



International Atomic Energy Agency

## **INFORMATION CIRCULAR**

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**THE TEXT OF THE AGREEMENT OF 1 JULY 1983 CONCERNING THE AGENCY'S  
ASSISTANCE TO VIET NAM FOR THE TRANSFER OF ENRICHED  
URANIUM FOR A RESEARCH REACTOR**

1. The text<sup>[1]</sup> of the Supply and Project Agreement of 1 July 1983 between the Agency and the Government of the Socialist Republic of Viet Nam concerning the Agency's assistance for the transfer of enriched uranium for a research reactor in Viet Nam is reproduced in this document for the information of all Members.
2. The Agreement entered into force on 1 July 1983, pursuant to Article XIII.1.

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[1] The footnotes to the text have been added in the present information circular.

AGREEMENT BETWEEN THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIET NAM  
AND THE INTERNATIONAL ATOMIC ENERGY AGENCY CONCERNING  
A TRANSFER OF ENRICHED URANIUM FOR A  
RESEARCH REACTOR

WHEREAS the Government of the Socialist Republic of Viet Nam (hereinafter called "Viet Nam"), desiring to establish a project consisting of a reactor for research purposes, has requested the assistance of the International Atomic Energy Agency (hereinafter called the "Agency") in connection with the supply of nuclear fuel required to put the research reactor of the Da Lat Nuclear Research Institute into operation;

WHEREAS Viet Nam on 12 June 1981 concluded with the Agency an agreement for the application of safeguards to the Da Lat research reactor (hereinafter called the "Safeguards Agreement")<sup>[2]</sup>;

WHEREAS within the framework of the technical assistance provided by the Agency to Viet Nam arrangements have been made between those two parties and the Government of the Union of Soviet Socialist Republics (hereinafter called the "Soviet Union") for the supply of enriched uranium and its fabrication into fuel elements for the above-mentioned reactor;

WHEREAS the Board of Governors of the Agency (hereinafter called the "Board") approved the project on 10 June 1983;

NOW THEREFORE Viet Nam and the Agency hereby agree as follows:

ARTICLE I

D e f i n i t i o n   o f   t h e   P r o j e c t

1. The project to which this Agreement relates concerns the 1 MW research reactor (hereinafter called "the reactor") installed at the Nuclear Research Institute in Da Lat, Viet Nam, which is to be operated by the Institute.
2. This Agreement shall, mutatis mutandis, apply to any additional assistance provided by the Agency to Viet Nam for the project.
3. Except as specified in this Agreement, the Agency assumes no obligations or responsibilities insofar as the project is concerned.

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[2] Reproduced in document INFCIRC/293.

## ARTICLE II

### S u p p l y   o f   E n r i c h e d   U r a n i u m

1. The Agency shall request the Soviet Union to permit the transfer and export to Viet Nam of approximately 3600 grams of uranium enriched to approximately 36 per cent by weight in the isotope uranium-235, contained in 140 fuel elements to be used in the reactor (hereinafter called "the fuel").

2. The particular terms and conditions for the transfer of the fuel, including all charges connected with the fabrication or supply of the fuel, delivery times and shipping conditions, shall be the subject of a Contract between the Agency, the Soviet Union and Viet Nam in implementation of this Agreement.

## ARTICLE III

### S h i p m e n t   o f   t h e   F u e l

All arrangements for the shipment of the fuel to Viet Nam shall be made by Viet Nam. Prior to the shipment of the fuel, Viet Nam shall notify the Agency of the amount of fuel and of the date, place and method of shipment.

## ARTICLE IV

### T r a n s p o r t ,   H a n d l i n g   a n d   U s e

1. Viet Nam shall take all appropriate measures to ensure the safe transport, handling and use of the fuel.

2. The Agency does not warrant the suitability or fitness of the fuel for any particular use or application; it shall not at any time bear any responsibility towards Viet Nam or any person for any claims arising out of the transport, handling and use of the fuel.

