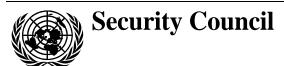
United Nations S/2003/95



Distr.: General 27 January 2003

English

Original: French

Letter dated 27 January 2003 from the Secretary-General addressed to the President of the Security Council

I have the honour to transmit to you herewith the text of a letter dated 27 January 2003 from the Director General of the International Atomic Energy Agency (see annex).

I should be grateful if you would arrange to bring this letter and its annex to the attention of the members of the Security Council.

(Signed) Kofi A. Annan

Annex

Letter dated 27 January 2003 from the Director General of the International Atomic Energy Agency addressed to the Secretary-General

[Original: English]

In paragraph 5 of Security Council resolution 1441 (2002), adopted on 8 November 2002, the Council requested the International Atomic Energy Agency (IAEA) to update the Council 60 days after resumption of inspections in Iraq.

It would therefore be appreciated if you could arrange to transmit to the President of the Security Council the enclosed update report pursuant to resolution 1441 (2002) (see enclosure), for circulation as a document of the Security Council.

(Signed) Mohamed ElBaradei

Enclosure

Update report of the International Atomic Energy Agency to the Security Council pursuant to resolution 1441 (2002)

1. The present report is submitted by the International Atomic Energy Agency (IAEA) to the Security Council in accordance with Council resolution 1441 (2002), adopted on 8 November 2002, in paragraph 5 of which the Council requested IAEA and the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) to resume inspections in Iraq no later than 45 days following adoption of that resolution and to update the Council 60 days thereafter. Inspections in Iraq pursuant to resolution 1441 (2002) were resumed by IAEA and UNMOVIC on 27 November 2002.

I. Background

- 2. In resolution 687 (1991), the IAEA was tasked with mapping out and destroying, removing or rendering harmless, the components of Iraq's nuclear weapons programme. It was also tasked with ongoing monitoring and verification of Iraq's compliance with its obligations under that and other relevant resolutions. The IAEA's plan for such ongoing monitoring and verification was approved by the Security Council in resolution 715 (1991). Among the other relevant resolutions is resolution 707 (1991), pursuant to which Iraq is prohibited from engaging in any nuclear activities, except the use of radioisotopes for medical, agricultural and industrial purposes, until such time as the Security Council determines that Iraq is in full compliance with resolutions 687 (1991) and 707 (1991) and IAEA determines that Iraq is in full compliance with the Agreement between Iraq and IAEA for the Application of Safeguards pursuant to the Treaty on the Non-Proliferation of Nuclear Weapons (the Safeguards Agreement).
- 3. On 16 December 1998, IAEA inspectors were withdrawn from Iraq. This action was taken after the decision by the United Nations Special Commission (UNSCOM), on whose logistic support IAEA activities in Iraq were dependent, to withdraw all of its personnel from Iraq, and out of concern for the safety and security of our personnel in anticipation of imminent military action.
- 4. By the time the inspectors were withdraw, IAEA had been able to draw a comprehensive and coherent picture of Iraq's past nuclear weapons programme and to dismantle the programme. IAEA had destroyed, removed or rendered harmless all of the physical capabilities of Iraq to produce amounts of nuclear-weapons-usable nuclear material of any practical significance. IAEA had concluded with respect to Iraq's past nuclear programme that:
- (a) There were no indications to suggest that Iraq had been successful in its attempt to produce nuclear weapons;
- (b) All nuclear material of significance to Iraq's nuclear weapons programme was verified and fully accounted for and all nuclear-weapons-usable nuclear material (plutonium and high enriched uranium) was removed from Iraq;
- (c) Iraq had successfully concentrated uranium from its own ore and produced industrial quantities of feed material (UCl₄) for electromagnetic isotopic

separation (EMIS). There were no indications that the production of feed material for centrifuge enrichment (UF₆) went beyond laboratory level;

