No. 22683

INTERNATIONAL ATOMIC ENERGY AGENCY
and
ROMANIA

Agreement concerning the transfer of enriched uranium for irradiation studies in a research reactor in Romania (with annex). Signed at Vienna on 1 July 1983

Authentic text: French.

Registered by the International Atomic Energy Agency on 23 January 1984.

AGENCE INTERNATIONALE DE L'ÉNERGIE ATOMIQUE
et
ROUMANIE

Accord relatif à la cession d'uranium enrichi pour des études d'irradiation dans un réacteur de recherche en Roumanie (avec annexe). Signé à Vienne le 1er juillet 1983

Texte authentique : français.

Enregistré par l'Agence internationale de l'énergie atomique le 23 janvier 1984.

[TRANSLATION[1] — TRADUCTION[2]]

AGREEMENT[3] BETWEEN THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF ROMANIA AND THE INTERNATIONAL ATOMIC ENERGY AGENCY CONCERNING THE TRANSFER OF ENRICHED URANIUM FOR IRRADIATION STUDIES IN A RESEARCH REACTOR IN ROMANIA

Whereas the Government of the Socialist Republic of Romania (hereinafter called "Romania") has established a research and development project consisting in the fabrication of experimental fuel elements for irradiation tests (hereinafter called the "project") in the dual-core TRIGA research reactor (hereinafter called the "reactor") at the Institute of Nuclear Power Reactors (hereinafter called the "Institute") at Pitesti in the Socialist Republic of Romania;

Whereas Romania has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in securing a supply of enriched uranium for use in the fabrication of experimental fuel elements for the project;

Whereas under the Agency's Technical Co-operation Programme for 1983, arrangements have been made between the Agency and the Government of the Union of Soviet Socialist Republics (hereinafter called the "Soviet Union") for the provision of uranium dioxide powder containing enriched uranium for use in the project; and

Whereas the Board of Governors of the Agency (hereinafter called the "Board") approved the transfer of enriched uranium for the project on 10 June 1983;

Now, therefore, Romania and the Agency hereby agree as follows:

Article I. DEFINITION OF THE PROJECT

1. The project to which this Agreement relates is the fabrication of experimental fuel elements for use in irradiation tests in the reactor and for post-irradiation studies in the hot cells at the Institute.

2. This Agreement shall apply, *mutatis mutandis*, to any additional assistance provided by the Agency to Romania for the project.

3. Except as specified herein, the Agency shall not assume any obligations or responsibilities in so far as the project is concerned.

Article II. SUPPLY OF ENRICHED URANIUM

1. Subject to the provisions of this Agreement, the Agency shall request the Soviet Union to permit the transfer and export to Romania of approximately 5,000 grams of uranium dioxide powder containing approximately 4,500 grams of uranium enriched to approximately 20 per cent by weight in the isotope uranium-235 (hereinafter called the "supplied material") for use in the fabrication of experimental fuel elements for the project.

2. The particular terms and conditions for the purchase and transfer of the supplied material, including all charges for or connected with such material, a sched-

[1] Translation supplied by the International Atomic Energy Agency.
[2] Traduction fournie par l'Agence internationale de l'énergie atomique.
[3] Came into force on 1 July 1983 by signature, in accordance with article XIII (1).

ule of deliveries and shipping instructions, shall be specified in a contract between the Agency and the Soviet Union in implementation of this Agreement.

Article III. SHIPMENT OF THE SUPPLIED MATERIAL

All arrangements for the shipment of the supplied material to Romania shall be the responsibility of the Institute. Prior to the shipment of any part of such material, the Institute through Romania shall notify the Agency of the amount thereof and of the date, place and method of shipment.

Article IV. TRANSPORT, HANDLING AND USE

Romania shall take all appropriate measures to ensure the safe transport, handling and use of the supplied material. The Agency does not warrant the suitability or fitness of the supplied material for any particular use or application nor shall the Agency at any time bear any responsibility towards Romania or any person for any claims arising out of the transport, handling or use of the supplied material.

Article V. PAYMENT

Payment of all charges for or in connection with the supplied material shall be made in accordance with the contract between the Agency and the Soviet Union, referred to in article II, paragraph 2, of this Agreement.

Article VI. SAFEGUARDS

1. Romania undertakes that the supplied material and any special fissionable material used in or produced through the use of the supplied material or the reactor, including subsequent generations of produced special fissionable material, shall not be used for the manufacture of any nuclear weapon or any nuclear explosive device or for research on or the development of any nuclear weapon or any nuclear explosive device, or for any other military purpose.

2. It is specified that the safeguards rights and responsibilities of the Agency provided for in paragraph A of article XII of its Statute[1] are relevant to the project and shall be implemented and maintained with respect to the project. Romania shall co-operate with the Agency to facilitate the implementation of the safeguards required by this Agreement.

3. It is further specified that the implementation of the Agency's safeguards rights and responsibilities referred to in paragraph 2 of this article is satisfied by the application of safeguards procedures pursuant to the Agreement between the Socialist Republic of Romania and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons,[2] signed on 8 March 1972,[3] which entered into force on 27 October 1972 (hereinafter called the "Treaty Safeguards Agreement"). However, if the said Agreement is terminated, the safeguards rights and responsibilities of the Agency provided for in paragraph A of article XII of its Statute shall be implemented in accordance with arrangements which will supplement this Agreement, which shall be agreed forthwith by the Agency and Romania and shall be based on the then effective Agency's safeguards system applicable to Agency projects including provisions with respect to Agency inspectors; pending agreement on such arrangements, the Agency will apply safeguards in accordance with the procedures provided for in that system.

