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# COMMUNICATION RECEIVED FROM THE RUSSIAN FEDERATION CONCERNING ITS POLICIES REGARDING THE MANAGEMENT OF PLUTONIUM

1. The Director General has received a letter dated 17 July 2002 from the Ministry of Atomic Energy of the Russian Federation (MINATOM) in which the Government of the Russian Federation, in keeping with its commitment under the Guidelines for the Management of Plutonium (contained in INFCIRC/549 of 16 March 1998 and hereinafter referred to as the "Guidelines"), and in accordance with Annexes B and C of the Guidelines, has made available an annual statement of its national holdings of civil unirradiated plutonium and of plutonium contained in spent civil reactor fuel, as of 31 December 2001. It has also enclosed a statement relating to its national strategy for the use of plutonium stocks and the establishment of a suitable fuel cycle in the Russian Federation.

2. In the light of the request expressed by the Russian Federation in its note verbale of 1 December 1997 concerning its policies regarding the management of plutonium (INFCIRC/549 of 16 March 1998), the texts of the enclosures of the letter of 17 July 2002 are attached for the information of all Member States.

INFCIRC/549/Add.9/4 Attachment

ANNEX B

## Annual figures for civil unirradiated plutonium

Totals	for	the	country	*)
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		as of 31 December 2001
1.	Unirradiated separated plutonium in product stores at reprocessing plants	34 000 kg
2.	Unirradiated separated plutonium in the course of manufacture or fabrication and plutonium contained in unirradiated products at fuel or other fabricating plants or elsewhere	-
3.	Plutonium in unirradiated MOX fuel or other fabricated produc at reactor sites or elsewhere **)	ts 200 kg
4.	Unirradiated separated plutonium held elsewhere. ***)	1 000 kg
Note	:	
(i)	Plutonium included in lines 1–4 above belonging to foreign boo	lies -
(ii)	Plutonium in any of the forms in lines 1–4 above held in location in other countries and therefore not included above	ons 600 g

\*\*) Plutonium in unirradiated MOX fuel at research reactor sites and weapons-origin plutonium in MOX fuel at the BN-600 reactor.

\*\*\*) Separated plutonium used for research purposes – critical assemblies, fuel for research reactors, etc.

<sup>\*)</sup> Rounded up to 100 kg.

## ANNEX C

# Estimated quantities of plutonium contained in spent civil reactor fuel

Totals for the country \*)

as of 31 December 2001

1.	Plutonium contained in spent fuel at civil reactor sites	34 000 kg
2.	Plutonium contained in spent fuel at reprocessing plants	3 000 kg
3.	Plutonium contained in spent fuel held elsewhere	24 000 kg

\*) Rounded up to 1000 kg.

# STRATEGY FOR THE USE OF PLUTONIUM STOCKS AND THE ESTABLISHMENT OF A SUITABLE FUEL CYCLE IN THE RUSSIAN FEDERATION

#### **Overall fuel cycle strategy**

Russia's nuclear energy strategy is based on the concept of a closed fuel cycle and the establishment of corresponding production capacity and technology.

Individual components of a closed ftiel cycle already exist (spent fuel reprocessing for various types of reactor), but others require specific research and considerable capital investment (e.g. production capacity for MOX and other types of fuel).

Russia is participating in bi- and multilateral international co-operation on problems of plutonium utilization in order to take full account of international experience gained in solving these problems.

#### Strategy for plutonium use

In developing its plutonium management strategy, Russia is proceeding from the following main assumptions:

Plutonium, as a nuclear material, has unique energy potential, is nationally owned, and can be put to maximum effective use under Russia's national energy strategy.

In implementing the plans adopted for the use of plutonium, it must be ensured that it is stored, transported and handled in accordance with national and international standards for nuclear safety, environmental protection, accountancy and control, and physical protection taking into account the recommendations of IAEA INFCIRC/225/Rev.4.

Russia's national plutonium management strategy is to make maximally effective use of plutonium through the development of appropriate plant and technology, while observing the established international and national safety, non-proliferation and environmental protection standards.

Russia's strategy provides for the possibility of collaboration with foreign partners/countries on the basis of all the commitments undertaken under the relevant agreements.

### Use of excess plutonium

The management of plutonium excess to defence needs will be in accordance with the Strategy for the use of plutonium as an energy resource. This achieves two objectives – Conversion of the plutonium to a state unsuitable for use in a nuclear weapon and utilization Of the energy potential of this plutonium.

In September 2000 the agreement between the Government of the Russian Federation And the Government of the United States of America concerning the management and disposition of plutonium designated as no longer. required for defence purposes and related co-operation was signed. Russia for its part undertook the disposition of 34 metric tons of such plutonium (68 metric tons was the total amount for both sides).

In accordance with the above-mentioned Russian-US intergovernmental agreement of September 2000 the process of disposition of excess weapons-grade plutonium on an industrial scale is to start in 2007.

In implementation of this agreement, and pursuant to other international and intergovernmental agreements, Russia will continue its research programme on the development of future technologies for the disposition of weapons-grade plutonium. A number of assemblies containing MOX fuel are being irradiated in the BOR-60 and BN-600 reactors and in a research reactor in Canada. These experiments are one of the stages of the research programme for future plutonium disposition.

#### Transfer to Russian territory of spent nuclear fuel containing plutonium

In 2001 the State Duma adopted legal amendments permitting the import of irradiated fuel assemblies for storage and/or reprocessing. Such imports, and also the conditions for the use of the separated plutonium, will be regulated by appropriate international agreements.

## **Complete plutonium inventory**

In accordance with the Guidelines on the Management of Plutonium, Russia is notifying the total amount of civil plutonium both in separated and unirradiated form (Annex B) and in spent fuel from nuclear power plants and research reactors (Annex C).