



## Security Council

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### NOTE BY THE SECRETARY-GENERAL

The Secretary-General has the honour to transmit to the members of the Security Council the attached communication which he has received from the Acting Director General of the International Atomic Energy Agency (IAEA).

Annex

Letter dated 29 October 1993 from the Acting Director General  
of the International Atomic Energy Agency addressed to the  
Secretary-General

In paragraph 8 of resolution 715 (1991), adopted on 11 October 1991, the Security Council requests the Director General of IAEA to submit to the Council reports on the implementation of the Agency's plan for future ongoing monitoring and verification of Iraq's compliance with paragraph 12 of resolution 687 (1991) of 3 April 1991. These reports are to be submitted when requested by the Security Council and, in any event, at least every six months after the adoption of resolution 715 (1991).

Accordingly, I am requesting you to kindly transmit to the President of the Security Council the enclosed fourth six-monthly report on the implementation of the plan. The Director General will remain available for any consultations you or the Council may wish to have.

(Signed) David WALLER  
Acting Director General

Enclosure

Fourth report of the Director General of the International Atomic Energy Agency on the implementation of the Agency's plan for future ongoing monitoring and verification of Iraq's compliance with paragraph 12 of resolution 687 (1991)

1. On 11 October 1991, the Security Council adopted resolution 715 (1991) approving, *inter alia*, the plan submitted in document S/22872/Rev.1 and Corr.1 by the Director General of the International Atomic Energy Agency for future ongoing monitoring and verification of Iraq's compliance with paragraph 12 of part C of Security Council resolution 687 (1991) and with the requirements of paragraphs 3 and 5 of resolution 707 (1991). In paragraph 8 of resolution 715 (1991), the Security Council requested the Director General of IAEA to submit to it reports on the implementation of the plan when requested by the Security Council and, in any event, at least every six months after the adoption of resolution 715 (1991). The first three reports submitted by the Director General were circulated on 15 April 1992 (S/23813), 28 October 1992 (S/24722) and 19 April 1993 (S/25621), respectively.
2. The Director General hereby submits the fourth six-monthly report on implementation of the plan for future ongoing monitoring and verification related to Iraq's nuclear capabilities (hereinafter referred to as the plan).
3. Since the last report of 19 April 1993, IAEA has carried out three inspection missions in Iraq, the nineteenth (30 April-7 May 1993), twentieth (25-30 June 1993) and twenty-first (24-27 July 1993) inspections. Detailed reports on the results of these inspections are contained in documents S/25982 and S/26333. The twenty-second mission is currently scheduled to take place in early November 1993.
4. During the period under review high-level technical talks were held in New York (31 August-9 September 1993) and in Baghdad (1-9 October 1993) between delegations from the United Nations Special Commission and IAEA, on the one hand, and, on the other, a delegation from Iraq. Comprehensive reports on these two rounds of talks were circulated to the Security Council as documents S/26451, S/26571 and S/26584.
5. These talks, which grew out of a visit to Iraq by the Executive Chairman of the Special Commission in July 1993 (see S/26127), were intended to address the nature and implementation of the provisions of the plans for ongoing monitoring and verification as approved by Security Council resolution 715 (1991), as well as all other outstanding issues between Iraq, the Commission and IAEA, with a view to resolving such issues.
6. Progress and impediments evidenced in the course of the technical talks are summarized in the relevant sections of the present report.

#### I. Declaration of items subject to the plan

7. In the course of the high-level technical talks in New York and Baghdad the Iraqi representatives handed over, inter alia, statements on additional material (including depleted uranium and heavy water) required to be reported pursuant to annex 3 to the plan, a mid-year update of the declaration of items listed on annex 3 to the plan, a mid-year update of the list of radioisotopes in Iraq as required pursuant to paragraph 22 (d) of the plan and a mid-year update of the information on nuclear-relevant sites and facilities as required under annex 2 to the plan. In addition, the Iraqi officials provided a set of forms developed by the Iraqi Atomic Energy Commission (IAEC) to implement a computerized system of accountancy and reporting, showing status, present location and utilization for all items listed in the declaration required under annex 3 to the plan.

