that request on 25 February 1981;

NOW THEREFORE, the Agency and Spain hereby agree as follows:

DEFINITIONS

Section 1. For the purposes of this Agreement:

(a) "facility" shall mean:

(i) A principal nuclear facility as defined in paragraph 78 of the Safeguards Document as well as a critical facility or a separate storage installation;

(ii) A plant for production of heavy water; or

(iii) Any location where nuclear material in amounts greater than one effective kilogram is customarily used;

(b) "specified nuclear facilities" shall mean:

- the Argos and Arbi research reactors at the Higher Technical Schools for industrial Engineers at Barcelona and Bilbao, respectively;
- the M-1 pilot reprocessing plant at the Juan Vigón National Nuclear Energy Centre; and
- the Plant for fabrication of research reactor fuel elements at the Juan Vigon National Nuclear Energy Centre;

(c) "equipment" shall mean any equipment which is especially designed or prepared for the processing, use or production of nuclear material. The team shall include all items listed in Appendix A to this Agreement as well as any major components thereof;

(d) "nuclear material" shall mean any source material or special fissionable material as defined in Article XX of the Statute of the Agency;

(e) "material" shall mean any substance which is especially prepared for the production, processing, or use of nuclear material; the term shall include the substances listed in Appendix B to this Agreement;

(f) produced, processed or used" shall mean any utilization or any alteration of the physical or chemical form or composition, including any change of the isotopic composition, of the nuclear material or material involved;

(g) "Safeguards Document" shall mean Agency document INFCIRC/66/Rev.2;

(h) "Inspectors Document" shall mean the Annex to Agency document GC/(V)/INF/39;

(i) recommendations for physical protection" shall mean Agency document INFCIRC/225/Rev.1 as updated from time to time;

(j) “effective kilogram” shall mean:

(i) in the case of plutonium, its weight in kilograms;

(ii) in the case of uranium with an enrichment of 0.01 (1%) and above, its weight in kilograms multiplied by the square of its enrichment;

(iii) in the case of uranium with an enrichment below 0.01 (1%) and above 0.005 (0.5%), its weight in kilograms multiplied by 0.0001; and

(iv) in the case of depleted uranium with an enrichment of 0.005 (0.5%) or below, and in the case of thorium its weight in kilograms multiplied by 0.00005.

UNDERTAKINGS BY SPAIN AND THE AGENCY

Section 2. Spain undertakes that none of the following items shall be used for the manufacture of any nuclear weapon or to further any other military purpose or for the manufacture of any other nuclear explosive device:

(a) Specified nuclear facilities and equipment thereof;

(b) Nuclear material, material or equipment notified to the Agency in accordance with Section 11 (b) (i);

(c) Nuclear material, including subsequent generations of special fissionable material, and any material, which is produced or processed or used in or on the basis of or by the use of any item referred to in this Section;

(d) Any other item required to be listed in the Inventory referred to in Section 10.

Section 3. Spain undertakes to accept Agency safeguards as provided for in this Agreement on the items referred to in Section 2.

Section 4. Span undertakes to facilitate the application of safeguards by the Agency as provided for in this Agreement and to co-operate with the Agency to that end.

Section 5. The Agency undertakes to apply safeguards as provided for in this Agreement to the items referred to in Section 2 to ensure, so far as it is able, that no such item is used for the manufacture of any nuclear weapon or to further any other military purpose or for the manufacture of any other nuclear explosive device.

Section 6. Spain and the Agency shall consult annually or at any other time at the request of either party to ensure the effective implementation of this Agreement; for this purpose each shall provide the other with such relevant information as the other may require.

SAFEGUARDS PRINCIPLES

Section 7. In applying safeguards, the Agency shall observe the principles set forth in paragraphs 9 to 14 of the Safeguards Document.

SAFEGUARDS PROCEDURES

Section 8.

(a) The safeguards procedures to be applied by the Agency are those specified in the Safeguards Document, and such additional procedures resulting from technological developments as may be agreed upon between the Agency and Spain;

(b) The Agency shall make subsidiary Arrangements with Spain concerning the implementation of safeguards procedures which shall include such containment and surveillance measures as are required for the effective application of safeguards, as well as any procedures necessary for ' g and verifying the correctness of the Inventory with respect to facilities, equipment, nuclear material and material. The Subsidiary Arrangements required by this Section shall enter into force within six months of the entry into force of this Agreement.

(c) The Agency shall have the right to request the information referred to in paragraph 41 of the Safeguards Document and too make the inspections referred to in paragraphs 51 and 52 thereof.

