# No. 4391

# UNITED STATES OF AMERICA and ECUADOR

Agreement for co-operation concerning civil uses of atomic energy. Signed at Washington, on 31 May 1957

Official texts: English and Spanish.

Registered by the United States of America on 1 July 1958.

# ÉTATS-UNIS D'AMÉRIQUE et ÉQUATEUR

Accord de coopération concernant l'utilisation de l'énergie atomique à des fins civiles. Signé à Washington, le 31 mai 1957

Textes officiels anglais et espagnol.

Enregistré par les États-Unis d'Amérique le 1er juillet 1958.

No. 4391. AGREEMENT<sup>1</sup> FOR CO-OPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE REPUBLIC OF ECUADOR CONCERNING CIVIL USES OF ATOMIC ENERGY. SIGNED AT WASHINGTON, ON 31 MAY 1957

Whereas the peaceful uses of atomic energy hold great promise for all mankind; and

Whereas the Government of the United States of America and the Government of the Republic of Ecuador desire to cooperate with each other in the development of such peaceful uses of atomic energy; and

Whereas the design and development of several types of research reactors are well advanced; and

Whereas research reactors are useful in the production of research quantities of radioisotopes, in medical therapy and in numerous other research activities and at the same time are a means of affording valuable training and experience in nuclear science and engineering useful in the development of other peaceful uses of atomic energy including civilian nuclear power; and

Whereas the Government of the Republic of Ecuador desires to pursue a research and development program looking toward the realization of the peaceful and humanitarian uses of atomic energy and desires to obtain assistance from the Government of the United States of America and United States industry with respect to this program; and

Whereas the Government of the United States of America, acting through the United States Atomic Energy Commission, desires to assist the Government of the Republic of Ecuador in such a program;

The Parties agree as follows:

### Article I

For the purposes of this Agreement:

(a) "Commission" means the United States Atomic Energy Commission or its duly authorized representatives.

<sup>&</sup>lt;sup>1</sup> Came into force on 6 February 1958, the date on which each Government received from the other Government written notification that it had complied with all statutory and constitutional requirements for entry into force of the Agreement, in accordance with article XI.

- (b) "Equipment and devices" means any instrument or apparatus and includes research reactors, as defined herein, and their component parts.
- (c) "Research reactor" means a reactor which is designed for the production of neutrons and other radiations for general research and development purposes, medical therapy, or training in nuclear science and engineering. The term does not cover power reactors, power demonstration reactors, or reactors designed primarily for the production of special nuclear materials.
- (d) The terms "Restricted Data", "atomic weapon", and "special nuclear material" are used in this Agreement as defined in the United States Atomic Energy Act of 1954.

## Article II

Restricted Data shall not be communicated under this Agreement, and no materials or equipment and devices shall be transferred and no services shall be furnished under this Agreement to the Government of the Republic of Ecuador or authorized persons under its jurisdiction if the transfer of any such materials or equipment and devices or the furnishing of any such services involves the communication of Restricted Data.

### Article III

- 1. Subject to the provisions of Article II, the Parties hereto will exchange information in the following fields:
- (a) Design, construction, and operation of research reactors and their use as research, development, and engineering tools and in medical therapy.
- (b) Health and safety problems related to the operation and use of research reactors.
- (c) The use of radioactive isotopes in physical and biological research, medical therapy, agriculture, and industry.
- 2. The application or use of any information or data of any kind whatsoever, including design drawings and specifications, exchanged under this Agreement shall be the responsibility of the Party which receives and uses such information or data, and it is understood that the other cooperating Party does not warrant the accuracy, completeness, or suitability of such information or data for any particular use or application.

### Article IV

1. The Commission will lease to the Government of the Republic of Ecuador uranium enriched in the isotope U-235, subject to the terms and

conditions provided herein, as may be required as initial and replacement fuel in the operation of research reactors which the Government of the Republic of Ecuador, in consultation with the Commission, decides to construct and as required in the agreed experiments related thereto. Also, the Commission will lease to the Government of the Republic of Ecuador uranium enriched in the isotope U-235, subject to the terms and conditions provided herein, as may be required as initial and replacement fuel in the operation of such research reactors as the Government of the Republic of Ecuador may, in consultation with the Commission, decide to authorize private individuals or private organizations under its jurisdiction to construct and operate, provided the Government of the Republic of Ecuador shall at all times maintain sufficient control of the material and the operation of the reactor to enable the Government of the Republic of Ecuador to comply with the provisions of this Agreement and the applicable provisions of the lease arrangement.

- 2. The quantity of uranium enriched in the isotope U-235 transferred by the Commission under this Article and in the custody of the Government of the Republic of Ecuador shall not at any time be in excess of six (6) kilograms of contained U-235 in uranium enriched up to a maximum of twenty percent (20%) U-235, plus such additional quantity as, in the opinion of the Commission, is necessary to permit the efficient and continuous operation of the reactor or reactors while replaced fuel elements are radioactively cooling in the Republic of Ecuador or while fuel elements are in transit, it being the intent of the Commission to make possible the maximum usefulness of the six (6) kilograms of said material.
- 3. When any fuel elements containing U-235 leased by the Commission require replacement, they shall be returned to the Commission and, except as may be agreed, the form and content of the irradiated fuel elements shall not be altered after their removal from the reactor and prior to delivery to the Commission.
- 4. The lease of uranium enriched in the isotope U-235 under this Article shall be at such charges and on such terms and conditions with respect to shipment and delivery as may be mutually agreed and under the conditions stated in Articles VIII and IX.

