



Security Council

Distr.
GENERAL

S/1999/127
9 February 1999

ORIGINAL: ENGLISH

LETTER DATED 8 FEBRUARY 1999 FROM THE SECRETARY-GENERAL
ADDRESSED TO THE PRESIDENT OF THE SECURITY COUNCIL

I have the honour to convey the attached communication, dated 8 February 1999, from the Director General of the International Atomic Energy Agency (see annex).

I should be grateful if you would bring it to the attention of the members of the Security Council.

(Signed) Kofi A. ANNAN



Annex

Letter dated 8 February 1999 from the Director General
of the International Atomic Energy Agency addressed to
the Secretary-General

I refer to the note by the President of the Security Council, document S/1999/100, dated 30 January 1999, and would be grateful if you could arrange to transmit to the President of the Security Council the attached report, which may be helpful in facilitating the work of the panel on disarmament and current and future ongoing monitoring and verification issues arising from Security Council resolutions on Iraq (see appendix).

(Signed) Mohamed ELBARADEI

Appendix

Letter dated 8 February 1999 from the Director General
of the International Atomic Energy Agency addressed to
the President of the Security Council

With reference to the note by the President of the Security Council, document S/1999/100, dated 30 January 1999, regarding, inter alia, the establishment of a panel on disarmament and current and future ongoing monitoring and verification issues arising from its resolutions related to Iraq, I attach a brief report on the status of implementation of the mandate of the International Atomic Energy Agency (IAEA) in Iraq, which may be helpful in facilitating the work of the panel. The report also includes a summary of the purpose, measures and costs of implementation of the IAEA plan for the ongoing monitoring and verification of Iraq's compliance with its obligations under the relevant Security Council resolutions.

The main body of information on IAEA activities in Iraq is contained in progress reports to the Security Council, in particular document S/1997/779, dated 8 October 1997, and all subsequent reports.

I and my staff remain available to provide such additional information as you or Council members may require.

(Signed) Mohamed ELBARADEI

Enclosure

Report of the Director General of the International Atomic Energy Agency in connection with the panel on disarmament and current and future ongoing monitoring and verification issues (S/1999/100)

INTRODUCTION

1. This report summarises the status of implementation by the IAEA of its mandate in Iraq pursuant to Security Council resolutions. It includes an examination of the remaining questions and concerns and their impact on the completeness of the IAEA's technically coherent picture of Iraq's clandestine nuclear weapons programme and on the IAEA's technical ability to fully implement its OMV plan. The report also includes a summary description of the purpose and technical activities of the OMV plan and provides additional information on the estimated direct costs of implementation of the plan.

SUMMARY OF THE STATUS OF THE IMPLEMENTATION OF THE IAEA
MANDATE IN IRAQ

2. The October 1997 progress report to the Security Council, document S/1997/779, dated 8 October 1997, included a comprehensive summary of the IAEA's activities with respect to its mandate in Iraq under resolution 687 (1991) over the period since the coming into force of that resolution, on 3 April 1991. The report, and its attachments, included the salient information on: the IAEA's inspection results; the actions taken to destroy, remove, or render harmless Iraq's nuclear weapons assets; and the indicated status of those assets in October 1997.

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3. The fundamental statement included in the report was that the extensive inspection activities undertaken by the IAEA had resulted in a technically coherent picture of Iraq's clandestine nuclear programme covering the stages from the production and procurement of natural uranium compounds, through Iraq's development of enrichment processes, to the design and experimental work for the eventual weaponisation of highly enriched uranium. The report also included statements, reproduced in annex 1 to this present report, to the effect that Iraq's programme had been very well funded and was aimed at the development and production of a small arsenal of nuclear weapons, but that there were no indications that Iraq had achieved its programme objective, or produced or otherwise acquired any meaningful amounts of weapon-usable nuclear material. The report additionally included statements to the effect that there were no indications that Iraq had retained the physical capability (facilities and hardware) to be able to produce weapon-usable nuclear material in amounts of any practical significance. The report also stressed that "no indication" of prohibited items or activities was not the same as their "non existence".

4. The report also cautioned that, despite the scope and intensity of the verification measures, a degree of uncertainty is inevitable in any countrywide verification process that seeks to prove the absence of readily concealable or disguisable objects and activities. In this context, the report listed five matters, reproduced in annex 2, whose resolution would contribute to a reduction in the residual uncertainty.

