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**IMPLEMENTATION OF THE AGREEMENT BETWEEN THE AGENCY
AND THE DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
FOR THE APPLICATION OF SAFEGUARDS IN CONNECTION WITH
THE TREATY ON THE NON-PROLIFERATION OF NUCLEAR WEAPONS
(INFCIRC/403)**

1. In resolution GC(XXXVII)/RES/624 of 1 October 1993 the General Conference decided:

"to include in the agenda for its thirty-eighth regular session an item entitled "Implementation of the Agreement between the Agency and the Democratic People's Republic of Korea for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons".

The purpose of this report is to assist the General Conference in its consideration of this item of its agenda.

INCONSISTENCIES BETWEEN THE DPRK'S INITIAL REPORT ON ITS NUCLEAR MATERIAL SUBJECT TO SAFEGUARDS AND THE SECRETARIAT'S FINDINGS

2. The Director General's report to the General Conference in 1993 in document GC(XXXVII)/1084 described developments in safeguards implementation in the DPRK pursuant to the DPRK's safeguards agreement with the Agency (INFCIRC/403) in connection with the NPT. It focussed on the Secretariat's efforts, endorsed by the Board of Governors, fully to discharge the Agency's responsibilities under the safeguards agreement and to shed light on the inconsistencies between the DPRK's declarations of its nuclear material subject to safeguards and the Secretariat's findings. The report also described the Director General's efforts to consult with the DPRK with a view to resolving inconsistencies and to the full implementation of the safeguards agreement. It concluded with a list of key points which had emerged from the Secretariat's endeavours in the latter regard up to and including September 1993.

3. Since the report in GC(XXXVII)/1084 was issued, there has been no change in the situation concerning the inconsistencies between the DPRK's initial report of its nuclear material subject to safeguards and the Secretariat's findings. Despite the Agency's efforts to resume consultations with the DPRK, since an Agency team visited Pyongyang from 1 to 3 September 1993 no consultations have taken place and the Agency has not been able to obtain access to additional information and locations as called for by the Board of Governors' resolution of 25 February 1993 (GOV/2636).

THE DPRK's DECLARED NUCLEAR ACTIVITIES: PROBLEMS OF SAFEGUARDS IMPLEMENTATION

4. The Director General's report to the 1993 General Conference in GC(XXXVII)/1084 said that, in order to meet the requirements of the safeguards agreement, thereby ensuring, inter alia, continuity of safeguards knowledge about the DPRK's declared nuclear activities, the Agency also needed to carry out, within a certain time frame, certain inspection activities which had been specified in detail to the DPRK. The performance of all the activities listed was essential and of particular importance in view of restrictions imposed during inspections in May and August 1993. However, in communications addressed to the Agency, the DPRK took the view that the suspension of the "effectuation" of its NPT withdrawal left it in a unique position in which it was prepared to allow the Agency only to maintain "continuity of safeguards". The DPRK attempted to differentiate between "continuity of safeguards" and "full implementation of the safeguards agreement", a matter which the DPRK considered had to be discussed and resolved in the context of its bilateral political talks with the United States. The Agency made it clear that safeguards verification is a system of many interrelated components designed to give, together, assurance of peaceful use of nuclear installations and material. Many components of the system, not only those involving containment and surveillance devices (i.e. cameras and seals), require periodic visits by inspectors.

5. The Agency also continued to stress the position - reflected, inter alia, in General Conference resolution GC(XXXVII)/RES/624 of 1 October 1993 - that when, in June 1993, the DPRK suspended the "effectuation" of its withdrawal from the NPT, its obligations as a party to the Treaty continued. As a consequence, the safeguards agreement between the Agency and the DPRK remained fully operative and must be fully implemented. The Agency could not accept linkages between the scope of its inspection activities and progress in political talks with a third party.

6. Because no inspection activity had taken place in the DPRK since September 1993, and because of the restrictions imposed during earlier inspections, the Director General was obliged to report to the Board of Governors, in December 1993, that, in addition to the unresolved inconsistencies which had led to the Agency's request for a special inspection, safeguards implementation in the DPRK had further deteriorated. This was because the safeguards system which had been in place for declared nuclear installations and material in the DPRK could no longer be said to provide any meaningful assurance of the peaceful use of those installations and material.

7. In January 1994, following further bilateral discussions with the United States in December, the DPRK indicated its readiness to accept such inspection of declared nuclear material and installations as was required to provide "continuity of safeguards". Subsequently, several detailed rounds of working-level discussions took place in Vienna between Agency officials and representatives of the DPRK's Permanent Mission about activities to be performed by the Agency during a next inspection at the DPRK's seven declared facilities. Although the discussions did not bring agreement about the formal basis of the inspection, a detailed list of inspection activities consistent with the requirements of the safeguards agreement was established and accepted on 15 February 1994.

