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**Communication Received From the United Kingdom of Great Britain and Northern Ireland**

At the request of the Governor of the United Kingdom, in his letter to the Director General dated 11 September 1998, the attached document is being circulated for the information of all Member States of the Agency.

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INFCIRC/570  
Attachment

**UNITED KINGDOM FISSILE MATERIAL TRANSPARENCY, SAFEGUARDS  
AND IRREVERSIBILITY INITIATIVES**

**INTRODUCTION**

1. The United Kingdom's civil nuclear industry has for many years been subject to international safeguards in accordance with our Safeguards Agreement with the International Atomic Energy Agency (IAEA) and the European Atomic Energy Community (EURATOM) (INFCIRC/263) - (which entered into force in 1978), and with the terms of the EURATOM Treaty (to which the United Kingdom acceded in 1973). However, as a recognised Nuclear Weapon State under the Nuclear Non-Proliferation Treaty (NPT), the United Kingdom is entitled to hold stocks of nuclear materials required for national security reasons outside the scope of safeguards supervision by the IAEA and EURATOM. In addition, and in accordance with our Safeguards Agreement, the United Kingdom has the right to withdraw material from safeguards when required for national security reasons.

2. Defence holdings of fissile materials consist of plutonium, high enriched uranium (HEU) and other forms of uranium. Plutonium is required for use in nuclear weapons. Uranium has a

number of military uses. In addition to its use in nuclear weapons, it is used to fuel the reactors which produce tritium (for use in nuclear weapons) and to produce the fuel for the reactors that power the United Kingdom's nuclear submarines. While accounting for these materials is maintained to standards at least as high as in the civil nuclear industry, until the recent publication of the United Kingdom's Strategic Defence Review, no figures on the amounts of these materials held had been released publicly.

## **TRANSPARENCY**

3. We have considered the arguments for maintaining previous levels of confidentiality about the stocks of fissile material required for national security reasons, and have concluded that there is no longer a need for complete confidentiality about these stocks. We have therefore declared for the first time the total size of our stockpiles of plutonium and uranium held outside international safeguards. The United Kingdom is the first State among Nuclear Weapon States and other States that have not given up the right to hold fissile material outside safeguards to take this step.

4. The United Kingdom has until now held the following stocks outside safeguards:

- 7.6 tonnes of plutonium;
- 21.9 tonnes of high enriched uranium;
- 15,000 tonnes of other forms of uranium.

This information complements information already published by the United Kingdom on inventories of these materials in the civil sector, including in connection with our adoption of the "Guidelines on the Management of Plutonium" (INFCIRC/549).

## **FUTURE DEFENCE STOCKPILES**

5. We have concluded that the number of nuclear weapons required to provide the minimum nuclear deterrent for the United Kingdom can safely be reduced. We have also considered the quantities of fissile material for which the United Kingdom will continue to have a national security requirement and concluded that substantial quantities of the material we have previously held outside international safeguards are no longer required for national security reasons. In accordance with the United Kingdom's obligations under the NPT and under the EURATOM Treaty, and with the terms of INFCIRC/263, these materials are now being placed under EURATOM safeguards and made liable to inspection by the IAEA. We are in discussion with the IAEA and EURATOM on how this can best be achieved.

6. More specifically, 0.3 tonnes of weapons-grade plutonium is now no longer needed for the defence programme. The great majority of this material is currently stored at the Atomic Weapons Establishment (AWE) at Aldermaston in southern England. It will be moved from there to suitable civil storage facilities elsewhere in the United Kingdom, where it will be placed under EURATOM safeguards and made liable to inspection by the IAEA. In addition, HEU which is no

longer required for nuclear weapons will be used instead for the naval propulsion programme, though as a consequence of this continuing defence-related use, it will not be placed under safeguards.

7. We have also concluded that there is no continuing national security requirement for 4.1 tonnes of non-weapons grade plutonium. All of this material is therefore being placed under EURATOM safeguards and made liable to inspection by the IAEA. The great majority of this material is already stored at Sellafield in north west England. The remainder, currently at AWE Aldermaston, will be transferred to a suitable non-defence location for storage and safeguarding.

8. As noted above, there will continue to be a range of defence-related requirements for forms of uranium other than HEU: for example, providing the fuel for the tritium-producing reactors at Chapelcross in Dumfriesshire, Scotland. Some stocks of these materials will therefore remain outside international safeguards. However, we have concluded that of the total current stockpile of 15,000 tonnes referred to above, over 9,000 tonnes is no longer required for national security reasons. This will therefore become subject to safeguards under the EURATOM Treaty and made liable to inspection by the IAEA.

## **REPROCESSING**

9. It will remain necessary to reprocess at Sellafield the spent fuel arising from the operation of the tritium-producing defence reactors at Chapelcross. Previously this reprocessing has been conducted outside safeguards. It will now be conducted under EURATOM safeguards and made liable to inspection by the IAEA. This means that all planned reprocessing and enrichment operations producing fissile material in the United Kingdom will hereafter routinely be conducted under international safeguards. We are the first Nuclear Weapon State to take this step and have gone a long way towards meeting what will undoubtedly be one of the main requirements of a Fissile Material Cut-Off Treaty (FMCT). We will, however, retain our right to resume such production outside of safeguards until a FMCT has been agreed.

## **WITHDRAWALS**

10. As noted in paragraph 1 above, the United Kingdom has the right to withdraw fissile material from safeguards. We have considered whether we will in future need to have the ability to exercise this right. While we will continue to maintain our legal right to withdraw material from safeguards for national security reasons, we have concluded that our policy will be that in practice such withdrawals will be severely limited. Only small quantities of materials not suitable for nuclear explosive purposes will be withdrawn (e.g. material purchased from civil manufacturers for such uses at defence nuclear facilities as the calibration of instruments and radiography and shielding of radiological sources). Information on such withdrawals will be made public. None of the material withdrawn will be used in nuclear weapons.

## **HISTORICAL ACCOUNTING AND DECLASSIFICATION**

11. We also recognise that if we are to achieve our goal of the global elimination of nuclear weapons, it will in time be necessary for those States that have at any time had nuclear programmes outside international safeguards to account for the fissile material produced under those programmes. We have noted with interest the Openness Initiative of the Department of Energy in the United States about the US nuclear production programme. We have made clear our commitment to transparency and open government. In this spirit, we have concluded that the Ministry of Defence should now set in hand a declassification and historical accounting process. This will be a continuing activity, but our aim is to produce by the spring of 2000 an initial report on the United Kingdom's defence fissile material production since the inception of the defence nuclear programme in the 1940s.

## **CONCLUSION**

12. We believe that the measures set out above, together with the initiatives that have already been taken in the civil sector, represent a coherent policy of transparency and openness. Moreover, taken together with the disarmament initiatives announced at the same time, they demonstrate both a positive commitment and a significant contribution to our goal of the elimination of nuclear weapons.