## ARTICLE V

### P a y m e n t

All charges relating to the fabrication and supply of the fuel shall be paid by the Agency in accordance with the provisions of the Contract referred to in Article II.2 of this Agreement.

## ARTICLE VI

### S a f e g u a r d s

1. Viet Nam undertakes that the reactor, the fuel and any special fissionable material used in or produced through the use of either, 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. The safeguards rights and responsibilities of the Agency provided for in Article XII.A of its Statute (hereinafter called "the Statute") are relevant to the project and shall be implemented and maintained with respect to the project. Viet Nam shall co-operate with the Agency to facilitate the implementation of the safeguards required by this Agreement.

3. The Agency's safeguards rights and responsibilities referred to in paragraph 2 of this Article shall be implemented in accordance with the Safeguards Agreement.

4. In the event the Board determines, in accordance with Article XII.C of the Statute, that there has been any non-compliance with paragraph 1 or 2 of this Article, the Board shall call upon Viet Nam to remedy such non-compliance forthwith, and the Board shall make such reports as it deems appropriate. In the event of failure by Viet Nam 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.

## ARTICLE VII

### S a f e t y   S t a n d a r d s   a n d   M e a s u r e s

The safety standards and measures specified in Annex A to this Agreement shall apply to the project.

## ARTICLE VIII

### A g e n c y   I n s p e c t o r s

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

## ARTICLE IX

### S c i e n t i f i c   I n f o r m a t i o n

In conformity with Article VIII.B of the Statute, Viet Nam shall make available to the Agency without charge all scientific information obtained as a result of the assistance provided by the Agency under this Agreement.

## ARTICLE X

### L a n g u a g e s

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 XI

### P h y s i c a l   P r o t e c t i o n

1. Viet Nam undertakes that adequate physical protection measures shall be maintained with respect to the reactor and the fuel and any special fissionable material used in or produced through the use of the reactor or the fuel, including subsequent generations of produced special fissionable material.

2. Viet Nam agrees to the levels for the application of physical protection set forth in Annex B to this Agreement, which levels may be modified by mutual consent of Viet Nam and the Agency without amendment to this Agreement. Viet Nam shall maintain adequate physical security 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", as it may be revised from time to time.

## ARTICLE XII

### S e t t l e m e n t   o f   D i s p u t e s

1. Any decision of the Board concerning the implementation of Article VI, VII or VIII of this Agreement shall, if the decision so provides, be given effect immediately by the Agency and Viet Nam 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 by Viet Nam and the Agency, shall on the request of one of the parties to this Agreement be submitted to an arbitral tribunal composed as follows: each party shall designate one arbitrator and the two arbitrators so designated shall elect an additional arbitrator, who shall be the Chairman. If within

thirty days of the request for arbitration one party has not designated an arbitrator, the other party may request the Secretary-General of the United Nations, 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 procedures shall be established 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 Viet Nam and the Agency, shall be final and binding on Viet Nam 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.

### ARTICLE XIII

#### Entry into Force and Duration of the Agreement

1. This Agreement shall enter into force upon signature by the authorized representative of Viet Nam and by or for the Director General of the Agency.
2. This Agreement shall continue in effect so long as any material, equipment or facility which was ever subject to this Agreement remains in the territory or under the jurisdiction of Viet Nam or under its control anywhere, or until such time as Viet Nam and Agency agree that such material, equipment or facility is no longer usable for any nuclear activity relevant from the point of view of safeguards.

