



International Atomic Energy Agency

INFORMATION CIRCULAR

INFCIRC/40/Rev.14

July 1979

GENERAL Distr.

Original: ENGLISH

MATERIALS DELIVERED BY MEMBER STATES

In this document the Director General is reporting to the Members of the Agency, under Article IX.G of the Statute, the quantities of materials which Members had delivered up to 31 December 1978, in compliance with requests the Agency had made under Article IX.D.

ABBREVIATIONS AND SIGNS USED

Agency	—	International Atomic Energy Agency
CSSR	—	Czechoslovakia
FRG	—	Federal Republic of Germany
UK	—	United Kingdom of Great Britain and Northern Ireland
USA	—	United States of America
USSR	—	Union of Soviet Socialist Republics
Am	—	Americium
Cf	—	Californium
n	—	Natural uranium
n/d	—	Natural or depleted uranium
Np	—	Neptunium
U	—	Uranium
*	—	Less than 1 μ g
**	—	1 μ g or more, but less than 1 mg
***	—	1 mg or more, but less than 0.5 g

MATERIALS DELIVERED BY MEMBER STATES UP TO 31 DECEMBER 1978

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ²³⁵ U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/..)
			Fissionable isotope content (grams ^a)	Total element (kilo-grams ^a)				

NUCLEAR MATERIALS

SPECIAL FISSIONABLE MATERIALS

Plutonium

1.	1	UK	Agency	**		Sale	Jan 1962	
	2	USA	Agency	*		Gift	Apr 1962	
	3	USA	Agency	*		Gift	Sep 1962	
	4	USA	Greece	80		Sale	Jun 1963	
	5	UK	Yugoslavia	***		Sale	Oct 1963	
	6	France	Yugoslavia	5		Gift	Dec 1963	
	7	USA	Agency	96		Gift	Mar 1964	
	8	USA	Yugoslavia	***		Sale	Jun 1964	
	9	USA	Yugoslavia	***		Sale	Jun 1964	
	10	UK	Agency	***		Sale	Jun 1964	
	11	USA	Agency	***		Sale	Jul 1964	
	12	USA	Pakistan	112		Sale	Apr 1965	34
	13	USA	Turkey	72		Gift	May 1966	83, part II
	14	France	Agency	12		Gift	Feb 1967	
	15	USA	Mexico	80		Gift	Jun 1967	82
	16	USA	Agency	2		Sale	Aug 1967	
	17	USA	Iran	112		Sale	Sep 1967	97
	18	USA	Mexico	80		Gift	Mar 1968	102
	19	USA	India	80		Gift	Oct 1968	94
	20	France	Romania	1		Loan	Oct 1968	95/Add.1
	21	USA	Uruguay	80		Gift	Jan 1969	67
	22	USSR	Burma	16		b	Nov 1970	
	23	UK	Burma	***		b	Apr 1971	
	24	USSR	Sri Lanka	80		b	Dec 1970	
	25	USA	India	***		Gift	Sep 1969	94/Add.1, part I
	26	USA	India	***		Gift	Jun 1970	94/Add.1, part II
	27	USA	India	***		Sale	Oct 1970	94
	28	USA	India	***		Gift	c	94/Add.1, part I
	29	USA	India	1		Sale	c	94/Add.2, part I
	30	USSR	Indonesia	80		b	Jan 1969	
	31	USSR	Egypt	80		b	Dec 1969	
	32	USSR	Egypt	16		b	Nov 1970	
	33	USSR	Egypt	**		b	Nov 1970	
	34	Belgium	Bulgaria	***		Sale	Mar 1971	148
	35	USA	Pakistan	5		Gift	Apr 1973	150/Add.1
	36	USA	Pakistan	***		Gift	Apr 1973	150/Add.1
	37	USA	India	***		Sale	Nov 1971	94/Add.2, part II
	38	USSR	Singapore	16		b	May 1971	
	39	USA	Iraq	16		Gift	c	195, part II
	40	USA	Poland	1		Sale	c	
	41	USA	Mexico	1.5		Sale	c	194, part II
	42	USA	India	1		Sale	c	
	43	USA	Chile	***		Sale	Nov 1972	196, part II
	44	USA	Agency	1		Sale	Jul 1968	
	45	USA	Agency	***		Sale	Apr 1971	
	46	USA	Agency	***		Sale	Oct 1973	
	47	USA	Yugoslavia	***		Sale	c	151/Add.1, part II
	48	USA	Agency	1		Sale	Apr 1973	
	49	USA	Agency	5		Sale	Aug 1973	