- (d) Iraq had been at, or close to, the threshold of success in such areas as the production of high enriched uranium through the electromagnetic isotopic separation (EMIS) process and the production and pilot cascading of single-cylinder subcritical gas centrifuge machines. However, there were no indications to suggest that Iraq had produced more than a few grams of nuclear-weapons-usable nuclear material through its indigenous processes;
- (e) Iraq had explored several other enrichment routes, including gaseous diffusion, chemical enrichment and laser enrichment without achieving any significant progress;
- (f) Iraq had made major progress in the area of weaponization, but still had significant hurdles to overcome before being able to complete the fabrication of a first nuclear implosion device;
- (g) There were no indications that there remained in Iraq any physical capability for the production of amounts of nuclear-weapons-usable nuclear material of any practical significance;
- (h) There were no indications of significant discrepancies between the technically coherent picture which had evolved of Iraq's past programme and the information contained in the "full, final and complete declaration" submitted by Iraq to IAEA, pursuant to Security Council resolution 707 (1991), in 1996, and supplemented in 1998.
- 5. As of December 1998, there were no key outstanding disarmament issues in the nuclear area, although there were a number of questions and concerns about Iraq's past nuclear programme, the clarification of which by Iraq would have reduced the uncertainty in the completeness of IAEA's knowledge and understanding. These remaining questions and concerns related to: the uncertainty about the progress made in weapons design and centrifuge development due to the lack of relevant documentation; the extent of external assistance from which Iraq benefited; and the lack of evidence that Iraq had abandoned definitively its nuclear programme.
- 6. In the four years following the withdrawal of IAEA inspectors, IAEA activities in Iraq were limited to annual verification, pursuant to the Safeguards Agreement, of the nuclear material (several tons of yellow cake and other natural uranium and some low enriched and depleted uranium) that remained in Iraq under IAEA seal.
- 7. During that intervening period, the Security Council adopted resolution 1284 (1999), which, inter alia, established UNMOVIC, reaffirmed the role of IAEA in addressing compliance by Iraq with resolution 687 (1991) and other related resolutions, established procedures and time frames for the implementation by IAEA and UNMOVIC of their respective mandates and provided for the possibility of the suspension of sanctions in Iraq.
- 8. On 16 September 2002, the Foreign Minister of Iraq informed the Secretary-General that Iraq had decided to "allow the return of the United Nations weapons inspectors to Iraq without conditions". On that basis, talks were held in Vienna, on 30 September and 1 October 2002, between representatives of Iraq on the one hand

and IAEA and UNMOVIC on the other, on practical arrangements necessary for the resumption of inspections.

- 9. On 8 November 2002, the Security Council adopted resolution 1441 (2002). In paragraph 9 of that resolution, the Council demanded that Iraq confirm, within seven days of notification by the Secretary-General of the adoption of the resolution, "its intention to comply fully with" that resolution. The Council demanded further that Iraq "cooperate immediately, unconditionally, and actively with UNMOVIC and the IAEA". In a letter to the Secretary-General dated 13 November 2002, Iraq stated that it would "deal with resolution 1441 (2002)", and that it was "ready to receive the inspectors so that they can perform their duties and ascertain that Iraq has produced no weapons of mass destruction in their absence from Iraq since 1998".
- 10. The Security Council also decided, in paragraph 3 of resolution 1441 (2002), that, in addition to submitting the biannual declarations required under the ongoing monitoring and verification plans of IAEA and UNMOVIC, Iraq was to provide to UNMOVIC, IAEA and the Security Council, not later than 30 days from the date of the resolution, "a currently accurate, full, and complete declaration of all aspects of its programmes to develop chemical, biological, and nuclear weapons, ballistic missiles, and other delivery systems ..., including any holdings and precise locations of such weapons, components, sub-components, stocks of agents, and related material and equipment, the locations and work of its research, development and production facilities, as well as all other chemical, biological, and nuclear programmes, including any which it claims are for purposes not related to weapon production or material".
- 11. In paragraph 5 of resolution 1441 (2002), the Security Council instructed UNMOVIC and requested IAEA to resume inspections in Iraq no later than 45 days after adoption of that resolution. An advance team of IAEA and UNMOVIC personnel, including the Director General of IAEA and the Executive Chairman of UNMOVIC, visited Baghdad on 18 and 19 November 2002 for a meeting with their Iraqi counterparts, led by Dr. Amer H. Al Saa'di, Adviser to the Presidency, to further discuss logistical arrangements and to reinstate the inspectorates' office in Baghdad.
- 12. IAEA and UNMOVIC resumed inspections on 27 November 2002.
- 13. On 8 December 2002, IAEA received at its Headquarters in Vienna, under cover of a letter dated 7 December 2002 from Dr. Al Saa'di, the nuclear-related declaration submitted by Iraq in response to paragraph 3 of resolution 1441 (2002), as its "currently accurate, full and complete declaration". The declaration consisted of seven volumes, the first six of which were entitled "The past Iraqi nuclear programme" covering Iraq's nuclear activities prior to 1991, and the seventh of which was entitled "Nuclear programme from 1991 up to 2002".

