



International Atomic Energy Agency

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THE TEXTS OF THE INSTRUMENTS CONNECTED WITH THE AGENCY'S ASSISTANCE TO FINLAND IN ESTABLISHING A RESEARCH REACTOR PROJECT

The texts of the Supply Agreement between the Agency, the Government of Finland and the Government of the United States of America, and of the Project Agreement between the Agency and the Government of Finland, in connection with the Agency's assistance to the Government of Finland in establishing a research reactor project, are reproduced in this document for the information of all Members of the Agency. These agreements entered into force on 30 December 1960.

I. SUPPLY AGREEMENT

CONTRACT FOR THE TRANSFER OF ENRICHED URANIUM FOR A RESEARCH REACTOR

WHEREAS the Government of Finland (hereinafter called "Finland"), desiring to set up a project consisting of a training and research reactor for peaceful purposes, has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in securing, among other things, the special fissionable material necessary for this purpose; and

WHEREAS the Board of Governors of the Agency has approved the project; and

WHEREAS the Agency and the Government of the United States of America (hereinafter called the "United States") on 11 May 1959 concluded an Agreement for Co-operation (hereinafter called the "Co-operation Agreement"), under which the United States undertook to make available to the Agency pursuant to the Statute of the Agency certain quantities of special fissionable material; and

WHEREAS the Agency and Finland are this day concluding an agreement for the provision by the Agency of the assistance requested by Finland (hereinafter called the "Project Agreement"); and

WHEREAS Finland has made arrangements with a manufacturer in the United States of America (hereinafter called the "Manufacturer") for the fabrication of enriched uranium into fuel elements for the reactor and for the provision therefor of fission counters containing enriched uranium;

NOW THEREFORE the Agency, the United States Atomic Energy Commission (hereinafter called the "Commission"), acting on behalf of the United States, and Finland hereby agree as follows:

ARTICLE I

Transfer of Enriched Uranium

1. The Commission, pursuant to all the terms, conditions, provisions and guarantees of the Co-operation Agreement, shall transfer to the Agency and the Agency shall accept from the Commission:
 - (i) Approximately 13 000 grams of uranium enriched to approximately 20% by weight in the isotope U^{235} (hereinafter called the "fuel material"), the exact quantities to be determined pursuant to sub-paragraph 3(b) of this article, contained in fuel elements for a 100-kilowatt Triga Mark II research reactor (hereinafter called the "reactor");
 - (ii) Approximately 5.16 grams of uranium enriched to greater than 90% per weight in the isotope U^{235} (hereinafter called the "indicator material"), the exact quantities to be determined pursuant to sub-paragraph 3(d) of this article, contained in three fission counters for the reactor.
2. The Agency shall transfer to Finland and Finland shall accept from the Agency the fuel material and the indicator material that the Agency received pursuant to paragraph 1 of this article.
3. The conditions of the transfers specified in paragraphs 1 and 2 of this article shall be as follows:

- (a) The Commission shall make available to the Manufacturer, at a facility of the Commission designated by it, enriched uranium for the fuel material, subject to such terms, charges, conditions and licenses as the Commission may require.
- (b) The precise quantity and enrichment of fuel material in the fuel elements shall be determined by the Manufacturer, and Finland shall cause the Manufacturer to submit to the Agency and to the Commission a written certification of the Manufacturer's determination of the enrichment by weight in the isotope U^{235} and of the quantity of enriched uranium contained in the fabricated fuel elements. This determination may be checked by the Agency, by Finland and by the Commission by means of any review or analysis that any of them may deem appropriate, and shall be approved or revised by unanimous agreement of the parties. The quantity and enrichment shown in the agreed determination shall be considered to be the quantity and enrichment of the fuel material actually transferred under paragraphs 1 and 2 of this article, shall be used for the calculation of the payments required to be made pursuant to Article II of this contract, and shall be the quantity and enrichment reported to the Member States of the Agency pursuant to Article IX.G of the Statute of the Agency.
- (c) The Commission shall make available to the Manufacturer or to a properly licensed supplier of the Manufacturer, at a facility of the Commission designated by it, enriched uranium for the indicator material, subject to such terms, charges, conditions and licenses as the Commission may require.
- (d) The precise quantity of indicator material in the fission counters shall be determined by the Manufacturer or his supplier, and Finland shall cause the Manufacturer to submit to the Agency and to the Commission a written certification of the Manufacturer's or his supplier's determination of the enrichment by weight in the isotope U^{235} and of the quantity of enriched uranium contained in the fission counters, and this determination shall be accepted as conclusive for all purposes by the parties.
- (e) Upon completion of the fabrication and the preparation for shipment of the fuel material and of the indicator material, and agreement by the parties with respect to the determination concerning the fuel material and receipt by the parties of the determination concerning the indicator material, Finland shall arrange for a transporter who, after thirty (30) days' written notice to the Commission and subject to such terms, charges, conditions and licenses as the Commission may require, shall transport and deliver the fuel material and the indicator material to the port of export at Los Angeles, California. The Commission, at the request of the Agency, shall thereupon transfer possession to Finland at the port so specified and authorize the export of such material. Finland shall make arrangements, including the payment of all costs, for domestic and overseas transportation and delivery (including cost of containers and packaging) and for storing such material, as well as for physically handling such material in connection with such delivery and transfer such arrangements and costs shall not be the responsibility of, nor be borne by, either the Commission or the Agency. Finland shall accept possession of such material at the designated port of export and shall sign an appropriate written receipt therefor, whereupon Finland shall assume full and complete responsibility for the enriched uranium contained therein.
- (f) Title to the fuel material and to the indicator material shall vest in the Agency at the time they leave the jurisdiction of the United States of America and shall thereafter immediately and automatically vest in Finland.
- (g) It is understood that if desired by the parties, the transactions relating to the fuel material, as detailed in Articles I and II of this contract, may be carried out separately from and independently of those relating to the indicator material.

ARTICLE II

Payment

1. Within thirty (30) days after the receipt of the Agency's invoice (to be dispatched at, or subsequent to, the time that the parties have reached agreement with respect to the determination concerning the fuel material and have received the determination concerning the indicator material), Finland shall pay to the Agency in United States currency a sum equal to that which the Agency will be obliged to pay to the Commission pursuant to paragraph 2 of this article. Finland shall pay to the Agency interest at the rate of six per cent (6%) per annum on all amounts due and not paid within thirty (30) days after receipt of the Agency's invoice.
2. Within thirty (3) days after receipt of the Commission's invoice (to be despatched at, or subsequent to, the time of the Commission's transfer of possession to Finland of the fuel material and the indicator material) the Agency shall pay the Commission for the fuel material and the indicator material at the rates set forth in the Annex to this contract. In the event that the degree of the U²³⁵ isotopic enrichment of the enriched uranium transferred lies between two successive degrees of enrichment for which charges are set forth in the Annex, the charges for the enriched uranium transferred shall be computed by linear interpolation. Payment shall be made to the Commission or its designated agent or contractor, in United States currency. The Agency shall pay to the Commission interest at the rate of six per cent (6%) per annum on all amounts due and not paid within thirty (30) days after the receipt of the Commission's invoice.
3. The Commission, to assist and encourage research on peaceful uses or for medical therapy, has offered to distribute to the Agency in each calendar year, free of charge, special fissionable material of a value of up to US \$50 000 at the time of transfer, to be supplied from the amounts specified in Article II.A of the Co-operation Agreement. The project to which this contract relates qualifies under the terms of that offer. The Commission shall decide by the end of the calendar year in which this contract is concluded on the extent, if any, to which the project shall benefit by the gift offer, and the Agency and Finland shall promptly be notified of that decision. The payments provided in paragraphs 1 and 2 of this article for the fuel material and the indicator material shall be reduced by the value of any free material made available to the project by the Commission.

