



International Atomic Energy Agency

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**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 the end of 1971, in compliance with requests the Agency had made under Article IX.D.

ABBREVIATIONS AND SIGNS USED

|        |   |  |
|--------|---|--|
| Agency | - | International Atomic Energy Agency                   |
| Egypt  | - | Arab Republic of Egypt                               |
| 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                  |
| Zaire  | - | Republic of Zaire                                    |
| n      | - | Natural uranium                                      |
| n/d    | - | Natural or depleted uranium                          |
| Np     | - | Neptunium  |
| Pu     | - | Plutonium  |
| Th     | - | Thorium  |
| U      | - | Uranium  |
| *      | - | Less than 1 $\mu$ g                                  |
| **     | - | 1 $\mu$ 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 1971

| Reference number              | Supplier | Recipient       | Quantity   |   | Enrichment by weight in $^{235}\text{U}$ (per cent <sup>a</sup> /) | Type of transaction                                | Date of transfer of possession | Text of agreement (INFCIRC/..) |
|-------------------------------|----------|-----------------|--|---|--|--|--------------------------------|--------------------------------|
|                               |          |                 | Fissionable isotope content (grams <sup>a</sup> /) | Total element (kilo-grams <sup>a</sup> /) |  |  |                                |                                |
| 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            | Ceylon   | 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                       |                                |
|                               | 35       | USA             | Pakistan   | 5   |  | Gift   | c/                             | 150/Add. 1                     |
|                               | 36       | USA             | Pakistan   | ***                                       |  | Gift   | c/                             | 150/Add. 1                     |
|                               | 37       | USA             | India  | ***                                       |  | Sale   | Nov 1971                       | 94/Add. 2, part II             |
|                               | 38       | USSR            | Singapore  | 16  |  | b/   | May 1971                       |                                |
| 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/<br>Belgium | Zaire  | 1 988                                     | 20   | Sale to<br>Belgium, gift to<br>Zaire <sup>d/</sup> | Jun 1962                       | 37                             |
|                               | 5        | USA/<br>Belgium | Zaire  | 3   | 94   | Sale to<br>Belgium, gift to<br>Zaire <sup>d/</sup> | 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) <sup>e/</sup>                    | 3  | Return <sup>e/</sup>                               | 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             |
|                               | 18       | USA             | Argentina  | 2 940                                     | 90   | Gift <sup>f/</sup>                                 | Dec 1964                       | 62                             |
|                               | 19       | USA             | Pakistan   | 5 175                                     | 90   | Part gift,<br>part sale                            | Apr 1965                       | 34                             |