5. Since October 1997, IAEA reporting to the Security Council has included statements on progress in the resolution of those five matters and the significance of the remaining questions and concerns. Document S/1998/38, dated 15 January 1998, recorded that Iraq had provided to the IAEA the requested information regarding its post-war procurement procedures. Similarly, document S/1998/312, dated 9 April 1998, recorded that Iraq had provided to the

IAEA a document summarising the technical achievements of its clandestine nuclear programme and that the IAEA regarded the summary information to be consistent with the technically coherent picture of that programme.

6. Document S/1998/694, dated 27 July 1998, prepared in response to Presidential statement S/PRST/1998/11, dated 14 May 1998, addressed all outstanding questions and concerns regarding Iraq's clandestine nuclear programme with particular regard to their impact on the IAEA's ability to implement fully its ongoing monitoring and verification (OMV) plan approved under resolution 715 (1991).

7. Document S/1998/927, dated 7 October 1998, identified three areas where questions and concerns remain, namely:

- a. the lack of certain technical documentation - specifically Iraq's stated inability to provide relevant engineering design drawings of the nuclear weapon and its principal components, or details of models. Additionally, very few of the original gas centrifuge design drawings Iraq obtained from foreign assistance have been handed over to the IAEA.
- b. external assistance to Iraq's clandestine nuclear weapons programme - specifically Iraq's stated inability to provide further information regarding the identification and location of a foreign national alleged to have offered assistance in nuclear weapon design, in nuclear-weapon usable material production and in the procurement of critical components and materials.
- c. Iraq's abandonment of its nuclear weapons programme - specifically Iraq's stated inability to provide documentation showing the timing and modalities of that abandonment. Furthermore, it was recorded that Iraq had not yet adopted measures or enacted penal laws to enforce national compliance with Iraq's obligation not to acquire, develop or retain, nuclear weapons, weapon-

usable nuclear material or related assets, as required by paragraph 34 of the IAEA OMV plan, approved under Security Council resolution 715 (1991).

8. That same document included a statement that "the uncertainties resulting from the above questions and concerns would not, of themselves, prevent the full implementation of the IAEA OMV plan".

REMAINING QUESTIONS AND CONCERNS

The lack of certain technical documentation

9. Enclosure 1 to Document S/1997/779 included a description of a range of technical documentation whose absence impacted on the completeness of the information on Iraq's weaponisation activities. Since that time the IAEA has obtained from Iraq a document which, although largely duplicating information received by the IAEA in October 1995, also included other records which support Iraq's earlier statement of the progress made in the development of the explosive package for the nuclear weapon. As a result, the only significant category of weaponisation documentation still missing comprises engineering drawings detailing the nuclear weapon design options and its principal components, as well as the corresponding models. Iraq has, on several occasions, declared its inability to provide this remaining documentation and has further stated that its weapon development had not reached the stage where the production of models and detailed engineering drawings would have been necessary. To compensate for this uncertainty the OMV plan is predicated upon the assumption that Iraq has acquired the technical ability to fabricate an implosion-type fission-based nuclear weapon.

10. In the area of uranium enrichment, it is established that Iraq obtained a large number of drawings of gas centrifuge enrichment machines from foreign sources of assistance which it used as the basis of its design and development

programme. The IAEA has only been provided with a few of these original drawings and those were of little technical significance. The completeness of the IAEA's understanding of Iraq's centrifuge development capabilities would be enhanced through the recovery of the remainder of the drawings. However, since the IAEA has assessed as credible Iraq's claim to have successfully developed and tested a single cylinder sub-critical centrifuge machine which could have been exploited to produce highly enriched uranium in weapon-significant amounts, the recovery of the drawings would do little to change the assessment of Iraq's capabilities in this area.

11. It is similarly established that the drawings obtained from foreign sources of assistance included details of a high-capacity super-critical multi-cylinder centrifuge machine whose exploitation would have greatly enhanced Iraq's enriched uranium production capacity. However, the IAEA considers Iraq's statement of having done little work of any significance to develop designs for these advanced machines, to be consistent with the relatively limited time and resources that Iraq could have assigned to this additional development project.