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ²³⁵ U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/...)
			Fissionable isotope content (grams ^a)	Total element (kilo-grams ^a)				
50	USA	Agency	**			Loan	May 1973	
51	USA	Agency	***			Sale	Oct 1973	
52	Belgium	Agency	***			Sale	Dec 1973	
53	USA	Yugoslavia	**			Sale	c	151/Add.1, part I
54	USA	Agency	2			Sale	Jan 1975	
55	USA	India	3			Sale	c	
56	USA	India	***			Sale	c	
57	Belgium	Agency	***			Sale	Feb 1974	
58	USA	Agency	*			Sale	Dec 1974	
59	USA	Brazil	*			b	c	
60	USA	Pakistan	**			b	c	
61	Belgium	Agency	***			Sale	Jun 1975	
62	Hungary	India	81			Sale	c	
63	USA	India	8			Sale	c	
64	USA	India	***			Sale	c	
65	USA	India	1			Sale	c	
66	USA	Hungary	***			b	c	
67	USA	Agency	**			Loan	Apr 1975	
68	USA	Agency	***			Sale	Jun 1975	
69	USA	Agency	*			Sale		
70	USA	Agency	*			Sale		
71	USA	Romania	**			Sale		
72	USA	Peru	***			b	Oct 1975	
73	USA	Agency	*			Sale	c	
74	USA	Agency	***			Sale	May 1976	
75	USA	Agency	***			Sale	c	
76	USA	Agency	*			Sale	Feb 1977	
77	USA	Agency	***			Sale	Feb 1977	
78	USA	CSSR	4			Loan ^o	Jan 1978	
79	USA	Bangladesh	**			Loan ^o	June 1978	
80	FRG	Agency	**			Gift	June 1978	
81	UK	Agency	**			Sale	May 1978	
82	USA	Pakistan	***			Loan ^o	Dec 1978	
83	UK	Agency	**			Sale	Oct 1978	
84	USA	Agency	***			Gift	Dec 1978	
85	FRG	Agency	**			Sale	June 1978	

Enriched uranium

2.	1	USA	Norway	42 206	3	Lease	Oct 1961	29
	2	USA	Finland	2 492	20	Gift	Feb 1962	24
	3	USA	Finland	5	93	Gift	Feb 1962	24
	4	USA/Belgium	Zaire	1 988	20	Sale to Belgium, gift to Zaire ^d	Jun 1962	37
	5	USA/Belgium	Zaire	3	94	Sale to Belgium, gift to Zaire ^d	Jun 1962	37
	6	USA	Austria	200	90	Sale	Jul 1963	
	7	UK	Yugoslavia	***	93	Sale	Oct 1963	
	8	USA	Finland	***	100	Sale	Oct 1963	
	9	USSR	Finland	3 025	10	Sale	Mar 1964	53
	10	USA	Agency	3	94	Sale	Apr 1964	
	11	USA	Agency	***	2	Sale	Apr 1964	
	12	USA	Norway	(40 476) ^e	3	Return ^e	Jun 1964	29
	13	USA	Yugoslavia	3	95	Sale	Jun 1964	
	14	UK	Agency	***	93	Sale	Jun 1964	
	15	USA	Finland	***	93	Sale	Aug 1964	
	16	USA	Agency	3	80	Sale	Nov 1964	
	17	USA	Norway	57 930	3	Lease	Nov 1964	29/Add.2, part II