ESTABLISHMENT AND MAINTENANCE OF THE INVENTORY AND THE LIST

Section 9. The Agency shall establish and maintain an Inventory as provided for in Section 10. The Agency shall send copies of the Inventory try Spain every twelve months and at any other time within two weeks of receiving a request for such copies from Spain.

Section 10. The following items in Spain shall be listed in the Inventory upon receipt of the relevant notification or report from Spain as specified in Sections 11 and 12:

(a) In the Main Part of the Inventory:

(i) Specified nuclear facilities and equipment thereof;

(ii) Nuclear material, material or equipment notified to the Agency in accordance with Section 11(b)(i);

(iii) Nuclear material, including subsequent generations of special fissionable material and any material, produced, processed or used in or on the basis or by the use of any item listed in the Inventory;

(b) In the Subsidiary Part of the Inventory:

(i) Any facility other than the specified nuclear facilities and any equipment which is storing nuclear material or material referred to in the Main Part of the Inventory;

(ii) Any facility other than the specified nuclear facilities which contains equipment referred to in the Main Part of the Inventory;

(iii) Any facility other than the specified nuclear facilities, and any equipment which is using, processing or fabricating any nuclear material or material referred to in the Main Part of the Inventory.

(c) In the Inactive Part of the Inventory:

Any nuclear material which is not listed in the Main Part of the Inventory because:

(i) It has been exempted from safeguards pursuant to Section 17 or

(ii) Safeguards thereon have been suspended pursuant to Section 18.

NOTIFICATIONS AND REPORTS

Section 11.

(a) Spain shall notify the Agency of items required to be listed in the Inventory as of the date of the entry into force of this Agreement.

(b) Thereafter Spain shall notify the Agency of:

  (i) The transfer to Spain of nuclear material, material or equipment intended for use in a specified nuclear facility;

  (ii) Any facility in Spain which contains equipment referred to in the Main Part of the Inventory;

  (iii) Any facility or equipment in Spain which is storing, using or processing any nuclear material or material referred to in the Main Part of the Inventory.

Section 12. Spain shall notify the Agency by means of reports in accordance with the Safeguards Document and the Subsidiary Arrangements provided for in Section 8(b) of any nuclear material or material produced, processed or used during the period covered by the report and which is required pursuant to Section 10(a)(iii) to be listed in the Main Part of the Inventory. Upon receipt of the reports the Agency shall list such materials in the Main Part of the Inventory. The Agency may verify the

calculations of the amounts of such material and appropriate adjustments in the Inventory shall be made by agreement between the Parties.

Section 13. The notifications provided for in Section 11 shall be made as follows:

(a) For Section 11(a), within two weeks of the entry into force of the Agreement;

(b) For Section 11 (b) (i) , not more than two weeks after the item has arrived in Spain;

(c) For Section 11 (b) (ii) and (iii), not more than two weeks after the entry into force of the Agreement or the arrival of the equipment, the nuclear material or the material at e facility, as appropriate.

Section 14. Notifications made pursuant to Sections 11, 12 and 16 shall specify, inter alia, to the extent relevant, the nuclear and chemical ocmposition, physical form and the quantity of the nuclear material or material or the type and capacity of any equipment or facility, the date of shipment, the date of receipt, the identity of the consignor and the consignee and any other relevant information.

Section 15. The Agency shall, within thirty days of receiving a notification pursuant to Section 11 inform Spain that the items covered by the notification are listed in the Main Part of the Inventory.

TRANSFERS

Section 16.

(a) Spain shall notify the Agency of its intention to transfer any item listed in the Main Part of the Inventory to any

facility within its jurisdiction which is not listed in the Inventory, and shall provide to the Agency, before such transfer is effected, sufficient information too enable it to determine whether it can apply safeguards to the items after transfer to such a facility. The items shall not be transferred until all the necessary arrangements with the Agency to this end have been concluded.

(b) Spain shall notify the Agency of any intended transfer of any item listed in the Main Part of the Inventory to a recipient which is not under the jurisdiction of Spain. Such items shall not be so transferred until the Agency has inform Spain, within a period to be specified in the Subsidiary Arrangements, that it has satisfied itself that Agency safeguards will apply in connection with the use of such item. Upon receipt of notification of transfer from Spain and confirmation of receipt by the recipient country, the items in question shall be deleted from the Inventory.

EXEMPTION FROM AND SUSPENSION OF SAFEGUARDS

Section 17. Nuclear material listed in the Main Part of the Inventory shall be exempted from safeguards under the conditions specified in paragraphs 21, 22 or 23 of the Safeguards Document.