[1] United Nations, *Treaty Series*, vol. 276, p. 3, and vol. 471, p. 334.
[2] *Ibid.*, vol. 729, p. 161.
[3] *Ibid.*, vol. 874, p. 3.

4. In the event the Board determines, in accordance with article XII.C of the Statute of the Agency, that there has been any non-compliance with paragraph 1 or 2 of this article, the Board shall call upon Romania to remedy such non-compliance forthwith, and the Board shall make such reports as it deems appropriate. In the event of failure by Romania to take fully corrective action within a reasonable time, the Board may take other measures provided for in article XII.C of the Statute of the Agency.

Article VII. SAFETY STANDARDS AND MEASURES

The safety standards and measures to be applied to the project shall, to the extent relevant, be those defined in Agency document INFCIRC/18/Rev.1.

Article VIII. AGENCY INSPECTORS

The relevant provisions of the Treaty Safeguards Agreement shall apply to Agency inspectors performing functions pursuant to this Agreement.

Article IX. PHYSICAL PROTECTION

1. Romania undertakes that adequate physical protection measures shall be maintained with respect to the supplied material and any special fissionable material used in or produced through the use of the supplied material or the reactor and processed in the hot cells.

2. Romania agrees to the levels for the application of physical protection set forth in the annex to this Agreement, which levels may be modified by mutual consent between Romania and the Agency without amendment to this Agreement. Romania shall maintain adequate physical protection measures in accordance with such levels. These measures shall as a minimum provide protection comparable to that set forth in Agency document INFCIRC/225/Rev.1, entitled "The Physical Protection of Nuclear Material", or in any revision of that document agreed to by Romania.

Article X. SCIENTIFIC INFORMATION

In conformity with article VIII.B of the Statute of the Agency, Romania shall make available to the Agency without charge all scientific information developed as a result of the assistance provided by the Agency for the project.

Article XI. LANGUAGES

All reports and other information required for the implementation of this Agreement shall be submitted to the Agency in one of the working languages of the Board.

Article XII. SETTLEMENT OF DISPUTES

1. Any decision of the Board concerning the implementation of articles VI, VII or VIII shall, if the decision so provides, be given effect immediately by Romania and the Agency pending the final settlement of any dispute.

2. Any dispute arising out of the interpretation or implementation of this Agreement, which is not settled by negotiation or as may otherwise be agreed between Romania and the Agency, shall at the request of either party be submitted to an arbitral tribunal composed as follows: Romania 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 30 days of the request for arbitration either

Romania or the Agency has not designated an arbitrator, either Romania or the Agency may request the Secretary-General of the United Nations to appoint an arbitrator. The same procedure shall apply if, within 30 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 divison of the expenses of arbitration between Romania and the Agency, shall be binding on both parties. The remuneration of the arbitrators shall be determined on the same basis as that of *ad hoc* judges of the International Court of Justice.

Article XIII. ENTRY INTO FORCE AND DURATION

1. This Agreement shall enter into force upon signature by the authorized representative of Romania and by or for the Director General of the Agency.

2. This Agreement shall continue in effect so long as any nuclear material which was ever subject to this Agreement remains in the territory of Romania or under its jurisdiction or control anywhere, or until such time as Romania and the Agency agree that such material is no longer usable for any nuclear activity relevant from the point of view of safeguards.

DONE in Vienna, this first day of July 1983, in duplicate in the French language.

For the Government of the Socialist Republic of Romania:

OCTAVIAN GROZA

For the International Atomic Energy Agency:

HANS BLIX

ANNEX

LEVELS OF PHYSICAL PROTECTION

Pursuant to article IX, the agreed levels of physical protection to be ensured by the competent national authorhies in the use, storage and transportation of nuclear material listed in 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 arrangements between sender, recipient and carrier, and prior agreement between entities subject to the jurisdiction and regulation of the supplier State and the recipient State, respectively, 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 arrangements between sender, recipient and carrier, and prior agreemnent between entities subject to the jurisdiction and regulation of the supplier State and the recipient State, respectivey, 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 which is under surveillance by guards who are in close communication with appropriate response forces. Specific measures taken in this context should have as their objective the detection and prevention of any assault short of war, unauthorized access or unauthorized removal of material.

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

TABLE. CATEGORIZATION OF NUCLEAR MATERIAL[c]

Material	*Form*	*Category*		
		I	*II*	*III*
1. Plutonium[a, f]	Unirradiated[b]	2 kg or more	Less than 2 kg but more than 500 g	500 g or less[c]
2. Uranium-235[d]	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	-	-	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]

[a] All plutonium except that with isotopic concentration exceeding 80% in plutonium-238.

[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 meter 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] Irradiated fuel should be protected as category I, II or III nuclear material depending on the category of the fresh fuel. However, fuel which by virtue of its original fissile material content is included as category I or II before irradiation should only be reduced one category level, while the radiation level from the fuel exceeds 100 rads/h at one meter unshielded.

[f] The State's competent authority should determine if there is a credible threat to disperse plutonium malevolently. The State should then apply physical protection requirements for category I, II or III of nuclear material, as it deems appropriate and without regard to the plutonium quantity specified under each category herein, to the plutonium isotopes in those quantities and forms determined by the State to fall within the scope of the credible dispersal threat.