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ²³⁵ U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/...)
			Fissionable isotope content (grams ^a)	Total element (kilo-grams ^a)				
18	USA	Argentina	2 940		90	Gift ^f	Dec 1964	62
19	USA	Pakistan	5 175		90	Part gift, part sale	Apr 1965	34
20	USA	Pakistan	2		93	Sale	Apr 1965	34
21	USA	Yugoslavia	292		20	Gift	Nov 1965	32/Add.1
22	USA	Yugoslavia	2 376		20	Gift	Dec 1965	32
23	USA	Yugoslavia	3		93	Gift	Dec 1965	32
24	USA	Argentina	893		90	Gift ^f	Dec 1965	62/Add.1
25	USA	Romania	93		93	Sale	Dec 1966	95
26	USA	Finland	380		20	Gift	Jan 1967	24/Add.2
27	UK	Agency	1		^g	Gift	Mar 1967	
28	USA	Norway	(14 979) ^h		3	Return ^h	Mar 1967	29/Add.2, part II
29	USA	Iran	5 155		93	Part gift, part sale	Sep 1967	97
30	USA	Iran	3		93	Sale	Sep 1967	97
31	USA	Philippines	1 369		93	Gift	Oct 1967	88
32	USA	Viet-Nam	76		20	Gift	Dec 1967	106
33	USA	Philippines	1 555		93	Gift	Jan 1968	88
34	USA	Spain	10 129		90	Part gift, part lease	Feb 1968	99
35	USA	Finland	380		20	Sale	Mar 1968	24/Add.3
36	USA	Norway	(42 470) ^h		3	Return ^h	Apr 1968	29/Add.2, part II
37	USA	Yugoslavia	152		20	Sale	Jul 1968	32/Add.2
38	USSR	Romania	20		20	Sale	Sep 1968	95/Add.1
39	USA	Mexico	3 333		20	Gift	Oct 1968	52
40	USA	Mexico	4		90	Gift	Oct 1968	52
41	USA	Zaire	200		20	Gift	Nov 1968	37
42	USA	Zaire	5		90	Gift	Nov 1968	37
43	USA	Zaire	80		20	Gift	Nov 1968	37/Add.2
44	USA	Uruguay	3 183		20	Gift	Jan 1969	67
45	USA	Uruguay	3		90	Gift	Jan 1969	67
46	USA	Pakistan	4 000		93	Part gift, part sale	Oct 1971	34/Add.1
47	USA	Pakistan	1 680		10	Sale	Jun 1970	116
48	FRG	Argentina	739		20	Gift	Jun 1971	143
49	USA	Pakistan	2		93	Sale	Feb 1970	34/Add.2
50	USA	Chile	9 570		93	Part gift, part lease	Sep 1972	137/Add.1
51	USA	Finland	2 127		20	Sale	end 1970	24/Add.4
52	USA	Finland	2		93	Sale	beg. 1971	24/Add.4
53	USA	Greece	100		93	Gift	Jul 1971	149, part II
54	USA	India	**		99	Gift	^c	94/Add.1, part I
55	USA	India	***		20 ^j	Sale	Oct 1970	94
56	USA	India	1		5	Sale	Oct 1970	94
57	USA	India	1		20	Sale	Oct 1970	94
58	USA	India	1		50	Sale	Oct 1970	94
59	USA	India	45		90	Gift	Mar 1971	94/Add.1, part II
60	USA	Indonesia	3 605		20	Gift	Oct 1972	136
61	USA	Brazil	465		93	Gift	Jun 1971	147, part II
62	UK	Burma	***			^b	Apr 1971	
63	USA	Zaire	1		93	Sale	Apr 1971	37/Add.3
64	USA	Zaire	3 000		20	Gift	Jun 1971	37/Add.4
65	USA	Greece	1 220		90	Gift ^k	Mar 1972	163
66	USA	Pakistan	9		99	Gift	Apr 1973	150/Add.1
67	USA	Pakistan	10 000		10	Sale	ⁱ	116/Add.1
68	USA	Yugoslavia	4 800		20-70	Part gift, part sale	ⁱ	32/Add.3
69	Sweden	Yugoslavia	440			^l	Nov 1970	
70	UK	Yugoslavia	1		93	Sale	May 1971	151, part III
71	USA	Agency	53		3	Sale	Jul 1971	
72	USA	Agency	30		3	Sale	Jul 1972	