Section 18. The Agency may suspend safeguards on nuclear material under the conditions specified in paragraphs 24 and 25 of the Safeguards Document.

Section 19. Nuclear material which is exempted from safeguards pursuant to Section 17 and nuclear material on which safeguards have been suspended pursuant to Section 18 shall be deleted from the Main Part of the Inventory and shall be listed in the Inactive Part of the Inventory.

TERMINATION OF SAFEGUARDS

Section 20. The safeguards applied pursuant to this Agreement shall be terminated by the Agency under the following conditions:

(a) On nuclear material, material, equipment and nuclear facilities, upon transfer in accordance with Section 16(b);

(b) On nuclear material under the conditions specified in paragraph 26 and paragraph 27 of the Safeguards Document;

(c) On material, equipment and facilities as and when the Agency determines that the item in question is no longer usable for any nuclear activity relevant from the point of view of safeguards.

Section 21. Upon termination of safeguards on any nuclear material, material, equipment or facility pursuant to Section 20 the item in question shall be deleted from the Inventory. The Agency shall, within thirty days of deleting the item from the Inventory pursuant to Section 20 inform Spain that such a deletion has been made.

AGENCY INSPECTORS

Section 22. The provisions of paragraphs 1 to 10 and 12 to 14, inclusive, of the Inspectors Document shall apply to Agency inspectors performing functions pursuant to this Agreement. However, paragraph 4

of the Inspectors Document shall not apply with regard to any nuclear facility or nuclear material to which the agency has access at all times. The actual procedures to implant paragraph 50 of the Safeguards Document shall be agreed before the nuclear facility or the nuclear material is listed in the Inventory.

Section 23. The relevant provisions of the Agreement on the Privileges and Immunities of the Agency[2/] shall apply to the Agency, its inspectors and any property of the Agency used by them in performing their functions under this Agreement.

PHYSICAL PROTECTION

Section 24. Spain shall take all the measures necessary for the physical protection of nuclear material, equipment and facilities required to be listed in the Inventory and shall be guided by the recommendations of the Agency with regard to such measures and shall at a minimum meet the levels of physical protection which are set out in Appendix C to this Agreement.

FINANCIAL PROVISIONS

Section 25. Expenses shall be borne as follows:

(a) Subject to paragraph (b) of this Section, each Party shall bear any expenses incurred in the implementation of its responsibilities under this Agreement;

(b) All special expenses incurred by Span or by persons under its jurisdiction, at the written request of the Agency, its inspectors or other officials, shall be reimbursed by the Agency if Spain notifies the Agency before the expense is incurred that reimbursement will be required.

2/ INFCIRC/9/Rev.2.

Nothing in this Section shall prejudice the allocation of expenses which are reasonably attributable to a failure by either Party to fly with this Agreement.

Section 26. Spain shall ensure that any protection against third-party liability, including any insurance or other financial security, in respect of a nuclear incident occurring in a nuclear facility of Span shall apply to the Agency and its inspectors when carrying out their functions under this Agreement as that protection applies to nationals of Spain.

THE AGENCY'S OBLIGATIONS IN THE EVENT OF NON-COMPLIANCE

Section 27.

(a) If the Board determines, in accordance with Article XII.C of the Statute, that there has been any non-compliance with this Agreement, the Board shall call upon .min to remedy such non-compliance forthwith, and the Board shall make such reports as it deems appropriate. In the event of failure by Spain to take fully corrective action within a reasonable time, the Board may take any other measures provided for in Article XII.C of the Statute.

(b) The Agency shall immediately notify Spain of any determination of the Board pursuant to this Section.

SETTLEMENT OF DISPUTES

Section 28. Any dispute arising out of the interpretation or application of this Agreement which is not settled by negotiation or another procedure agreed to by Swain and the Agency, shall on the request of either Spain or the Agency be submitted to an arbitral tribunal composed as follows:

Spain and the Agency shall each designate one arbitrator and the two arbitrators so designated shall elect a third who shall be the Chairman. If within thirty days of the request for arbitration either Spain or the Agency has not designated an arbitrator, Spain or the Agency may request the President of the International Court of Justice to appoint an arbitrator. The same procedure shall apply if, within thirty days of the designation or appointment of the second arbitrator, the third arbitrator has not been elected. A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall be made by majority vote. The arbitral procedure shall be fixed by the tribunal. The decisions of the tribunal, including all rulings concerning its constitution, procedure, jurisdiction and the division of the expenses of arbitration between Spain and the Agency, shall be binding on Spain and the Agency. The remuneration of the arbitrators shall be determined on the same basis as that of ad hoc judges of the International Court of Justice.