II. Activities of the International Atomic Energy Agency since the resumption of inspections

A. The Iraq Nuclear Verification Office and the start-up of the Baghdad Field Office

14. The IAEA core team for the implementation of its Security Council mandate in Iraq (formerly known as the UNSCR 687 Action Team, now renamed the Iraq

Nuclear Verification Office or INVO) has increased its staff and is proceeding with an intensive recruitment effort to ensure that the team is composed of the most qualified and experienced experts available.

15. IAEA, with the assistance and cooperation of UNMOVIC, as foreseen in resolution 1441 (2002), has re-established its field office in the Baghdad Ongoing Monitoring and Verification Centre (BOMVIC). In addition to logistical support provided by UNMOVIC to the IAEA inspection teams, such as air transport, vehicles, radio communications and medical support, IAEA has installed a secure computer network, secure storerooms and radiometric measurement laboratories.

B. Declarations

1. Backlog of semi-annual declarations

- 16. Under the IAEA ongoing monitoring and verification plan, Iraq is required to submit semi-annual declarations, on 15 January and 15 July of each year, containing, inter alia, information on: nuclear material; relevant facilities, installations and sites; material, equipment and items identified in annex 3 of the plan; and isotopes. Semi-annual declarations were provided by Iraq between 1994 and 1998, but none were submitted following the withdrawal of inspectors from Iraq in December 1998.
- 17. At the meeting held in Vienna on 30 September and 1 October 2002 between Iraq, UNMOVIC and IAEA, Iraq provided IAEA with the backlog of semi-annual declarations due between January 1999 and July 2002. Iraq subsequently provided corrections to those declarations, along with explanations of some of the changes related to items reported in the declarations. Iraq has also recently submitted the semi-annual declaration, due in January 2003, covering the second half of 2002, to IAEA.

2. The "currently accurate, full and complete declaration"

- 18. As indicated above, Iraq submitted its nuclear-related currently accurate, full and complete declaration to IAEA in December 2002, as required pursuant to resolution 1441 (2002). In carrying out its preliminary assessment of the Iraq declaration, IAEA concentrated on:
- (a) A comparison of Iraq's current declaration regarding its nuclear programme prior to 1991 with Iraq's 1998 full, final and complete declaration;
- (b) The review of Iraq's declaration regarding its nuclear programme over the period from 1991 to 2002, with particular emphasis on Iraqi activities since late 1998.
- 19. In its currently accurate, full and complete declaration, Iraq states that:
 - "No activities of any substance related to the former [Iraqi nuclear programme] were carried out during and beyond April 1991. All nuclear programme activities were practically terminated and abandoned during April 1991 and only reports of previous accomplishments and new missions (non-proscribed) were issued later." (Extended Summary, page 86/113)
- 20. Iraq's currently accurate, full and complete declaration regarding its nuclear programme prior to 1991 contains no substantive differences from the full, final and