| Reference number             | Supplier | Recipient | Quantity   |   | Enrichment by weight in <sup>235</sup> U (per cent <sup>a</sup> /) | Type of transaction | Date of transfer of possession | Text of agreement (INFCIRC ...) |                    |
|------------------------------|----------|-----------|--|---|--|---------------------|--------------------------------|---------------------------------|--------------------|
|                              |          |           | Fissionable isotope content (grams <sup>a</sup> /) | Total element (kilo-grams <sup>a</sup> /) |  |                     |                                |                                 |                    |
| Enriched uranium (continued) |          |           |  |   |  |                     |                                |                                 |                    |
| 2.                           | 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 <sup>f</sup> /            | Dec 1965                        | 32                 |
|                              | 24       | USA       |  | Argentina                                 | 893  | 90                  | Gift <sup>f</sup> /            | 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) <sup>h</sup> /  | 3                   | Return <sup>h</sup> /          | 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 <sup>h</sup> /            | Mar 1968                        | 24/Add. 3          |
|                              | 36       | USA       |  | Norway                                    | (42 470) <sup>h</sup> /  | 3                   | Return <sup>h</sup> /          | 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                                 | 750  | 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          | c/                              | 137                |
|                              | 51       | USA       |  | Finland                                   | 4 750  | 20                  | Sale                           | c/                              | 24/Add. 4          |
|                              | 52       | USA       |  | Finland                                   | 3  | 90                  | Sale                           | c/                              | 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 <sup>i</sup> /   | 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                  | Part gift, part sale           | c/                              | 136                |
|                              | 61       | USA       |  | Brazil                                    | 465  | 93                  | Gift                           | Jun 1971                        | 147, part II       |
|                              | 62       | UK        |  | Burma                                     | ***  |                     | Sale                           | 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 <sup>j</sup> /            |                                 |                    |
|                              | 66       | USA       |  | Pakistan                                  | 9  | 99                  | Gift                           | c/                              | 150/Add. 1         |
|                              | 67       | USA       |  | Pakistan                                  | 10 000   | 10                  | Sale                           | c/                              | 116/Add. 1         |
|                              | 68       | USA       |  | Yugoslavia                                | 4 750  | 20                  | Part gift, part sale           | c/                              | 32/Add. 3          |
|                              | 69       | Sweden    |  | Yugoslavia                                | 440  |                     | k/                             | Nov 1970                        |                    |
|                              | 70       | UK        |  | Yugoslavia                                | 1  | 93                  | Sale                           | c/                              | 151, part III      |
|                              | 71       | USA       |  | Agency                                    | 53   | 3                   | Sale                           | c/                              |                    |
|                              | 72       | USA       |  | Agency                                    | 30   | 3                   | Sale                           | c/                              |                    |
|                              | 73       | FRG       |  | Mexico                                    | 750  | 20                  | Gift                           | c/                              |                    |
| Uranium-233                  |          |           |  |   |  |                     |                                |                                 |                    |
| 3.                           | 1        | USA       |  | Agency                                    | ***  |                     | Sale                           | Jul 1964                        |                    |
|                              | 2        | UK        |  | Yugoslavia                                | ***  |                     | Sale                           | c/                              | 151, part II       |
|                              | 3        | UK        |  | Yugoslavia                                | ***  |                     | Sale                           | Jul 1970                        |                    |
|                              | 4        | UK        |  | Burma                                     | ***  |                     | Sale                           | Apr 1971                        |                    |
|                              | 5        | USA       |  | India                                     | ***  |                     | Gift                           | c/                              | 94/Add. 1, part I  |

| Reference number        | Supplier | Recipient | Quantity  |  | Enrichment by weight in $^{235}\text{U}$ (per cent $\frac{\text{a}}$ /) | Type of transaction               | Date of transfer of possession | Text of agreement (INFCIRC ...) |
|-------------------------|----------|-----------|---|--|---|-----------------------------------|--------------------------------|---------------------------------|
|                         |          |           | Fissionable isotope content (grams $\frac{\text{a}}$ /) | Total element (kilo-grams $\frac{\text{a}}$ /) |   |                                   |                                |                                 |
| SOURCE MATERIALS        |          |           |   |  |   |                                   |                                |                                 |
| Uranium                 |          |           |   |  |   |                                   |                                |                                 |
| 4.                      | 1        | Canada    | Japan   | 3 042 $\frac{\text{b}}$                        | n   | Gift to the Agency, sale to Japan | Nov 1969                       | 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                              | $\frac{\text{c}}$ /            | 150/Add. 1                      |
|                         | 8        | USA       | India   | ***  | n/d   | Sale                              | $\frac{\text{c}}$ /            | 94/Add. 2, part III             |
| Thorium                 |          |           |   |  |   |                                   |                                |                                 |
| 5.                      | 1        | USA       | Finland   | ***  |   | Sale                              | Oct 1963                       |                                 |
|                         | 2        | Belgium   | Bulgaria  | ***  |   | Sale                              | Mar 1971                       |                                 |
| NON - NUCLEAR MATERIALS |          |           |   |  |   |                                   |                                |                                 |
| 6.                      | 1        | UK        | Yugoslavia  | ***<br>( $^{237}\text{Np}$ )                   |   | Sale                              | Oct 1963                       |                                 |
|                         | 2        | USA       | Pakistan  | ***<br>( $^{252}\text{Cf}$ )                   |   | Sale                              | $\frac{\text{c}}$ /            | 150/Add. 1                      |

- a/ Rounded off to the nearest integer.
- b/ Material transferred under a technical assistance agreement.
- c/ Material not delivered by 31 December 1971 but already allocated under Article XI. F. 1 of the Statute.
- 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/ 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 from USA, 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/ Reference number 2.17; 481 grams of uranium-235 remained in Norway after April 1968.
- i/ Four samples containing uranium enriched to 10%, 5%, 3% and 1% respectively.
- j/ The material had previously been leased by USA to Greece and was in Greece when it was allocated as a gift in December 1971.
- k/ 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.
- l/ Samples weighing 26 kilograms, which were transferred at an earlier date, are included in this amount.