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ²³⁵ U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/...)
			Fissionable isotope content (grams ^a)	Total element (kilo-grams ^a)				
73	FRG	Mexico	745		20	Gift	Aug 1972	162
74	USA	Poland	***		90	^b	Dec 1973	
75	USA	Romania	180		90	Gift	Mar 1974	
76	UK	Romania	63		0.5-90	^b	Apr 1973	
77	USA	Indonesia	2 400		20	Part gift, part sale	ⁱ	136/Add.1
78	USA	Agency	5		20,49,75	Sale	Dec 1972	
79	USA	India	***		2	Sale	^c	
80	USA	India	5		0.5-90	Sale	^c	
81	USA	Mexico	14		0.5-97	Sale	^c	194, part II
82	USA	Mexico	772		20	Part gift, part sale	ⁱ	52/Add.1
			7 560		70			
83	USA	Poland	2		1-90	Sale	^c	
84	USA	Greece	1 580		90	Gift ^k	Mar 1974	163/Add.1
85	USA	Turkey	1 040		1.143	Gift ^m	May 1974	
86	USA	Romania	39 060		93	Part gift, part sale	^c	206
			9 294		20			
87	USA	India	1		0.2-50	Sale	^c	
88	France	India	9		93	Sale	^c	
89	USA	Agency	***		2	Sale	Aug 1973	
90	UK	Agency	360		0.6-10	Sale	Jan 1974	
91	USA	Agency	25			Sale	Jun 1973	
92	USA	Agency	3		50	Sale	Aug 1973	
93	USA	Agency	***			Sale	Oct 1973	
94	USA	Korea, Rep.of	***			^b	Nov 1973	
95	USA	India	1		93	Sale	^c	
96	USA	Yugoslavia	**			Sale	^c	151/Add.1, part I
97	Belgium	Agency	98			Loan	Dec 1973	
98	USA	India	40		49-93	Sale	^c	
99	USA	Agency	2			Sale	Mar 1974	
100	USA	India	2		1-97	Sale	^c	
101	USA	Romania	15 569		93	Sale	^c	206/Add.1
102	USA	Agency	31		93	Gift	Mar 1974	
103	USA	Venezuela	2 594		17	Part gift, part sale	^c	
			204		20			238
104	USA	Pakistan	5 000		93	Sale	July 76	34/Add.4
105	USA	India	2		75-97	Sale	^c	
106	USA	Pakistan	***		0.1-0.001	^b	^c	
107	USA	Philippines	4 185		93	Gift	^c	
108	USA	Agency	***			Sale	^c	
109	USA	Agency	***			Sale	Jun 1975	
110	USA	India	2		0.5-97	Sale	^c	
111	Belgium	Agency	33		3.5	Sale	^c	
112	USA	Romania	**			Sale	^c	
113	Sweden	Agency	352		1.40,1.85, 2.50	Sale	May 1976	
114	USA	Agency	***			Sale	^c	
115	UK	Agency	236		80	Sale	Mar 1976	
116	USA	Agency	3		0.05-97	Sale	^c	
117	USA	Agency	10		93	Gift	May 1976	
118	USA	Greece	6300		93	part gift, part sale	^c	
119	USA	CSSR	3		1-93	Sale	May 1977	
120	USA	Agency	2			Gift	Mar 1977	
121	USA	Agency	3		50	Gift	Feb 1977	
122	USA	Mexico		9 691	4	Sale	ⁱ	
123	USA/ Argentina	Peru	2 970		20	Sale	Apr 1978	266
124	USA	Bangladesh	***			Loan ^o	Jun 1978	
125	USA	Agency	***		0.3-4	Gift	Sep 1978	
126	USA	Agency	1		2.4	Gift	Apr 1978	