- complete declaration provided to IAEA in 1998. The declaration of December 2002 contains numerous clarifications. It does not include, however, additional information related to the questions and concerns referred to in paragraph 5 above.
- 21. With regard to the period between 1991 and 2002, the declaration states that Iraq's nuclear activities were limited to the use of radioisotopes for non-proscribed purposes (i.e. medical, agricultural and industrial uses), in conformity with Security Council resolution 707 (1991). The remainder of the declaration, covering the post-1991 period, provides a description of the activities which were or are being conducted at current and former Iraqi Atomic Energy Commission (IAEC) sites, at locations established since 1991 to which a number of former IAEC personnel were transferred, as well as at other industrial locations that supported the weapons development programme in the past. All of these sites and locations were previously known to IAEA and were subject to ongoing monitoring and verification prior to 1998.
- 22. The IAEC sites were heavily damaged during the Gulf War. Pursuant to the Security Council mandate in resolution 687 (1991), IAEA inspection teams eliminated all remaining weapons development infrastructure at these sites. In its declaration of December 2002, Iraq stated that the current and former IAEC sites, as well as the locations to which former IAEC personnel were transferred, are now devoted to the conduct of non-nuclear commercial activities. The other industrial locations that had supported the past weapons programme were declared as now being involved in a variety of industrial and military applications.
- 23. From the IAEA assessment of the Iraqi "currently accurate, full and complete declaration" to date, the following conclusions have been drawn:
- (a) The part of the declaration that concerns Iraq's past nuclear programme (that is, the programme prior to 1991) contains no substantive differences from its earlier full, final and complete declaration and appears to be consistent with the IAEA's understanding of the Iraqi nuclear weapons programme (as reported to the Security Council in S/1997/779, S/1999/127 and S/2002/1150);
- (b) The part of the declaration that covers Iraq's programme between 1991 and 1998 is consistent with the conclusions drawn by IAEA on the basis of its verification activities conducted throughout that period and regularly reported to the Security Council;
- (c) The key outstanding issue for IAEA is the accuracy and completeness of Iraq's declaration that there have been no material changes in its nuclear programme since 1998 and that its nuclear activities have been limited to the non-proscribed use of radioisotopes.
- 24. The IAEA has integrated the new declarations submitted by Iraq with the information accumulated between 1991 and 1998 (such as original Iraqi documents, results of inspections, commercial satellite imagery and information provided by States) and information acquired after 1998. Analysis of all of this information is continuing in parallel with, and in support of, inspection activities.

3. Other declarations

25. In response to a request by IAEA, in accordance with paragraph 7 of resolution 1441 (2002), Iraq provided a list of 214 Iraqi personnel involved in Iraq's past

nuclear programme, most of whose names are well known to IAEA as a result of its inspection activities prior to 1998. The list includes the professional rank, as well as the location where each of these individuals currently works. The IAEA has already met with many of these people since inspections were resumed in November 2002.

26. During a meeting held on 19 and 20 January 2003 in Baghdad, at which the Director General of IAEA and the Executive Chairman of UNMOVIC met with an Iraqi delegation led by Dr. Al Saa'di, Iraq agreed to supplement the list in accordance with advice from IAEA and to provide information on the whereabouts of key scientists and technicians.

C. Documents

- 27. The Iraqi counterpart has been requested, in the course of inspections, to provide explanations in writing of complex matters and inventories of items of relevance to investigations of specific issues. These explanations and inventories have been provided in the form of summaries and new documents, generated on an ad hoc basis. While Iraq might have been more proactive in anticipating the need for some of this documentation, the requested documents have been prepared and provided to IAEA within reasonable time frames.
- 28. In response to inspectors' questions, Iraq has also provided documents that appear to be original documents prepared contemporaneously with the events described in them (such as reports, minutes of meetings, letters and communications and notes created as part of the normal operations of a programme). The provision by Iraq of such original documents has been and remains critical for the verification of Iraq's declaration.
- 29. On 16 January 2003, documents were found in the private home of an employee of an Iraqi Government company, a former staff member of the Iraqi Atomic Energy Commission (IAEC). Most of the 2,000 pages concern laser physics or uranium enrichment using laser techniques, some pages of which were marked as being classified. Although a preliminary analysis of these documents suggests that they are not of particular significance in terms of providing new information concerning Iraq's past nuclear programme, it suggests that documents of relevance can be found at private homes. Iraq has been urged to implement measures to locate any other documents that may have been retained by individuals and which contain information relevant to Iraq's nuclear and nuclear-related activities and to provide promptly to IAEA any documents so located.

D. Inspections

1. Sites

- 30. Since the resumption of inspections on 27 November 2002, IAEA has conducted 139 inspections at 106 sites, including two Presidential sites.
- 31. The focus of the first phase of inspections was reconnaissance: reestablishment of the IAEA's knowledge of Iraq's remaining nuclear capabilities, including confirmation of the locations of major equipment, of nuclear material and significant non-nuclear materials, and of key technical personnel.
- 32. The first step of the reconnaissance phase was to inspect facilities that were known to have been of significance in the past programme, to confirm that no

nuclear activities have been revived at these locations. Most of these facilities were effectively destroyed either during the Gulf War or pursuant to IAEA's authority under resolution 687 (1991). IAEA has also re-inspected several dozen facilities that had been deemed prior to 1998 as being capable of supporting the resumption of a nuclear programme. There were no signs of nuclear activities at any of these facilities.