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

**For the GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIET NAM:**

(signed) Nguyễn Tuấn Liêu

**For the INTERNATIONAL ATOMIC ENERGY AGENCY:**

(signed) Hans Blix

## SAFETY STANDARDS AND MEASURES

1. The safety standards and measures applicable to the project shall be those defined in Agency document INFCIRC/18/Rev.1 (hereinafter called the "Safety Document") and as specified below.
2. Viet Nam shall apply the Agency's Basic Safety Standards for Radiation Protection[3] and the relevant provisions of the Agency's Regulations for the Safe Transport of Radioactive Materials[4] as they are revised by the Agency from time to time, and shall as far as possible apply them also to any shipment of the fuel outside the jurisdiction of Viet Nam. Viet Nam shall endeavour to ensure safety conditions as recommended in the relevant parts of the Agency's codes of practice[5].
3. Viet Nam shall arrange for the submission to the Agency, at least 60 days prior to the proposed transfer of the fuel to the jurisdiction of Viet Nam, of a detailed safety analysis report containing the information specified in paragraph 4.7 of the Safety Document, with particular reference to the following types of operations, to the extent that such information is relevant and not yet available to the Agency:
  - (a) Receipt and handling of the fuel;
  - (b) Loading of the fuel elements into the reactor;
  - (c) Start-up and pre-operational testing of the reactor with the fuel;
  - (d) Experimental program and procedures involving the reactor;
  - (e) Unloading of the fuel elements from the reactor;
  - (f) Handling and storage of the fuel elements after unloading.

Once the Agency has determined that the safety measures provided for are adequate, it shall give its consent for the start of the assisted operation. Should Viet Nam desire to make substantial modifications to the procedures with respect to which information has been submitted, or to perform any operations with the reactor or the fuel with respect to which operations no such information has been submitted, it shall submit to the Agency all relevant information as specified in paragraph 4.7 of the Safety Document. On the basis of that information, the Agency may require the application of additional safety measures in accordance with paragraph 4.8 of the Safety Document. Once Viet Nam has undertaken to apply the additional safety measures requested by the Agency, the Agency shall give its consent for the modifications or operations referred to above.

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[3] IAEA Safety Series No. 9, 1982 Edition (STI/PUB/607).

[4] Ibid. No. 6, 1973 Revised Edition (as amended) (STI/PUB/517).

[5] Ibid. No. 35, Safe operation of critical assemblies and research reactors, 1971 Edition (STI/PUB/225).

4. Viet Nam shall arrange for submission to the Agency, as appropriate, of the reports specified in paragraphs 4.9 and 4.10 of the Safety Document.

5. The Agency may, in agreement with Viet Nam, send safety missions for the purpose of providing advice and assistance to Viet Nam in connection with the application of safety measures to the project, in accordance with paragraphs 5.1 and 5.3 of the Safety Document. Special safety missions may be arranged by the Agency in the circumstances specified in paragraph 5.2 of the Safety Document.

6. Changes in the safety standards and measures laid down in this Annex may be made in accordance with paragraphs 6.1 to 6.3 of the Safety Document.

## A N N E X B

### LEVELS OF PHYSICAL PROTECTION

Pursuant to Article XI, the agreed levels of physical protection to be ensured by the competent national authorities 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 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 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 Category 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<sup>o</sup>**

Material	Form	Category		
		I	II	III
1. Plutonium <sup>a,f</sup>	Unirradiated <sup>b</sup>	2 kg or more	Less than 2 kg but more than 500 g	500 g or less <sup>c</sup>
2. Uranium-235 <sup>d</sup>	Unirradiated <sup>b</sup>	5 kg or more - - -	Less than 5 kg but more than 1 kg	1 kg or less <sup>c</sup>
	- uranium enriched to 20% <sup>235</sup> U or more		10 kg or more	Less than 10 kg <sup>c</sup>
	- uranium enriched to 10% <sup>235</sup> U but less than 20%		-	10 kg or more
	- uranium enriched above natural, but less than 10% <sup>235</sup> U			
3. Uranium-233	Unirradiated <sup>b</sup>	2 kg or more	Less than 2 kg but more than 500 g	500 g or less <sup>c</sup>

- <sup>a</sup> All plutonium except that with isotopic concentration exceeding 80% in plutonium-238.
- <sup>b</sup> 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.
- <sup>c</sup> Less than a radiologically significant quantity should be exempted.
- <sup>d</sup> 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.
- <sup>e</sup> 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.
- <sup>f</sup> 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.