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ²³⁵ U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/..)
			Fissionable isotope content (grams ^a)	Total element (kilo-grams ^a)				
127	USA	Agency	1		3.8	Gift	Sep 1978	
128	USA	Agency	2		2.4	Gift	Sep 1978	
129	FRG	Agency	**		1	Gift	Jun 1978	
130	USA	Agency	1		1.3	Sale	Apr 1978	
131	Sweden	Agency	5		1.3-2.3	Gift	July 1978	
132	USA	Agency	*			Gift	Sep 1978	
133	USA	Agency	3		2.2-5	Sale	Dec 1978	
Uranium-232								
3.	1	UK	India	***		Sale	c	
Uranium-233								
4.	1	USA	Agency	***		Sale	Jul 1964	
	2	UK	Yugoslavia	***		Sale	c	151, part II
	3	UK	Yugoslavia	***		b	Jul 1970	
	4	UK	Burma	***		b	Apr 1971	
	5	USA	India	***		Gift	c	94/Add.1, part I
	6	UK	India	***		Sale	c	
	7	USA	Agency	***		Sale	Mar 1971	
	8	USA	Agency	***		Sale	Oct 1973	
	9	USA	Agency	***		Sale	Dec 1973	
	10	USA	Agency	***		Sale	Jan 1975	
	11	USA	Agency	30		Loan	c	
	12	USA	Agency	**		Sale	c	
	13	USA	Bangladesh	**		Loan ^o	Jun 1978	
	14	USA	Agency	1.5		Gift	Sep 1978	
	15	USA	Agency	1		Gift	Sep 1978	
Uranium-236								
5.	1	Belgium	Agency	***		Sale	Feb 1974	
Uranium-238								
6.	1	USA	Agency	***		Loan	May 1973	
	2	Belgium	Agency	129		Loan	Dec 1973	
	3	Belgium	Agency	***		Sale	Jun 1975	
	4	USA	Agency	***		Loan	Apr 1975	
	5	USA	Romania	**		Sale	c	
	6	USA	Agency	***		Sale	c	
	7	USA	Bangladesh	***		Sale	Jun 1978	
SOURCE MATERIALS								
Uranium								
7.	1	Canada	Japan	3 042 ⁿ	n	Gift to the Agency, sale to Japan	Nov 1959	3
	2	Sweden	Agency	9	n/d	Gift	Jun 1963	
	3	Canada	Agency	6	n/d	Gift	Jul 1963	
	4	UK	Egypt	2	n	Sale	Nov 1964	
	5	USA	Mexico	2 527	n	Lease	Jan 1967	82
	6	USA	Mexico	2 519	n	Lease	Apr 1968	102
	7	USA	Pakistan	***	n	Sale	Apr 1973	150/Add.1
	8	USA	India	***	n/d	Sale	May 1972	94/Add.2, part III
	9	USA	India	400	n	Sale	c	
	10	CSSR	Agency	150	n	Sale	Apr 1974	

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ^{235}U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/...)
			Fissile isotope content (grams ^a)	Total element (kilo-grams ^a)				
11	USA	India		15	n/d	Sale	c	
12	USA	Romania		**	n	Sale	c	
13	UK	Agency		3 000	n	Sale	c	
14	USA	Romania		0.15	n	Sale	Jun 1977	
15	USA	Agency		0.30	n	Gift	Feb 1977	
16	USA	Agency		***	n	Sale	Jun 1978	

Thorium

8.	1	USA	Finland	***		Sale	Oct 1963	
	2	Belgium	Bulgaria	***		Sale	Mar 1971	148
	3	USA	Poland	***		b	Dec 1973	
	4	USA	Yugoslavia	***		Sale	c	151/Add.1, part II
	5	USA	Pakistan	***		b	c	
	6	USA	Agency	**		Sale	c	
	7	USA	Poland	200		Sale	c	
	8	USA	Bangladesh	**		Loan ^o	Jun 1978	