8. The information provided by the Iraqi representatives is being analysed by IAEA to determine whether it satisfies the requirements of the plan. Preliminary results of this analysis show that, while some progress has been made, the overall quality of the documentation still leaves much to be desired in terms of completeness and accuracy. A detailed list of what is needed to bring the IAEC reporting under the plan to the necessary standard has been communicated to the Iraqi Government. Promises have been obtained from IAEC that a further effort will be made to correct the shortcomings and to improve the completeness and accuracy of the documentation. In the course of the technical talks in Baghdad, IAEC informed the IAEA team that additional information required under annex 2 to the plan was in preparation and would be transmitted to the IAEA-22 inspection team.

#### II. Radiometric hydrologic survey

9. As indicated in the last report on the implementation of the plan, part of the long-term monitoring effort in Iraq involves the periodic radiometric survey of the main water bodies in Iraq. The survey serves as a measure for the timely detection of undeclared nuclear activities as well as for the establishment of a baseline for longer-term monitoring. This requires the collection of surface water, sediment and biota samples. During the nineteenth inspection, such samples were taken at 15 locations along the Tigris-Euphrates watersheds. The next sampling campaign has been scheduled for the beginning of November 1993, in connection with the twenty-second IAEA inspection mission.

#### III. Periodic inspection activities

10. Since the last report on the implementation of the plan, IAEA has conducted three inspection missions, in the course of which it has carried out two no-notice inspections of newly designated sites, as well as a number of inspections of a monitoring nature at previously visited sites. One of these was carried out at a suspected equipment dispersal site near Al Nida (formerly Al Rabiya), where a number of machines, including one under IAEA seal from Al Nida, were located.

#### IV. Nuclear material balance

11. As indicated above, in the course of the high-level technical talks, the Iraqi authorities made available additional information on nuclear material, in particular as it relates to depleted uranium and imported natural uranium oxide, and on the existence in Iraq of a small amount of heavy water.

12. A complete inventory of all stocks of nuclear material, such as uranium, thorium and plutonium compounds, existing in Iraq is a prerequisite for any meaningful implementation of the plan, since it must provide the starting point of the nuclear material accountancy. Any future variation of the inventory will require a detailed explanation, will entail verification and will have to be thoroughly documented.

13. Major inconsistencies between the Iraqi declarations concerning nuclear material and IAEA's results of samples analysis were mentioned in the last report, which raised serious questions about the completeness of the present inventory of nuclear materials in Iraq. In the course of the high-level technical talks in New York, some clarifications were provided by the Iraqi authorities. If verified, these clarifications could explain these inconsistencies. Such verification will require additional sampling and analysis.

#### V. Equipment and materials

14. In the course of the eighteenth inspection (3-11 March 1993), 242 computer numerical control (CNC) machine tools were seen for the first time during an inspection of the workshops of the Al Hatteen State Establishment. None of the machines had been included previously in the Iraqi declaration with respect to items listed in annex 3 to the plan. The Iraqi authorities asserted that the machine tools had not been included in the list because they had not met the specifications of annex 3. IAEA is currently verifying the correctness of this statement through inquiries with the manufacturers. In IAEA's inventory of CNC machine tools found in Iraq (over 1,000 items), 148 have been identified as Matrix Churchill machine tools. During the nineteenth inspection, the team ascertained that 144 of the 148 Matrix Churchill CNC machine tools did not meet the annex 3 specifications, but that the remaining 4 required further evaluation.

15. Fifty additional Matrix Churchill CNC machine tools were found during the twentieth IAEA inspection in Iraq at the Nahrawan munition factory, following receipt of information provided by a Member State. Again the Iraqi authorities stated that this stock of CNC machine tools did not meet the specifications of annex 3. This statement is being verified by machine tools experts.

16. IAEA has indications suggesting that a considerable number of Matrix Churchill CNC machines exported to Iraq are still missing and this matter will be pursued further.