8. Inspection activities under this understanding began on 3 March 1994. However, at one of the DPRK's seven declared facilities, the Radiochemical Laboratory, a reprocessing plant, Agency inspectors were denied access to perform certain required and agreed safeguards activities. When the Director General reported this to the Board of Governors on 21 March 1994, the Board adopted a further resolution (GOV/2711), which, inter alia, called upon the DPRK immediately to allow the Agency to complete all requested inspection activities and requested the Director General to transmit the resolution to all Members of the Agency and to the Security Council and General Assembly of the United Nations. On 31 March 1994, a statement of the President of the Security Council took note "that the DPRK has accepted in principle IAEA inspections of its seven declared sites" following its decision to suspend its withdrawal from the NPT and called upon the DPRK "to allow the IAEA inspectors to complete the inspection activities agreed between the IAEA and the DPRK on 15 February 1994, as a step in fulfilling its obligations under the IAEA-DPRK safeguards agreement and in honouring non-proliferation obligations of the Treaty". Some of the safeguards measures required, but initially blocked by the DPRK during the March inspection at the Radiochemical Laboratory were later permitted on the basis of what the DPRK considered to be "a special exception" taking into account developments in its bilateral talks with the United States.

THE 5 MW(e) EXPERIMENTAL NUCLEAR POWER REACTOR IN THE DPRK

9. The Director General had invoked the special inspection provisions of the DPRK's safeguards agreement in February 1993 because access to additional information and locations is essential to the Agency's ability to ascertain the extent of reprocessing operations in the DPRK and therefore how much plutonium, either grams or kilograms, has been produced there. Vital also in these contexts was the need for the Agency to ascertain, with confidence, whether the core of the DPRK's 5 MW(e) Experimental Nuclear Power Reactor was the first core, as the DPRK has stated. The report of the Director General in GC(XXXVII)/1084 recalled that the Agency had been informed, in May 1993, that the refuelling of the reactor had been postponed. The report also said that the Agency had reiterated to the DPRK that it considered it essential for the Agency to be present during the refuelling.

10. On 19 April 1994, the DPRK notified the Agency of its intention to carry out "at an early date" the refuelling of the Experimental Nuclear Power Reactor. As early as February 1993, the Agency had given the DPRK full information about safeguards measures required in connection with that refuelling, stressing, inter alia, that specific safeguards activities - related to the selection, segregation and securing of certain fuel rods - would be indispensable at the time of the core discharge operation. The overall purpose of the measures was to enable the Agency to verify, through measurements at a later date, that no fuel in the reactor had been diverted in the past and that the fuel discharged was indeed the first core of the reactor as the DPRK had declared.

11. When the DPRK told the Agency, on 12 May 1994, that it had already started the refuelling campaign, the Agency confirmed to the DPRK, as explained in the Director General's reports to the Board of Governors (GOV/2687/Add.5) and to the Security Council (S/1994/601), that the discharge of fuel without the safeguards measures requested constituted a serious violation of the DPRK's safeguards agreement. The Agency sent inspectors to the DPRK and asked that arrangements be made promptly for the necessary safeguards measures and urged that, until these were in place, further discharge should be deferred. The DPRK declined to accede to this request but nevertheless agreed to receive Agency officials to discuss the issue. An Agency team had extensive discussions with DPRK officials from 25 to 27 May in an attempt to reach agreement about how to proceed with the implementation of the safeguards measures required, but no agreement was reached. The Agency concluded that, if the discharge of fuel from the reactor were to continue at the same pace as it had proceeded up until the time of the Agency team's visit, the opportunity to select, segregate and secure fuel rods for later measurements in accordance with Agency standards would be

lost within days. The Director General reported this situation to the Board of Governors (GOV/2687/Add.6) and to the Security Council (S/1994/631).

12. On 30 May 1994, a statement of the President of the Security Council said, *inter alia*, that "the Council strongly urges the DPRK only to proceed with the discharge operation at the 5 MW(e) Reactor in a manner which preserves the technical possibility of fuel measurements, in accordance with the IAEA's requirements in this regard" and that "the Council calls for immediate consultations between the IAEA and the DPRK on the necessary technical measures". The Council also requested the Director General "to maintain IAEA inspectors in the DPRK to monitor activities at the five megawatt reactor".

13. In response to the statement of the President of the Security Council, the Agency put forward to the DPRK three viable options with regard to the fuel discharge operation. Any one of those options, if accepted by the DPRK, could have prevented further erosion of the Agency's future ability to assess the history of the reactor core and could have ensured that such ability as still then existed would have been preserved. The Agency had concluded that there were no technical or safety-related reasons against acceptance of any one of the three options. As for a proposal which the DPRK had put forward to the Agency with the purported aim of preserving the Agency's possibility to make later measurements of fuel rods, the Agency explained that the proposal was not viable because it would not have permitted the Agency to ascertain whether nuclear material from the reactor had been diverted in past years, nor whether the fuel discharged was the first core, as declared by the DPRK.