The extent of external assistance to Iraq's clandestine nuclear programme

12. A collection of correspondence between the Iraqi General Intelligence Service (Mukhabarat) and Department 3000 of the Iraqi Atomic Energy Commission, which later became PC-3, was contained in the so-called Haider House Farm cache of documentation. Part of this collection related to the relatively minor use of a Mukhabarat front company for clandestine procurement and has been clarified in discussion with the Iraqi counterpart. However, also included in that collection of correspondence was a series of letters relating to an approach by a foreign national, apparently received around October 1990, offering to provide, for financial reward, assistance and information on nuclear weapon design, weapon-usable nuclear material production and the procurement of critical components and materials.

13. After initial protracted reluctance to recall the offer, the Iraqi counterpart provided some additional detail to that included in the correspondence. This additional information was, however, not sufficient for the IAEA to be able to identify and locate the foreign national alleged to have made the offer. Throughout the discussions the Iraqi counterpart consistently maintained that it had not taken any advantage of the offer and stated its opinion that the risk of exposure of its clandestine programme far outweighed probability of benefiting from such offers.

14. The IAEA holds no evidence to contradict Iraq's statement but considers that it is important to continue to ask for Iraq's assistance in attempting to identify and locate the foreign national involved.

Iraq's abandonment of its nuclear weapons programme

15. In order to attempt to compensate for uncertainty in the completeness of the technically coherent picture of Iraq's clandestine nuclear programme, the IAEA sought to obtain from the Iraqi counterpart, documentary evidence of Iraq's formal abandonment of that programme, its timing and modalities. This IAEA initiative started in the second half of 1996 and resulted in the provision by Iraq of a collection of orders and decrees indicating that many of the organisations associated with PC-3 had been assigned new missions. The most significant of these documents was an order indicating that PC-3 itself had been dissolved as an entity in the first half of 1992 and that its financial assets and ongoing liabilities were to be re-assigned to other organisations.

16. The documents were helpful and, in a secondary sense, supported Iraq's statement that its clandestine nuclear programme had been abandoned. On the other hand, they did not include a decree or any other document recording a formal governmental decision to abandon the programme.

17. The Iraqi counterpart insists that no document exists, be it decree or any other form of record, registering the formal abandonment of its clandestine nuclear programme. Indeed the counterpart argues that, had such a document existed, it would clearly be in their best interests to provide it to the IAEA. The logic of the argument is sound provided that any such record would have registered a decision taken no later than mid-1991. There can be no doubt that a verifiable record of such vintage registering Iraq's timely abandonment would reduce the significance of the uncertainty associated with the completeness of the coherent picture of Iraq's programme. Notwithstanding the existence or non-existence of such documentation, it is clear that Iraq has not fulfilled its obligation to adopt measures and enact penal laws, to implement and enforce compliance with Iraq's obligations under resolutions 687 and 707, other relevant Security Council resolutions and the IAEA OMV plan, as required under paragraph 34 of that plan.

Impact of uncertainties on the full implementation of the OMV plan

18. The IAEA's possession of the additional information, referred to in paragraphs 9-17, would certainly add to the completeness of the picture of Iraq's clandestine nuclear programme, particularly regarding Iraq's achievements in weaponisation and centrifuge enrichment technology. However, its continued absence would have no significant effect on the technical basis of the IAEA OMV plan, nor would it impede the full implementation of that plan.

ONGOING MONITORING AND VERIFICATION

Purpose and technical activities

19. The IAEA interim status report of 27 July 1998 (S/1998/694) recalled that the purpose of its OMV plan is to monitor and verify Iraq's compliance with its

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obligations under paragraph 12 of Security Council resolution 687 (1991), primarily, Iraq's obligation not to acquire, develop or retain nuclear weapons or nuclear-weapon-usable material or any related production capability.

20. The OMV plan is thus designed to provide timely detection of indications of any attempt by Iraq to reconstitute its clandestine nuclear programme, or more specifically, to give assurance of the absence of prohibited equipment, materials and activities. The plan takes fully into account the extensive technological expertise developed by Iraq in the course of its clandestine nuclear programme, particularly regarding the production of weapon-usable nuclear material. The OMV plan also takes into account the uncertainties referred to in the previous section of this report and is predicated on the assumption that Iraq retains the capability to exploit, for nuclear weapons purposes, any relevant material or technology to which it may gain access in the future.