NON-NUCLEAR MATERIALS

9.	1	UK	Yugoslavia	***		Sale	Oct 1963	
				(^{237}Np)				
	2	USA	Pakistan	*		Sale	Nov 1972	150/Add.1
				(^{252}Cf)				
	3	France	Poland	***		b	Feb 1974	
				(^{237}Np)				
	4	USA	Yugoslavia	***		Sale	c	151/Add.1, part II
				(^{241}Am)				
	5	USA	Agency	25		Sale	Jun 1973	
				(^{237}Np)				
	6	USA	Agency	**		Sale	Jun 1973	
				(^{252}Cf)				
	7	USA	Agency	**		Loan	May 1973	
				(^{237}Np)				
	8	USA	Agency	***		Sale	Dec 1973	
				(^{237}Np)				
	9	USA	Agency	***		Sale	Feb 1974	
				(^{241}Am)				
	10	USA	Agency	***		Sale	Feb 1974	
				(^{243}Am)				
	11	France	Poland	***		b	c	
				(^{252}Cf)				
	12	USA	Agency	***		Sale	c	
				(^{252}Cf)				
	13	USA	Agency	***		Sale	c	
				(^{237}Np)				
	14	USA	Agency	**		Loan	Apr 1975	
				(^{237}Np)				
	15	USA	Romania	**		Sale	c	
				(^{237}Np)				
	16	USA	Agency	**		Sale	c	
				(^{241}Am)				
	17	USA	Agency	**		Sale	c	
				(^{237}Np)				
	18	USA	Bangladesh	**		Loan ^o	Jun 1978	
				(^{241}Am)				
	19	USA	Bangladesh	**		Loan ^o	Jun 1978	
				(^{237}Np)				

Reference number	Supplier	Recipient	Quantity		Enrichment by weight in ^{235}U (per cent ^a)	Type of transaction	Date of transfer of possession	Text of agreement (INFCIRC/...)
			Fissionable isotope content (grams ^a)	Total element (kilo-grams ^a)				
20	USA	Agency		2.9 (^{241}Am)		Gift	Oct 1978	
21	USA	Agency		2.48 (^{241}Am)		Gift	Oct 1978	
22	USA	Agency		* (^{252}Cf)		Gift	Jan 1978	

^a Rounded off to the nearest integer.

^b Material transferred under a technical assistance agreement.

^c Material already allocated under Article XI.F.1 of the Statute but receipt of delivery not acknowledged by 31 December 1978.

^d The material was sold to Belgium by USA on 9 December 1958, and given by Belgium to Zaire, through the Agency and with the approval of the supplier, pursuant to the TRICO Title Transfer Agreement (INFCIRC/37, part I). The date given in the table is that of the transfer of title.

^e See reference number 2.1; title to the balance of the material was at the same time transferred to Norway as a gift (INFCIRC/29/Add.2, part I).

^f The material had previously been leased by USA to Argentina, and was in Argentina at the time of the transfer of title through the Agency to Argentina. The date given is that of the transfer of title.

^g Five samples each containing 0.595 grams of uranium enriched to 90%, 50%, 20%, 10% and 1% respectively.

^h See reference number 2.17; 481 grams of uranium-235 remained in Norway after April 1968.

ⁱ The material is covered by a long-term Supply Agreement; only part of it had been delivered by 31 December 1978.

^j Four samples containing uranium enriched to 10%, 5%, 3% and 1% respectively.

^k The material had previously been leased by USA to Greece, and was in Greece at the time of the transfer of title through the Agency to Greece. The date given is that of the transfer of title.

^l Material of US origin which has been transferred through the Agency for the testing of a fuel element in Yugoslavia for up to one year.

^m The material had previously been leased by USA to Turkey, and was in Turkey at the time of the transfer of title through the Agency to Turkey. The date given is that of the transfer of title.

ⁿ Samples weighing 26 kilograms, which were transferred at an earlier date, are included in this amount.

^o Material transferred under the Agency's nuclear data programme.