- 33. During this phase, IAEA has concentrated on accounting for the most significant equipment monitored at these facilities under the ongoing monitoring and verification plan prior to 1998. It is now in the process of locating other equipment, material and sources.
- 34. While IAEA is still continuing with its reconnaissance, the inspectors have already initiated the investigative phase, with particular emphasis on Iraq's activities over the last four years, focusing on those areas of concern identified by States, as well as those identified by IAEA on the basis of its own analysis.
- 35. Drawing from satellite imagery and other information available to it, IAEA identified a number of sites, some of which had been associated with Iraq's past nuclear activities, where modifications of possible relevance to IAEA's mandate had been made, or new buildings constructed, between 1998 and 2002. Eight of these sites were identified by States as being locations where nuclear activities were suspected of being conducted. All of these sites were inspected to ascertain whether there had been developments in technical capabilities, organization, structure, facility boundaries or personnel. In general, IAEA has observed that, while a few sites have improved their facilities and taken on new personnel over the past four years, at the majority of these sites (which had been involved in research, development and manufacturing) the equipment and laboratories have deteriorated to such a degree that the resumption of nuclear activities would require substantial renovation. The IAEA has found no signs of nuclear activity at any of these sites.
- 36. Several other facilities which had never been inspected by IAEA or by the United Nations Special Commission (UNSCOM) in the past were inspected in response to information that indicated the presence of large industrial capabilities at those locations. None of these facilities has proven to be nuclear-related or to require their declaration by Iraq.

2. Inventory of nuclear material

- 37. As indicated above, prior to the withdrawal of IAEA inspectors from Iraq in December 1998, IAEA had removed from Iraq all nuclear-weapons-usable nuclear material. The remaining stocks of nuclear material in Iraq are stored under IAEA seal in a storage facility referred to as Location C, just outside the Tuwaitha complex.
- 38. An inspection of Location C was undertaken in December 2002 to verify the nuclear material. The inspection confirmed that the IAEA seals and the inventory of nuclear material remained intact since the last safeguards inspection in January 2002.

3. Ongoing monitoring — containment, surveillance and sampling

39. The IAEA will soon re-introduce containment and surveillance systems for the monitoring of critical dual-use equipment and activities associated with such

equipment. The systems will provide not only for the application of seals and the installation of cameras, but the remote transmission of data in near-real-time mode from those cameras. An example of this will be the installation at certain sties of surveillance systems to monitor the location and use of flow forming machines that had been monitored by the IAEA prior to 1998 and are subject to ongoing monitoring and verification.

- 40. The IAEA verification system in Iraq also includes numerous methods and technologies designed to detect certain radioisotopes. Given the restrictions imposed on Iraqi nuclear activities, the detection of radiation in facilities or in the environment can be an important indicator that could guide inspections and investigations.
- 41. The monitoring of Iraq's waterways (rivers, canals and lakes), through the collection of water, sediment and vegetation began in 1992, and was implemented on a semi-annual basis until December 1998. The programme also surveyed the sewage outfalls of waste treatment plants and any other facility of interest. The first such campaign since inspections were resumed was completed in December 2002. The samples are still being analysed.
- 42. In 1998, IAEA also initiated a programme of wide-area environmental sampling, which consisted of air sampling and widespread vegetation and swipe sampling. Four IAEA air samplers were in operation in Iraq in 1998. The samplers were removed from Iraq by IAEA inspectors in November 2002 for servicing. They will be re-installed within the next two weeks.
- 43. The IAEA's environmental sampling programme also included the taking of surface swipe samples in factories and laboratories across Iraq. The IAEA inspectors have resumed this activity at key locations previously associated with Iraq's past nuclear weapons programme and at new sites. Analysis of the results thus far obtained has revealed no indication of the conduct of proscribed activities at the locations where these samples were taken.
- 44. In addition to the taking of environmental samples, IAEA has re-instituted routine car-borne and hand-held gamma surveys in Iraq. The purpose of these surveys is to detect the existence of possible undeclared nuclear material or radioisotopes, not just within inspected sites, but also along routes travelled by the gamma survey vehicle. No indications of proscribed nuclear activities have been detected thus far during these surveys.