14. Early in June, the Director General reported to the Board of Governors (GOV/2687/Add.7) and to the Security Council (S/1994/656) that, despite the Agency's efforts, the limited opportunity which had remained for it to select, segregate and secure fuel rods for later measurements was lost. The situation resulting from the core discharge was irreversible and had seriously eroded the Agency's ability to undertake further measures crucial to its ability to ascertain whether all the plutonium produced in the DPRK had been declared to the Agency. The Director General's report made clear that, because of the refusal of the DPRK to provide access to additional information and locations and because of the discharge of the reactor core without the Agency's required verification measures, the Agency could not achieve the overall objective of comprehensive safeguards - the provision of assurance about the non-diversion of nuclear material.

15. In a further resolution of the Board of Governors on 10 June 1994 (GOV/2742), the Board, inter alia, found that the DPRK was continuing to widen its non-compliance with its safeguards agreement, decided, in conformity with the provisions of Article XII.C of the Agency's Statute, to suspend non-medical Agency assistance to the DPRK and asked the Director General to transmit the resolution to all Members of the Agency and to the Security Council and General Assembly of the United Nations. The Director General did so.

RECENT DEVELOPMENTS

16. On 13 June 1994, a spokesman for the Foreign Ministry of the DPRK made a statement referring, inter alia, to the Board of Governors' adoption, on 10 June, of "an extremely unreasonable resolution on the suspension of the Agency's assistance to our country". The statement also said that the DPRK "will immediately withdraw from the IAEA" and "will consider invalid all the unreasonable resolutions adopted by the Agency with regard to our issue up until now". The statement added that "the inspections for the continuity of safeguards which we have accepted in our unique status will no longer be allowed" and that "the Agency's inspectors now will have nothing to do any further in our country".

17. On 15 June 1994, the Agency was informed by the United States, in its capacity as depositary of the Statute of the Agency, that the DPRK had decided to withdraw from the Agency with effect from 13 June. As requested, the Secretariat brought the DPRK's withdrawal from the Agency to the attention of all the Members of the Agency. The DPRK's withdrawal from Agency membership did not affect the validity of the safeguards agreement between the DPRK and the Agency, which remains in force.

18. As stated in paragraph 16 above, the statement of 13 June by the spokesman of the DPRK's Foreign Ministry had indicated the DPRK's unwillingness to accept further inspection activity. However, following a personal contact between the President of the DPRK and former US President Carter, the position of the DPRK appears to have been modified. Objections have not been raised to the Agency's maintaining a continuous inspector presence at Nyongbyon, where, inter alia, inspectors have been monitoring some activities at the 5 MW(e) reactor. As noted in paragraph 12 above, through the statement of 30 May by the President of the Security Council, the Council requested the Director General to maintain Agency inspectors in the DPRK to monitor activities at that reactor.

19. In a letter of 4 July, and in subsequent notifications of inspections, the Agency requested access to four facilities to carry out inspection activities required by the DPRK's safeguards agreement with the Agency and accepted by the DPRK on 15 February. Access to two of those declared facilities, the Fuel Fabrication Plant and the Fresh Fuel Storage Facility, was not granted and the Agency was therefore unable to ascertain whether fresh fuel had been produced and whether nuclear material had been moved into or out of these facilities since they had been inspected in March 1994. Agency inspectors at Nyongbyon were informed orally by DPRK representatives on 8 July that safeguards activities were to be limited to the replacement of existing seals and the maintenance of video surveillance equipment at the 5 MW(e) Experimental Nuclear Power Reactor and the Radiochemical Laboratory. The Agency did not receive any written response to its request for inspections at the Nuclear Fuel Rod Fabrication Plant and the Nuclear Fuel Rod Storage Facility. However, a note read to Agency inspectors in the DPRK on 22 July by DPRK representatives said, *inter alia*, that because of the DPRK's withdrawal from the Agency, and in the light of the statement made subsequently by a spokesman of the DPRK's Ministry of Foreign Affairs, referring to restrictions on activities to provide continuity of safeguards knowledge, "there can be no talk about doing activities according to February 15 Talking Points".

20. With respect to the 5 MW(e) Experimental Nuclear Power Reactor, the inspectors were enabled to continue activities related to seals and surveillance at the reactor and irradiated fuel storage areas. However, the identification of fresh fuel and its verification by non-destructive analysis and the auditing of facility accounting and operating records, including supporting documents, were denied. Thus, although the inspectors could be reasonably confident that there had been no diversion of the discharged irradiated fuel, they could not confirm whether fresh fuel had been removed from the reactor storage area, possibly to begin refuelling the reactor.