21. As the task of the destruction, removal and rendering harmless of Iraq's prohibited nuclear assets was nearing completion during the second half of 1992, work began on the phasing-in of the IAEA OMV plan. The plan was considered to be operational in August 1994 with the establishment of the IAEA's continuous presence in Iraq through its Nuclear Monitoring Group (NMG). Since that time, work has continued to increase the scope and technology of OMV measures which has led, over time, to corresponding increases in the personnel resources of the NMG.

22. Effective ongoing monitoring and verification in Iraq, as required by resolution 687 (1991), must be comprehensive and rigorous and, as a result, is intrusive. The effectiveness of the IAEA OMV plan is critically dependent upon the full exercise of the rights of access enshrined in the plan. Any diminution of, or interference with, those rights directly impacts on the ability of the IAEA to provide the necessary level of assurance of Iraq's compliance with its obligations.

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23. The procedures and techniques initially employed by the IAEA to map out Iraq's clandestine nuclear programme were designed to detect the presence of prohibited equipment, materials and activities. The IAEA has employed essentially the same procedures and techniques under its OMV plan, which is designed to provide assurance of the absence of prohibited equipment, materials and activities.

24. These procedures and techniques include, but are not limited to: unannounced inspections of known locations; unannounced inspections of previously un-inspected locations; examination of records, equipment, materials and products; sampling of materials and work surfaces; interviews of personnel in the workplace; overhead imagery analysis; and environmental monitoring, including aerial and land-based radiation surveys, hydrological sampling, vegetation sampling, air sampling and deposition sampling. These practical measures are complemented by the following up of information derived from the results of inspections, from analysis of Iraqi documentation, from publicly available information and other information provided by Member States. The IAEA will, in the future, make use of any other verification technology that could facilitate the fulfilment of its mandate.

25. The measures to be implemented under the OMV plan must not only provide credible assurance of the absence of prohibited equipment, materials and activities at routinely inspected locations, but must also provide a significant probability of detecting prohibited equipment, materials or activities at other locations. Thus, the OMV plan must incorporate a comprehensive search capability designed to detect signs of prohibited activities being carried out at locations that are not routinely monitored. A critical component of this capability is, therefore, the carrying out unannounced inspections at new sites. It was to strengthen further this search capability that the IAEA embarked upon a programme of expansion and consolidation of a number of its field activities into a wide-area environmental monitoring programme.

Estimated costs of long-term implementation

26. The IAEA interim status report of 27 July 1998 (S/1998/694) recorded that, as a result of seeking the maximum assistance in cash and kind from all Member States, the IAEA had been able to limit its average annual direct expenditure to some three million US dollars. In this context, it is relevant to record that, since it began the implementation of its mandate in April 1991, supporting Member States have provided, without cost to the IAEA, technical expert resources, equipment and sample analysis/evaluation services worth tens of millions of US dollars. Taking into account these services and the costs of the planned wide-area environmental monitoring programme (personnel resources, equipment, sample processing and analysis, data evaluation and data management), the estimated total annual direct cost of implementing the IAEA OMV plan will be of the order of nine million US dollars. It was also explained that the estimate of nine million US dollars did not include the substantial costs of logistical and other assistance provided by the Special Commission, such as medical services and emergency evacuation, communications, office and laboratory accommodation, aeroplane and helicopter transport and road vehicle transport.

27. On the assumption that the IAEA will resume the implementation of its mandate in Iraq it is assessed that effective implementation of the OMV plan will require the continuous presence in Iraq of the Nuclear Monitoring Group, comprising up to eight technical staff and one or two administrative support personnel, supplemented, from time to time, with additional technical staff as specific monitoring tasks may require.

28. In accordance with the above, a more detailed budget assessment has been completed which estimates the total annual direct cost of implementing the IAEA OMV plan to be almost ten million US dollars per year, again not including

the costs of logistical support provided through the Special Commission. A summary of this assessment is included in Annex 3 to this report.

Status of IAEA verification in Iraq

29. As is well known, the IAEA has been unable to fulfil its mandate under the relevant Security Council resolutions since its departure from Iraq on 16 December 1998. As a consequence the IAEA is, at this time, unable to give any measure of assurance that Iraq is in compliance with its obligations under the relevant resolutions. This report can therefore only reflect the situation existing up to 16 December 1998.

SUMMARY

30. The IAEA's current inability to implement its mandate in Iraq, under the relevant Security Council resolutions, renders it unable to provide any assurance that Iraq is in compliance with its obligations under those resolutions. To be able to implement its mandate and particularly to reinstate continuity of knowledge of Iraq's nuclear-related assets, it is essential that the IAEA return to Iraq as soon as possible.