### Article V

Materials of interest in connection with defined research projects related to the peaceful uses of atomic energy undertaken by the Government of the Republic of Ecuador, including source materials, special nuclear materials, byproduct material, other radioisotopes, and stable isotopes, will be sold or otherwise transferred to the Government of the Republic of Ecuador by the Commission for research purposes in such quantities and under such terms and

conditions as may be agreed when such materials are not available commercially. In no case, however, shall the quantity of special nuclear materials under the jurisdiction of the Government of the Republic of Ecuador, by reason of transfer under this Article, be, at any one time, in excess of 100 grams of contained U-235, 10 grams of plutonium, and 10 grams of U-233.

### Article VI

Subject to the availability of supply and as may be mutually agreed, the Commission will sell or lease, through such means as it deems appropriate, to the Government of the Republic of Ecuador or authorized persons under its jurisdiction such reactor materials, other than special nuclear materials, as are not obtainable on the commercial market and which are required in the construction and operation of research reactors in the Republic of Ecuador. The sale or lease of these materials shall be on such terms as may be agreed.

### Article VII

It is contemplated that, as provided in this Article, private individuals and private organizations in either the United States or the Republic of Ecuador may deal directly with private individuals and private organizations in the other country. Accordingly, with respect to the subjects of agreed exchange of information as provided in Article III, the Government of the United States will permit persons under its jurisdiction to transfer and export materials, including equipment and devices, to and perform services for the Government of the Republic of Ecuador and such persons under its jurisdiction as are authorized by the Government of the Republic of Ecuador to receive and possess such materials and utilize such services, subject to:

- (a) The provisions of Article II.
- (b) Applicable laws, regulations and license requirements of the Government of the United States and the Government of the Republic of Ecuador.

### Article VIII

- 1. The Government of the Republic of Ecuador agrees to maintain such safeguards as are necessary to assure that the special nuclear materials received from the Commission shall be used solely for the purposes agreed in accordance with this Agreement and to assure the safekeeping of this material.
- 2. The Government of the Republic of Ecuador agrees to maintain such safeguards as are necessary to assure that all other reactor materials, including equipment and devices, purchased in the United States under this Agreement by the Government of the Republic of Ecuador or authorized persons under its

jurisdiction shall be used solely for the design, construction, and operation of research reactors which the Government of the Republic of Ecuador decides to construct and operate and for research in connection therewith, except as may otherwise be agreed.

- 3. In regard to research reactors constructed pursuant to this Agreement, the Government of the Republic of Ecuador agrees to maintain records relating to power levels of operation and burn-up of reactor fuels and to make annual reports to the Commission on these subjects. If the Commission requests, the Government of the Republic of Ecuador will permit Commission representatives to observe from time to time the condition and use of any leased material and to observe the performance of the reactor in which the material is used.
- Some atomic energy materials which the Government of the Republic of Ecuador may request the Commission to provide in accordance with this arrangement are harmful to persons and property unless handled and used After delivery of such materials to the Government of the Republic of Ecuador, the Government of the Republic of Ecuador shall bear all responsibility, in so far as the Government of the United States is concerned, for the safe handling and use of such materials. With respect to any special nuclear materials or fuel elements which the Commission may, pursuant to this Agreement, lease to the Government of the Republic of Ecuador or to any private individual or private organization under its jurisdiction, the Government of the Republic of Ecuador shall indemnify and save harmless the Government of the United States against any and all liability (including third party liability) from any cause whatsoever arising out of the production or fabrication, the ownership, the lease, and the possession and use of such special nuclear materials or fuel elements after delivery by the Commission to the Government of the Republic of Ecuador or to any authorized private individual or private organization under its jurisdiction.

### Article IX

The Government of the Republic of Ecuador guarantees that:

- (a) Safeguards provided in Article VIII shall be maintained.
- (b) No material, including equipment and devices, transferred to the Government of the Republic of Ecuador or authorized persons under its jurisdiction, pursuant to this Agreement, by lease, sale, or otherwise will be used for atomic weapons or for research on or development of atomic weapons or for any other military purposes, and that no such material, including equipment and devices, will be transferred to unauthorized persons or beyond the jurisdiction of the Government of the Republic of Ecuador except as the Commission may agree to such transfer to another nation and then only if in

the opinion of the Commission such transfer falls within the scope of an agreement for cooperation between the United States and the other nation.

### Article X

It is the hope and expectation of the Parties that this initial Agreement for Cooperation will lead to consideration of further cooperation extending to the design, construction, and operation of power producing reactors. Accordingly, the Parties will consult with each other from time to time concerning the feasibility of an additional agreement for cooperation with respect to the production of power from atomic energy in the Republic of Ecuador.

### Article XI

- 1. This Agreement shall enter into force on the day on which each Government shall receive from the other Government written notification that it has complied with all statutory and constitutional requirements for the entry into force of such Agreement and shall remain in force for a period of five years.
- 2. At the expiration of this Agreement or of any extension thereof the Government of the Republic of Ecuador shall deliver to the United States all fuel elements containing reactor fuels leased by the Commission and any other fuel materials leased by the Commission. Such fuel elements and such fuel materials shall be delivered to the Commission at a site in the United States designated by the Commission at the expense of the Government of the Republic of Ecuador and such delivery shall be made under appropriate safeguards against radiation hazards while in transit.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed pursuant to duly constituted authority.

Done at Washington, in duplicate, in the English and Spanish languages, this thirty-first day of May, 1957.

For the Government of the United States of America:

R. R. RUBOTTOM Jr. W. F. LIBBY

For the Government of the Republic of Ecuador:

José R. Chiriboga V.

Ambassador