Section 29. Decisions of the Board concerning the implantation of this fit, except such as relate only to Sections 24, 25 and 26 shall, if they so provide, be given effect immediately by the Parties, pending the final settlement of any dispute.

FINAL CLAUSES

Section 30. The Parties shall, at the request of either of these, consult about mending this Agreement. If the Board decides to make any changes in the Safeguards Document or in the Inspectors Document, this Agreement shall be mended if the Parties so agree, to take account of such changes, as of the date of the request.

Section 31. This Agreement shall enter into force after signature by or for the Director General of the Agency and by the authorized representative of Spain and when the Agency receives written notification from Spain that the constitutional requirements for entry into force have been duly fulfilled. This Agreement shall remain in force until safeguards have been terminated in accordance with its provisions, on all nuclear material, including subsequent generations of produced special fissionable material, subject to safeguards under this Agreement, and all other items referred to in Section 2, or as may be otherwise agreed between the Agency and Spain.

DONE in Vienna on the first day of April 1981, in duplicate in the Spanish language.

For the INTERNATIONAL ATOMIC ENERGY AGENCY:

(signed) Sigvard Eklund

For the GOVERNMENT OF' SPAIN:

(signed) Juan Manuel Castro-Rial

APPENDIX A

1. Nuclear reactors capable of operation so as to maintain a controlled self-sustaining fission chain reaction, excluding zero energy reactors; the latter being defined as reactors with a designed maximum rate of production of plutonium not exceeding 100 grams per year.

A "Nuclear reactor" basically includes the items within or attached directly to the reactor vessel, the equipment which controls the level of power in the core, and the components which normally contain or come in direct contact with or control the primary coolant of the reactor core.

It is not intended to exclude reactors which could reasonably be capable of modification to produce significantly more than 100 grams of plutonium per year. Reactors designed for sustained operation at significant power levels, regardless of their capacity for plutonium production, are not considered as "zero energy reactors".

2. Reactor pressure vessels: Metal vessels, as complete units or as major shop-fabricated parts therefor, which are especially designed or prepared to contain the core of a nuclear reactor as defined in paragraph 1 above and are capable of withstanding the operating pressure of the primary coolant.

A top plate for a reactor pressure vessel is a major shop-fabricated part of a pressure vessel.

3. Reactor internals (e.g. support columns and plates for the core and other vessel internals, control rod guide tubes, thermal shields, baffles, core grid plates, diffuser plates, etc.).

4. Reactor fuel charging and discharging machines: Manipulative equipment especially designed or prepared for inserting or removing fuel in a nuclear reactor as defined in paragraph 1 above capable of on-load operation or employing technically sophisticated positioning or alignment features to allow complex off-load fuelling operations such as those in which direct viewing of or access to the fuel is not normally available.

5. Reactor control rods: Rods especially designed or prepared for the control of the reaction rate in a nuclear reactor as defined in paragraph 1 above.

This item includes, in addition to the neutron absorbing part, the support or suspension structures therefor if supplied separately.

6. Reactor pressure tubes: Tubes which are especially designed or prepared to contain fuel elements and the primary coolant in a reactor as defined in paragraph 1 above at an operating pressure in excess of 50 atmospheres.

7. Zirconium tubes: Zirconium metal and alloys in the form of tubes or assemblies of tubes, and in quantities exceeding 500 kg, especially designed or prepared for use in a reactor as defined in paragraph 1 above, and in which the relationship of hafnium to zirconium is less than 1:500 parts by weight.

8. Primary coolant pumps: Pumps especially designed or prepared for circulating the primary coolant for nuclear reactors as defined in paragraph 1 above.

9. Facilities for the reprocessing of irradiated fuel elements, and equipment especially designed or prepared therefor.

A "Facility for the. reprocessing of irradiated fuel elements" includes the equipment and components which normally come in direct contact with and directly control the irradiated fuel and the major nuclear material and fission product processing streams. In the present state of technology only two items of equipment are considered to fall within the meaning of the phrase "and equipment especially designed or prepared therefor". These items are:

(a) Irradiated fuel element chopping machines: remotely operated equipment especially designed or prepared for use in a reprocessing plant as identified above and intended to cut, chop or shear irradiated nuclear fuel assemblies, bundles or rods; and

(b) Critically safe tanks (e.g. small diameter, annular or slab tanks) especially designed or prepared for use in a reprocessing plant as identified above, intended for dissolution of irradiated nuclear fuel and which are capable of withstanding hot, highly corrosive liquid, and which can be remotely loaded and maintained.