E. Interviews

- 45. The IAEA has regularly conducted interviews of Iraqi scientists, managers and technicians in its inspection and monitoring process. Interviews elicit information about individuals and their activities that can confirm where they work or worked, the activities in which they are or were engaged and hierarchical relationships. Discussions and interviews are a major tool for obtaining information about programmes, activities and achievements. Such information has proven essential in assessing the completeness and accuracy of the IAEA's understanding of Iraq's past and current programmes.
- 46. IAEA has conducted many interviews since the resumption of inspections, some in the form of group interviews. During these interviews, IAEA has focused

on activities in which the individuals are known to have participated or are currently participating.

47. Pursuant to paragraph 5 of resolution 1441 (2002), IAEA is entitled to private access to all officials and other persons whom it wishes to interview. The first two individuals whom the IAEA requested to be interviewed privately declined to be interviewed except in the presence of an Iraqi Government representative. It is noted, however, that in the course of a meeting on 20 January 2003, in Baghdad, Iraq committed itself to encourage its citizens to accept to be interviewed in private. However, it is regrettable that a request for a private interview made following that commitment was declined by the interviewee. The IAEA intends to make full use of its interview authority and to determine the modalities and locations for interviews, both inside and outside of Iraq as necessary. It will continue to report to the Security Council on its efforts and degree of success in that regard.

F. Specific issues raised by States

1. Aluminium tubes

- 48. In recent months, concerns have been expressed about attempts by Iraq to procure high-strength aluminium tubes. These concerns arose from the fact that high-strength aluminium tubes with appropriate characteristics can be used as components of equipment for the enrichment of uranium.
- 49. In response to IAEA questioning, the Iraqi authorities indicated that unsuccessful attempts had been made between 2000 and 2002 to procure high-strength aluminium tubes, but that the tubes had been intended for use in connection with a programme aimed at reverse engineering 81-millimetre rockets.
- 50. According to Iraq, a large number of 81-millimetre rockets, the combustion chambers of which were made of high-strength aluminium, had been imported into Iraq in the middle of the 1980s. Most of these rockets were consumed during the conflict between Iraq and the Islamic Republic of Iran. Between 1988 and 1989, Iraq imported 160,000 un-anodized aluminium tubes with the goal of reverse engineering the original rockets and establishing its own indigenous capability of producing similar rockets. The programme was delayed by many factors, including the fact that, since they were not anodized, the majority of the imported tubes were ruined through poor storage and weather conditions. Of the 160,000 imported tubes, about 20,000 were salvaged, roughly 13,000 of which were subsequently used in the manufacture of rockets. According to Iraqi officials, Iraq began to look for a new supply of tubes in 2000, using private traders to search abroad for new tubes. The new tubes were to be anodized, to take into account uncertain storage conditions while awaiting machining.
- 51. The IAEA has conducted a series of inspections at sites involved in the production and storage of reverse engineered rockets, held discussions with and interviewed Iraq personnel, taken samples of aluminium tubes and begun a review of the documentation provided by Iraq relating to contracts with the traders.
- 52. As a result of these inspection efforts, it has been possible to confirm the existence of a programme for producing 81-millimetre rockets. The IAEA's analysis to date indicates that the specifications of the aluminium tubes recently sought by Iraq appear to be consistent with reverse engineering of rockets. While it would be

possible to modify such tubes for the manufacture of centrifuges, they are not directly suitable for such use. The IAEA will continue to investigate the matter. It should be noted, however, that the attempted acquisition of such tubes is prohibited under paragraph 24 (a) of resolution 687 (1991), which, inter alia, proscribes the supply to Iraq of components of arms and related materiel.

2. HMX

- 53. The relocation and consumption of HMX (a high explosive of potential use in nuclear weapons), as described in Iraq's backlog of semi-annual declarations, has been investigated by IAEA. In those declarations, Iraq stated that, between 1998 and 2002, it had transferred 32 of the 228 tons of HMX which had been under IAEA seal as of December 1998 to other locations. In addition, Iraq stated that a very small quantity (46 kilograms) of HMX had been used at munitions factories for research and development. At the request of IAEA, Iraq has provided further clarification on the movement and use of the HMX, indicating that the 32 tons of HMX had been blended with sulphur to produce industrial explosives, which had been provided mainly to cement plants for quarrying, and that the research and development using the small quantity of HMX had been in the areas of personnel mines, explosives in civilian use, missile warhead filling and research on tanks.
- 54. The IAEA inspectors have been able to verify and re-seal the remaining balance of approximately 196 tons of HMX, most of which has remained at the original storage location. The movement of the blended HMX and the other small quantity of HMX has also been documented by Iraq. However, it has not been possible to verify the use of those materials, as all of it is said to have been consumed through explosions and there are no immediately available technical means for verifying such uses. The IAEA will continue to investigate means of verifying the Iraqi statements about the use of the HMX and blended HMX.