31. The IAEA's extensive verification activities in Iraq, since May 1991, have yielded a technically coherent picture of Iraq's clandestine nuclear programme. These verification activities have revealed no indication that Iraq possesses nuclear weapons or any meaningful amounts of weapon-usable nuclear material, or that Iraq has retained any practical capability (facilities or hardware) for the production of such material.

32. However, there is an inevitable degree of uncertainty in any countrywide verification process that seeks to prove the absence of readily concealable or

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disguisable items or activities. It is this uncertainty which makes it essential for ongoing monitoring and verification to be a continuous process. Nonetheless, the IAEA, despite its extensive verification measures, cannot provide absolute assurance of the absence of readily concealable items, such as components of centrifuge machines or copies of weapon-related documentation. Similarly, it should be recognised that verification measures cannot guarantee detection of readily concealable or disguisable proscribed activities, such as computer-based weaponisation studies, explosives experimentation or small-scale centrifuge cascade development. A statement by the IAEA that it has found "no indication" of prohibited equipment, materials or activities in Iraq is not the same as a statement of their "non existence". It is for this reason that the OMV plan takes into account the prudent assumption that Iraq has retained documentation of its clandestine nuclear programme, specimens of important components and possibly amounts of non-enriched uranium. It is similarly assumed that Iraq retains the capability to exploit, for nuclear weapons purposes, any relevant materials or technology to which it may gain access in the future.

33. Resolution of the few remaining questions and concerns described in paragraphs 9 – 17 above would undoubtedly contribute to the confidence in the completeness of the technically coherent picture. However, Iraq has consistently stated that it is unable to provide any further information or documentation. In this latter regard, Iraq states that much of the requested documentation never existed and that which did exist had been unilaterally destroyed by Iraq in 1991 and 1992. The IAEA holds no credible information to confirm or refute Iraq's statements.

34. The uncertainty deriving from the few remaining questions and concerns does not present any technical impediment to the full implementation of the IAEA's OMV plan, which takes into account those uncertainties. Provided that it is able to exercise its right to full and free access in Iraq, the IAEA is in a position to proceed with the full implementation of its OMV plan and, as part of that plan, to investigate further the remaining questions and concerns and any other aspect of Iraq's

clandestine nuclear programme arising out of new information acquired by the IAEA.

35. The scope of the activities to be carried out within the frame of the OMV plan is based upon the technically coherent picture of Iraq's clandestine nuclear programme and remaining uncertainties are compensated for by prudent assumptions regarding Iraq's nuclear capabilities. These assumptions, as for example, the assumption that Iraq has the capability to exploit, for nuclear weapons purposes, any relevant materials or technology to which it may gain access in the future, are based on logical assessment rather than clear indications to that effect.

36. It is estimated that the annual direct costs of full implementation of the IAEA OMV plan will be in the region of ten million US dollars, not including the substantial costs of logistical and other assistance provided through the Special Commission. Arrangements for the resumption of the IAEA's activities in Iraq should take into consideration the need for long-term funding of those activities.

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Annex 1 Abstracts from document S/1997/779

The scope and status of Iraq's clandestine nuclear programme

71. The results of the IAEA's on-site inspection of Iraq's nuclear capabilities have, over time produced a picture of a very well funded programme aimed at the indigenous development and exploitation of technologies for the production of weapons-usable nuclear material and the development and production of nuclear weapons, with a target date of 1991 for the first weapon.

72. The programme, which is described in greater detail in Attachment 1 to document S/1997/779, comprised:

- indigenous production and overt and covert procurement of natural uranium compounds. In this regard:

All known indigenous facilities capable of production of amounts of uranium compounds useful to a reconstituted nuclear programme have been destroyed along with their principal equipment.

All known procured uranium compounds are in the custody of the IAEA.

All known practically recoverable amounts of indigenously produced uranium compounds are in the custody of the IAEA.

- industrial-scale facilities for the production of pure uranium compounds suitable for fuel fabrication or isotopic enrichment. In this regard:

All known facilities for the industrial-scale production of pure uranium compounds suitable for fuel fabrication or isotopic enrichment have been destroyed, along with their principal equipment.

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- research and development of the full range of enrichment technologies culminating in the industrial-scale exploitation of EMIS and substantial progress towards similar exploitation of gas centrifuge enrichment technology.