10. Facilities for the fabrication of fuel elements:

A "Facility for the fabrication of fuel elements" includes the equipment:

(a) Which normally comes in direct contact with or directly processes, or controls, the production flow of nuclear material, or

(b) Which seals the nuclear material within the cladding.

The whole set of items for the foregoing operations, as well as individual items intended for any of the foregoing operations, and for other fuel fabrication operations, such as checking the integrity of the cladding or the seal, and the finish treatment to the solid fuel.

11. Equipment, other than analytical instruments, especially designed or prepared for the separation of isotopes of uranium:

"Equipment, other than analytical instruments, especially designed or prepared for the separation of isotopes of uranium" includes each of the major items of equipment especially designed or prepared for the separation process.

12. Facilities for the production of heavy water:

A "Facility for the production of heavy water" includes the plant and equipment specially designed for the enrichment of deuterium or its compounds.

13. Major components of Items 1 to 12 above, as well as any significant fraction of the items essential to the operation of a facility for the reprocessing or enrichment of nuclear material or the production of heavy water.

APPENDIX B

Substances specially prepared for the use or production of "source material" or "special fissionable material"

1. Deuterium and heavy water: Deuterium and any deuterium compound in which the ratio of deuterium to hydrogen exceeds 1:5000 for use in a nuclear reactor, as defined in paragraph 1 of Appendix A, in quantities exceeding 200 kg of deuterium atoms in any period of 12 months.

2. Nuclear grade graphite: Graphite having a purity level better than 5 parts per million boron equivalent and with a density greater than 1. 50 grams per cubic centimeter in quantities exceeding 30 metric tons in any period of 12 months.

APPENDIX C

Agreed Levels of Physical Protection

The agreed levels of physical protection to be ensured by the appropriate governmental authorities in the use, storage and transportation of the materials of the attached table shall as a minimum include protection characteristics as follows:

CATEGORY III

Use and Storage within an area to which access is controlled.

Transportation under special precautions including prior arrangement between sender, recipient and carrier, and prior agreement between States in case of international transport specifying time, place and procedures for transferring transport responsibility.

CATEGORY II

Use and Storage within a protected area to which access is controlled, i. e. an area under constant surveillance by guards or electronic devices, surrounded by a physical barrier with a limited number of points of entry under appropriate control, or any area with an equivalent level of physical protection.

Transportation under special precautions including prior arrangement between sender, recipient and carrier, and prior agreement between States in case of international transport specifying time, place and procedures for transferring transport responsibility.

CATEGORY I

Materials in this Category shall be protected with highly reliable systems against unauthorized use as follows:

Use and Storage within a highly protected area, i. e. a protected area as defined for Category II above, to which, in addition, access is restricted to persons whose trustworthiness has been determined and under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault, unauthorized access or unauthorized removal of material.

Transportation under special precautions as identified above for transportation of Category II and III materials and, in addition, under constant surveillance of escorts and under conditions which assure close communication with appropriate response forces.

CATEGORIZATION OF NUCLEAR MATERIAL

	Material	Form	Category I	Category II	Category III
1.	Plutonium[a/]	Unirradiated[b/]	2 kg or more	less than 2 kg but more than 500 g	500 g or less[c/]
2.	Uranium-235	Unirradiated[b/]			
		- uranium enriched to 20% ^{235}U or more	5 kg or more	Less than 5 kg but more than 1 kg	1 kg or less[c/]
		- uranium enriched to 10% ^{235}U but less than 20%	-	10 kg or more	Less than 10 kg[c/]
		- uranium enriched above natural, but less than 10% ^{235}U[d/]	-	-	10 kg or more
3.	Uranium-233	Unirradiated[b/]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less[c/]
4.	Irradiated fuel		[e/]	[e/]	Depleted or natural uranium, thorium or low enriched fuel (less than 10% fissile content)[e/]

[a/] As identified in the Statute of the IAEA.

[b/] Material not irradiated in a reactor or material irradiated in a reactor but with a radiation level equal to or less than 100 rads/hour at one metre unshielded.

[c/] Less than a radiologically significant quantity should be exempted.

[d/] Natural uranium, depleted uranium and thorium and quantities of uranium enriched to less than 10% not falling in Category III should be protected in accordance with prudent management practice.

[e/] Other fuel which by virtue of its original fissile material content is classified as Category I or II before irradiation may be reduced one category level when the radiation level from the fuel exceeds 100 rads/hour at one metre unshielded.