ARTICLE III

Responsibility

1. Though Agency health and safety standards and measure will apply in accordance with the Project Agreement, neither the Agency nor any person acting on its behalf shall at any time bear any responsibility for the safe handling and use of the fuel material and the indicator material.
2. After acceptance of possession by Finland of the fuel material and the indicator material, as provided in Article I of this contract, neither the United States, the Commission, nor any person acting on behalf of the Commission shall bear any responsibility for the safe handling and use of such materials.

ARTICLE IV

Officials not to benefit

No Member of or Delegate to the Congress of the United States of America, or Resident Commissioner of the United States of America shall be admitted to or share any part of this contract or any benefit that may arise therefrom.

ARTICLE V

Settlement of Disputes

1. If the parties should be unable to reach agreement with respect to the determination provided for in sub-paragraph 3(b) of Article I of this contract within thirty (30) days of the submission of such determination to them by the Manufacturer, any party may request that such a determination be made by a laboratory agreed upon by all the parties as umpire for such determination. The umpire may perform any tests or analyses that it may deem necessary, and all parties hereby agree too facilitate in every way the work of such umpire. The results of such determination by the umpire shall be considered as final and binding on all the parties. The costs of such determination by the umpire shall be borne equally by the parties, provided that if the determination insisted on by any party or parties is confirmed by the umpire such party or parties shall not be obliged to bear any share of such costs.
2. Any question or dispute concerning the interpretation or application of this contract which is not settled by negotiation or as may otherwise be agreed by the parties concerned, except one for which a mode of settlement is provided for in paragraph 1 of this article, shall on the request of any party be submitted to an arbitral tribunal composed as follows:
 - (a) If the question or dispute involves only two of the parties to this contract, all three parties agreeing that the third is not concerned, the two parties involved shall each designate one arbitrator, and the two arbitrators so designated shall appoint a third, who shall be the Chairman. If within thirty (30) days of the request for arbitration either party has not designated an arbitrator or if within thirty (30) days of the designation of two arbitrators the third arbitrator has not been appointed, either party to the dispute may request the President of the International Court of Justice to appoint an arbitrator.
 - (b) If the question or dispute involves all three parties to this contract, each party shall designate one arbitrator, and the three arbitrators so designated shall by unanimous decision appoint a fourth arbitrator who shall be the Chairman and a fifth arbitrator. If within thirty (30) days of the request for arbitration any party has not designated an arbitrator, or if within thirty (30) days of the appointment of all three arbitrators the Chairman or the fifth arbitrator has not been appointed, any party may request the President of the International Court of Justice to appoint the necessary numbers of arbitrators.

A majority of the members of the arbitral tribunal shall constitute a quorum, and all decisions shall be made by majority vote. The procedure of the arbitration shall be fixed by the arbitrators. The decisions of the tribunal, including all rulings concerning procedure, jurisdiction, and the division of the expenses of arbitration between the parties, shall be binding on all the parties. The remuneration of the members of the tribunal shall be determined on the same basis as that of ad hoc judges of the International Court of Justice under Article 32, paragraph 4, of the Statute of the Court.

ARTICLE VI

Entry into Force

This contract shall enter into force upon signature by the Director General of the Agency and the duly authorized representatives of the Commission and Finland.

DONE in triplicate in the English language:

For the INTERNATIONAL ATOMIC
ENERGY AGENCY

(signed) Sterling Cole

December 23, 1960

Washington, D.C.

For the UNITED STATES ATOMIC ENERGY COMMISSION ON BEHALF OF THE
GOVERNMENT OF THE UNITED STATES OF AMERICA

(signed) A.A. Wells

December 23, 1960

Washington, D.C.