3. Uranium imports

- 55. In response to information suggesting that Iraq had attempted to import uranium from an African country, IAEA has requested Iraq to provide clarification. Iraq has denied that it imported or attempted to import uranium in any form after 1990. This message was also conveyed in an official letter to IAEA on 14 January 2003.
- 56. During the recent high-level meeting held in Baghdad, Iraq was encouraged to take a more proactive approach to assisting IAEA in resolving the issue. IAEA will continue to further investigate the matter.

4. Procurement of magnets and magnet production capabilities

- 57. Questions have been raised about Iraqi attempts to construct a facility for the manufacture of magnets.
- 58. In response to IAEA inquiries, Iraq presented detailed information on a project to construct a facility to produce magnets for the Iraqi missile programme as well as for industrial applications, including a solicitation of offers by Iraq. That project had, however, been delayed due to "financial credit arrangements".
- 59. Preliminary investigations indicate that the specifications contained in the offer solicitation are consistent with those required for the declared intended uses.

However, IAEA will continue to investigate the matter with a view to ascertaining whether the attempted procurement was in connection with efforts to resume activities associated with uranium enrichment.

G. Cooperation

- 60. In support of the IAEA inspections, the Iraqi authorities have provided access to all facilities visited, including presidential compounds and private residences, without conditions and without delay, despite some complaints about the inconvenience or intrusive nature of the inspection activities. The IAEA has taken, and will continue to take, full advantage of all of the inspection authority granted by resolution 1441 (2002). In doing so, the inspectors have been instructed to make every effort to conduct their activities with professionalism and sensitivity.
- 61. The Iraqi authorities also have been cooperative in making available additional original documentation, in response to requests by IAEA. However, to date, these documents have not included any information relevant to the questions and concerns outstanding since 1998.
- 62. As indicated above, on 19 and 20 January 2003, the Director General of IAEA and the Executive Chairman of UNMOVIC met in Baghdad with an Iraqi delegation, headed by Dr. Al Saa'di, with a view to encouraging greater transparency and more proactive cooperation on the part of Iraq. A statement was issued on the outcome of the meeting (see attachment).

III. Assessment by the International Atomic Energy Agency

- 63. Neither Iraqi declarations nor IAEA inspections have given rise to any new information of significance regarding the period covering Iraq's past nuclear programme (pre-1991) or the evolution of its nuclear-related capabilities between 1991 and 1998. The only area where some refinement of the understanding of Iraq's past programme may be expected is in the area of laser enrichment, owing to the discovery of the cache of documents referred to in paragraph 29 above. However, an initial review of these documents suggests that they are unlikely to change the IAEA's conclusion with respect to the lack of achievement in the production of enriched uranium using this method.
- 64. Little progress has been made in resolving the questions and concerns that remained as of 1998. On the question of external assistance to the past nuclear programme, Iraq has provided a letter that summarizes information provided by it during earlier discussions and which reiterates Iraq's previous statements that it had never followed up on offers of such assistance. On the issue of the abandonment of the programme, Iraq has indicated its intention to adopt, as required in paragraph 34 of the ongoing monitoring and verification plan, laws prohibiting the conduct of proscribed activities in Iraq.
- 65. In the first eight weeks of inspections, IAEA has visited all sites identified by it or by States as significant. No evidence of ongoing prohibited nuclear or nuclear-related activities at those locations has been detected to date during these inspections, although not all of the laboratory results of sample analysis are yet available. Nor have the inspections thus far revealed signs of new nuclear facilities or direct support to any nuclear activity. However, further verification activities will

be necessary before IAEA will be able to provide credible assurance that Iraq has no nuclear weapons programme.