21. A process line in the Radiochemical Laboratory was declared to have operated in 1990 and to have separated a quantity of plutonium. Agency inspectors were able to apply surveillance and seals at this process line and assess, as long as those measures were in place, that it had not been operated for the reprocessing of irradiated fuel. In the period between February 1993 and March 1994 it was not possible to assess whether any activity had taken place, since surveillance did not operate for certain periods and seals were found broken. For this reason, samples were taken during the March and May 1994 inspections and measurements (gamma mapping) were performed at selected points so as to verify the operational status of the plant during the period since February 1993. The gamma mapping

results and the preliminary evaluation of the results so far available from sample analysis have not indicated reprocessing of recently irradiated fuel.

22. A new process line has been under construction for some time at the Radiochemical Laboratory. During the March 1994 inspection, it was found to be in an advanced state of construction. Inspectors were not given access to it, as requested on 4 July 1994, to ascertain the state of its completion. In addition the Agency asked to take certain measurements (gamma mapping) similar to those last taken in March and May 1994, but this was not accepted by the DPRK. Similarly, permission was not given to audit facility accounting and operating records including supporting documents.

23. In the absence of any formal response to the inspection request in the Agency's letter of 4 July, the Director of Division of Operations A of the Agency's Department of Safeguards wrote to Mr. Jong Sun Choi, Director of External Relations of the DPRK's General Department of Atomic Energy, on 12 August 1994. The letter to Director Choi recalled the Agency's request of 4 July and the DPRK's negative response, as conveyed orally to Agency inspectors in the DPRK. The Agency's letter of 12 August reminded Director Choi that the inspection activities requested were designed to maintain continuity of knowledge, as required by the DPRK's safeguards agreement, at the declared nuclear facilities in the DPRK and had been included in the list of activities accepted by the DPRK on 15 February 1994. The Agency's letter concluded with a list of inspection activities required at four of the DPRK's declared nuclear facilities, explaining that, for as long as the Agency was precluded from conducting the necessary inspections, it could not provide the required assurance about the non-diversion of declared nuclear material at the DPRK's declared nuclear facilities.

24. At the time of preparation of this report, no written response has been received from the DPRK to the Agency's letter of 12 August. However, in discussions with Agency inspectors in the DPRK on 5 September, a DPRK representative said that, in the light of progress made during recent bilateral consultations between DPRK and United States representatives, the DPRK was ready to enlarge the scope of inspections as requested by the Agency. The same representative said that inspection activities could begin at the Radiochemical Laboratory and at the Nuclear Fuel Rod Storage Facility and the Nuclear Fuel Rod Fabrication Plant. Moreover, in addition to the activities currently being carried out at the 5 MW(e) Experimental Nuclear Power Reactor, Agency inspectors would be able to enter the reactor fresh fuel storage and verify the fresh fuel rods there. With regard to the Radiochemical Laboratory, the DPRK representative told the inspectors that, because the

process line is under Agency seal, the Agency can continue with sealing activities and with servicing surveillance equipment.

25. In view of the oral statements made by the DPRK representative, on 8 September the Director of Division of Operations A wrote a further letter to Director Choi of the General Department of Atomic Energy in the DPRK recording his understanding of the current safeguards situation and the inspection activities that would be undertaken. On 12 September, Agency inspectors confirmed to Agency Headquarters that the inspection activities planned at the Nuclear Fuel Rod Fabrication Plant and at the Nuclear Fuel Rod Storage Facility had been initiated. However, DPRK representatives had informed the inspectors that enlarging the scope of current inspection activities at the Radiochemical Laboratory to include review of the state of construction of the new process line, as requested by the Agency, would depend on the outcome of meetings between the DPRK and the United States.

26. At the 12 September meetings of the Board of Governors, in the light of a further report by the Director General (GOV/2687/Add.8, which is summarized in the preceding paragraphs) the Director General and the Secretariat were commended on their efforts to discharge their safeguards responsibilities and requested to continue with those efforts. There were expressions of continuing concern at the non-compliance of the DPRK with its safeguards agreement, which remains in force despite the DPRK's withdrawal from the Agency. At the same time, some encouragement was taken from recent positive developments in the bilateral negotiations between the DPRK and the United States and from repeated statements by the DPRK that it intends to lift some of the restrictions which it has placed on inspection activities. Appeals to the DPRK to co-operate with the Agency and fully implement its safeguards agreement were reiterated, and there were renewed calls for consultations in a spirit of co-operation and conciliation. Also, there were expressions of regret at the DPRK's withdrawal from the Agency and of hope that the DPRK would resume Agency membership.