For the GOVERNMENT OF FINLAND

(signed) C.O. Frietsch

December 30, 1960

Vienna

ANNEX

United States Atomic Energy Commission Charges for
Enriched Uranium

The rates of charges for enriched uranium, as provided for in paragraph 2 of Article II of this contract, are as follows:

<u>Percentage Enrichment by Weight in the Isotope U²³⁵ of the Enriched Uranium</u>	<u>Price US \$/gram of Uranium</u>
15	2.374
20	3.223
25	4.078
90	15.361
95	16.258

II PROJECT AGREEMENT

AGREEMENT BETWEEN THE INTERNATIONAL ATOMIC ENERGY AGENCY AND THE GOVERNMENT OF FINLAND FOR ASSISTANCE BY THE AGENCY TO FINLAND IN ESTABLISHING A RESEARCH REACTOR PROJECT

WHEREAS the Government of Finland (hereinafter called "Finland"), desiring to set up a project for research on, and development and practical application of, atomic energy for peaceful purposes, has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in securing a research reactor which Finland desires to purchase from a particular manufacturer in the United States of America (hereinafter called the "Manufacturer"). And in securing the special fissionable material necessary for that reactor; and

WHEREAS the Board of Governors of the Agency has approved the project; and

WHEREAS the Agency and the Government of the United States of America (hereinafter called the "United States") on 11 May 1959 concluded an Agreement for Co-operation (hereinafter called the "Co-operation Agreement"), under which the United States undertook to make available to the Agency pursuant to the Statute of the Agency certain quantities of special fissionable material), and also undertook, subject to various applicable provisions and license requirements, to permit, upon request of the Agency, persons under the jurisdiction of the United States to make arrangements to transfer and export material, equipment or facilities for a Member of the Agency in connection with an Agency project; and

WHEREAS the Agency, Finland and the United States Atomic Energy Commission acting on behalf of the United States are this day concluding a contract for the transfer of enriched uranium for the research reactor (hereinafter called the "Supply Agreement");

NOW THEREFORE the Agency and Finland hereby agree as follows:

ARTICLE I

Definition of the Project

The project to which this Project Agreement relates is a 100-kilowatt Triga Mark II training and research reactor, and its associated facilities, to be operated by the Finland Institute of Technology at Otaniemi, Finland.

ARTICLE II

Supply of a Reactor and Allocation of Special Fissionable Material

1. The Agency undertakes that, pursuant to Article IV of the Co-operation Agreement, it will request the United States to permit the transfer and export to Finland of a 100-kilowatt Triga Mark II reactor together with components and spare parts (hereinafter called the "reactor") manufactured in accordance with a contract between Finland and the Manufacturer.
2. The Agency hereby allocates to the project described in Article I of this Project Agreement, from material made available to the Agency by the United States, special fissionable material in the form of enriched uranium (hereinafter called the "special fissionable material"), as specified in Article I of the Supply Agreement.

ARTICLE III

Shipment of the Special Fissionable Material

1. Finland undertakes that any shipment of the fissionable material arranged for by it shall be in the custody of a licensed public carrier selected for that purpose by Finland, or shall be accompanied by a responsible person designated by Finland.
2. Finland undertakes that, in arranging for the shipment of the special fissionable material, it will ensure as far as possible the observance of the provisions of the Regulations for Transport of Radioactive Materials approved by the Board of Governors of the Agency for application to operations assisted by the Agency, provided that insofar as the shipment takes place within the territory or under jurisdiction of a Member State of the Agency the laws and regulations of that State shall be fully complied with.

ARTICLE IV

Terms and Conditions for the Provision of the Special Fissionable Material

The special fissionable material will be transferred by the Agency to Finland pursuant to the terms of the Supply Agreement, such agreement constituting an integral part of this Project Agreement to the extent that rights and obligations between the Agency and Finland are set forth therein.

ARTICLE V

Agency Safeguards against Diversion

1. Finland agrees that the reactor and the special fissionable material, and any special fissionable material produced by their use, shall not be used in such a way as to further any military purpose.
2. It is hereby agreed and specified that, until such time as may be otherwise agreed by the Agency and Finland, the rights and responsibilities provided for in Article XII.A of the Statute of the Agency are relevant to the project. Subject to the above-mentioned statutory provisions and subject to any relevant principles and procedures that may be established thereunder, the details of Agency safeguards against diversion and the provisions regarding Agency inspectors, including those performing functions pursuant to Article VI of this Project Agreement, shall be determined from time to time by the Board of Governors of the Agency after consultation by the Director General of the Agency with Finland. Finland hereby agrees to comply with any requirements thus established and to co-operate with the Agency in their application.