- 66. The IAEA has started to work at resolving the key issue of whether Iraqi nuclear activities or nuclear-related capabilities have changed since December 1998. Marked progress has already been made in areas about which major concerns had been expressed prior to the resumption of inspections: concerns raised over the construction or reconstruction of buildings at known facilities have been defused; and it appears, prima facie, that the high strength aluminium tubes were to be for the production of rockets and not for use in centrifuges for uranium enrichment, although assessment of the possibility that Iraq may have intended to modify the tubes in question later for use in centrifuges remains to be completed. Following the provision by Iraq of its backlog of semi-annual declarations, a thorough analysis of the movement and use of the dual-use equipment and material made it possible to reduce the areas of concern to a minimum. The disposition of the 32 tons of the previously monitored HMX that Iraq declared to have been used for civilian purposes, however, will be difficult to confirm.
- 67. No progress has been made on the issue of Iraq's alleged attempt to import uranium from abroad. It is not possible for IAEA to draw any conclusions with respect to this issue without more specific information.

IV. The way ahead

- 68. The IAEA will step up its activities, both with regard to operations in the field and work at Headquarters. It will continue to aim at resolving all pending issues, in particular the key issue as to whether there had been any material changes in Iraq's nuclear programme and nuclear-related capabilities while inspections were suspended. The IAEA will also reinstate or initiate all activities necessary for the full operation of its ongoing monitoring and verification plan, including the types of activities conducted prior to December 1998, and new ones to enhance the IAEA's detection capabilities. Among these activities will be the installation of remote video surveillance at key facilities, the installation of air samplers, the conducting of airborne gamma surveys and the carrying out of other methods of wide-area environmental sampling.
- 69. Security Council resolution 1441 (2002) requests States to provide to IAEA and UNMOVIC information which may be of assistance to them in carrying out their mandates under the resolution, including recommendations of sites to be inspected and persons to be interviewed. While some information has been provided, actionable information has been limited and has only been forthcoming in the past three weeks. In order for IAEA to fulfil its mandate quickly and most effectively, it is important that States continue to provide support to IAEA in all aspects relevant to its mandate in Iraq.
- 70. Iraq's cooperation with IAEA should be full and active, as required by the relevant Security Council resolutions. While Iraq has been forthcoming in its cooperation in connection with the provision of unconditional and immediate access to sites, and has satisfactorily answered a number of specific questions, its cooperation could and should be more proactive. IAEA is keen to see that Iraq's commitment to encourage its citizens to provide access to private sites and to accept private interviews is put into practice. Iraq should also intensify its search for all

documents and other types of evidence, both direct and indirect, which could help IAEA in resolving pending issues and in clarifying the remaining questions and concerns.

71. IAEA expects to be able, within the next few months, barring exceptional circumstances and provided there is sustained proactive cooperation by Iraq, to provide credible assurance that Iraq has no nuclear weapons programme. In the meantime, the presence in Iraq of inspectors with broad investigative and monitoring authority serves as a deterrent to, and insurance against, the resumption by Iraq of proscribed nuclear activities.

New York 27 January 2003

Attachment

Agreed statement following talks between the United Nations Monitoring, Verification and Inspection Commission/the International Atomic Energy Agency and Iraq

Baghdad, 19 and 20 January 2003

The meeting between the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC)/the International Atomic Energy Agency (IAEA) and Iraq was devoted to a stocktaking of the inspections that have taken place and resolving issues that have come up. The following was noted.

- 1. Access has been obtained to all sites. This will continue. The Iraqi side will encourage persons to accept access also to private sites.
- 2. There has been helpful assistance in the logistic build-up of the inspection infrastructure, including at the Mosul office. This will continue, for example in the case of a field office in Basrah.
- 3. After the find of some empty 122 millimetre chemical munitions at Al Ukhaidhir stores, the Iraqi side has appointed a team to undertake an investigation and comprehensive search to look for similar cases at all locations. One find of four more units was already reported at Al Taji munitions stores. The final results will be reported.
- 4. A response was given to an UNMOVIC request for a number of documents. Some were handed over and clarifications were given regarding others.
- 5. The list of persons engaged in the various disciplines will be supplemented in accordance with advice from UNMOVIC and IAEA.
- 6. The declaration given on 7 December by Iraq was discussed. Iraq expressed a readiness to respond to questions raised in connection with the declaration and discuss such questions.
- 7. Persons asked for interviews in private will be encouraged to agree to such interviews.
- 8. UNMOVIC and IAEA agreed that their helicopters will take an appropriate number of minders on board, as necessary.
- 9. Iraq will enact national legislation as soon as possible regarding proscribed activities.
- 10. Iraq agreed to continue technical discussions with IAEA to clarify issues regarding aluminium tubes, alleged uranium importation and the use of high explosives, as well as other outstanding issues.