17. Two hundred fifty-five tons of high explosive of the HMX type are stored under IAEA seal in six bunkers at the Al Qa Qaa site. As a typical dual-use material, HMX is listed in annex 3 to the plan. The present storage conditions

of HMX at Al Qa Qaa are inconvenient for monitoring and cause some safety concerns. IAEA has requested that the Iraqi side consolidate the HMX in a safer and more convenient place to facilitate sealing and regular monitoring. The IAEA-20 team evaluated two large bunkers in the Muthanna complex which Iraq had proposed as an alternative storage location. With minor modifications to improve security, these bunkers represent a considerable improvement over the current storage conditions at Al Qa Qaa. The transfer of the HMX is expected to take place during IAEA-22.

## VI. Procurement-related information

18. A clear understanding of Iraqi procurements and the sources of technical advice for the nuclear programme has been a primary objective since the beginning of inspections in Iraq under resolution 687 (1991). During IAEA-18, following a course well established through previous inspections, a broad range of questions dealing with Iraqi procurements were put to the Iraqi side. The Iraqi side's often stated response was that, with the destruction of records during and following the Gulf war, it had no way to deal with such a general request and, in addition, it believed that most of the requested information was already in the hands of IAEA. While it is true that, through inspection data collected in Iraq, investigations undertaken by Governments of Member States and interviews with personnel of specific companies, most of the programme has been identified and that many of the front organizations and purchasing agents are also known, there still remain uncertainties as to the completeness of the information.

19. A number of important questions, the answers to which remain outstanding, have been put to the Iraqi aide on several occasions. In December 1992, these questions were put forward in response to an offer from the Chairman of IAEC to deal positively with specific questions. These questions were restated during the first round of high-level technical talks in New York as follows:

(a) What are the identities of the individuals and/or companies from outside Iraq who supplied technical and design information for the Iraqi magnetic centrifuge?

(b) Who were the manufacturers, suppliers, agents and shippers for the 360-grade maraging steel? Please distinguish between the sources of the maraging steel used in the manufacture of centrifuge components outside Iraq and the stock of maraging steel presented inside Iraq. (The Iraqi side expressed concern that, while it can identify the supplier, it has no knowledge of who manufactured the maraging steel);

(c) Who supplied the carbon fibre rotor tubes and how were technical specifications communicated to the manufacturer?

(d) Describe the activities undertaken by the H & H Company with respect to the Iraqi centrifuge enrichment programme;

(e) Identify the manufacturer and describe the procurement procedure for the HMX explosive declared by Iraq to have been intended for conventional armaments.

20. At the end of the second round of high-level technical talks held in Baghdad in October 1993, the Iraqi authorities provided information covering the five areas listed in the previous paragraph. This information is now being verified for correctness and completeness. A preliminary assessment indicates that, while the procurement issues (e.g. the source of supplies and the dealers) have been reasonably covered, the extent of foreign advice concerning the centrifuge uranium enrichment programme has been grossly understated and the information provided in this area is not sufficient to explain the progress made by Iraqi scientists and engineers in developing working centrifuge prototypes. This matter will be further pursued in the course of the November inspection.

#### VII. Removal of irradiated nuclear fuel assemblies

21. Since the last report on implementation of the plan, IAEA was able to conclude a contract with the Committee on International Relations of the Ministry of the Russian Federation for Atomic Energy (CIR Minatom) for the removal, processing and sale or storage of highly enriched uranium still remaining in Iraq, under IAEA's custody, in the form of irradiated fuel assemblies of the Iraqi research reactors. All the complex technical preparations for the removal of the fuel were completed by the end of October. The first of the two shipments to the Russian Federation is currently scheduled to take place in December 1993.

#### VIII. Summary and conclusions

22. Some progress has been made in the last three IAEA inspection missions in Iraq, and during the two rounds of high-level technical talks in New York and Baghdad, in clarifying issues relevant to problems that are still open. Efforts are now focused on completing the technical basis for implementing effectively the ongoing monitoring and verification plan as foreseen in resolution 715 (1991).

23. Remaining problems are compounded by the persistent refusal of the Iraqi Government to formally recognize its obligations under United Nations Security Council resolutions 707 (1991) and 715 (1991). Until Iraq desists in its refusal, it will not have complied with the requirement laid down in paragraph 12 of section C of Security Council resolution 687 (1991) that it accept the plan prepared by the Agency and approved by the Security Council.

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