ARTICLE VI

Health and Safety Measures

It is hereby agreed that the health and safety measures specified in the Annex to this Project Agreement will be applied to the reactor and the special fissionable material.

ARTICLE VII

Information and Rights to Inventions and Discoveries

1. In pursuance of Article VIII.B of the Statute of the Agency, Finland shall make available to the Agency without charge all scientific information developed as a result of the assistance extended by the Agency under this Project Agreement.
2. The Agency, in view of the degree of its participation in the present project, does not claim any right or interest in any inventions or discoveries, or any patents therein, arising from the project. The Agency may, however, be granted licenses under any such patents upon terms and conditions to be agreed.

ARTICLE VIII

Settlement of Disputes

1. Any question of dispute concerning the interpretation or application of this Project Agreement which is not settled by negotiation or as may otherwise be agreed, shall be settled in accordance with the provisions of Article V of the Supply Agreement.
2. In case of any question or dispute involving the application of Articles V or VI of this Project Agreement, decisions of the Board of Governors of the Agency shall, if they so provide, immediately be given effect and be complied with by Finland, pending the conclusion of any procedure of consultation, negotiation or arbitration that may be or may have been involved with regard to that question or dispute.

ARTICLE IX

Entry into Force

The Project Agreement shall enter into force upon signature by the Director General of the Agency and the duly authorized representative of Finland.

Done in duplicate in the English language this day of in Vienna.

For the INTERNATIONAL ATOMIC
ENERGY AGENCY:

For the GOVERNMENT OF
FINLAND:

A N N E X

Health and Safety Measures

1. The health and safety measures applicable to the project shall be those approved by the Board of Governors on 31 March 1960 as set forth in Agency document INFCIRC/18, as specified in the paragraphs below.
2. Finland shall apply the health and safety standards and measures provided for in its Law of Protection against Radiation, No. 174, on 26 April 1957, in its Decree on Protection Against Radiation, No. 328, of 27 September 1957, and in its Decision of the Ministry of the Interior regarding Protection against Radiation, No. 119, of 15 March 1958, which were submitted by Finland for consideration by the Agency in approving the project. In addition Finland shall as far as possible conform to the Agency safety standards referred to in paragraph 2 of INFCIRC/18 that have been promulgated by the Agency under the authority of the Board of Governors; in particular Finland shall conform to the provisions of the Manual on "Safe Handling of Radioisotopes" and to the provisions of the Regulations for the Transport of Radioactive Materials approved by the Board of Governors for application to operations assisted by the Agency.
3. Finland shall submit to the Agency with respect to the following types of operations the information specified in paragraph 29 of INFCIRC/18:
 - (a) Receipt and handling of the fuel.
 - (b) Loading of fuel into reactor.
 - (c) Start-up of the reactor.
 - (d) Discharge of fuel from the reactor.
 - (e) Handling and storage of discharge core.
 - (f) Reprocessing of fuel, if to be performed in Finland.
4. Finland shall submit the reports specified in paragraph 25 of INFCIRC/18, the first report to be submitted no later than twelve months after the coming into force of the Project Agreement. In addition, the reports specified in paragraphs 26 and 27 of INFCIRC/18 shall be submitted.
5. The Agency will inspect the reactor at the time of initial start-up, once during the first year of operation, and thereafter not more than once a year, except that special inspections may be carried out under the circumstances specified in paragraph 32 of INFCIRC/18. The arrangements for such inspections will be determined in accordance with the procedures specified in paragraph 2 of Article V of the Project Agreement.
6. Any change in the safety standards and measures specified in this Annex shall be made in accordance with the provisions of paragraphs 38 and 39 of INFCIRC/18.