In this regard:

All known single-use equipment used in the research and development of enrichment technologies has been destroyed, removed or rendered harmless.

All known dual-use equipment used in the research and development of enrichment technologies is subjected to ongoing monitoring and verification.

All known facilities and equipment for the enrichment of uranium through EMIS technologies have been destroyed along with their principal equipment.

- design and feasibility studies for an indigenous plutonium production reactor.

In this regard:

IAEA inspections have revealed no indications that Iraq's plans for an indigenous plutonium production reactor proceeded beyond a feasibility study.

- research and development of irradiated fuel reprocessing technology. In this regard:

The facility used for research and development of irradiated fuel reprocessing technology was destroyed in the bombardment of Tuwaitha

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and the process-dedicated equipment has been destroyed or rendered harmless.

- research and development of weaponisation capabilities for implosion-based nuclear weapons. In this regard:

The principal buildings of the Al Atheer nuclear weapons development and production plant have been destroyed and all known purpose-specific equipment has been destroyed, removed or rendered harmless.

- a "crash programme" aimed at diverting safeguarded research reactor fuel and recovering the HEU for use in a nuclear weapon. In this regard:

The entire inventory of research reactor fuel was verified and accounted for by the IAEA and maintained under IAEA custody until it was removed from Iraq.

77. Although certain documentary evidence is missing and some gaps in knowledge remain, the following can be stated with regard to Iraq's clandestine programme:

- There are no indications to suggest that Iraq was successful in its attempt to produce nuclear weapons. Iraq's explanation of its progress towards the finalisation of a workable design for its nuclear weapons is considered to be consistent with the resources and time scale indicated by the available programme documentation. However, no documentation or other evidence is available to show the actual status of the weapon design when the programme was interrupted.

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- Iraq was at, or close to, the threshold of success in such areas as the production of HEU through the EMIS process, the production and pilot cascading of single-cylinder sub-critical gas centrifuge machines, and the fabrication of the explosive package for a nuclear weapon.
- There are no indications to suggest that Iraq had produced more than a few grams of weapons-usable nuclear material (HEU or separated plutonium) through its indigenous processes, all of which has been removed from Iraq.
- There are no indications that Iraq otherwise acquired weapons-usable nuclear material.
- All of the safeguarded research reactor fuel, including the HEU fuel that Iraq had planned to divert to its "crash programme", was verified and fully accounted for by the IAEA and removed from Iraq.
- There are no indications that there remains in Iraq any physical capability for the production of amounts of weapons-usable nuclear material of any practical significance.

79. There are no indications of significant discrepancies between the technically coherent picture which has evolved of Iraq's past programme and the information contained in Iraq's FFCD-F issued on 7 September 1996 as supplemented by the written revisions and additions provided by Iraq since that time. However, taking into account the possibility, albeit remote, of undetected duplicate facilities or the existence of anomalous activities or facilities outside this technically coherent picture, no absolute assurances can be given with regard to the completeness of Iraq's FFCD. Some uncertainty is inevitable in any country-wide technical verification process which aims to prove the absence of readily concealable objects or activities. The extent to which such uncertainty is acceptable is a policy judgement.

80. Most of the IAEA activities involving the destruction, removal and rendering harmless of the components of Iraq's nuclear weapons programme which to date have been revealed and destroyed, were completed by the end of 1992 (See Attachment 3 to document S/1997/779). Since that time, only a relatively small number of items of proscribed equipment and materials have been identified and disposed of, most of which were handed over to the IAEA by Iraq since the events of August 1995. While no indications of the presence of further proscribed equipment or materials in Iraq have been found, the IAEA, despite its extensive inspection activities, cannot, for the reasons described in the previous paragraph, provide absolute assurance of the absence of readily concealable items, such as components of centrifuge machines or copies of weapons-related documentation.

82. Implementation of the OMV plan has not resulted in the detection of any indications of ongoing proscribed activities or the presence in Iraq of proscribed equipment or materials, apart from the items referred to in paragraph 80 above. It should be recognised, however, that OMV measures cannot guarantee detection of readily concealable or disguisable proscribed activities, such as computer-based weaponisation studies or small-scale centrifuge cascade development. Iraq's direct acquisition of weapons-usable nuclear material would also present a severe technical challenge to the OMV measures and great reliance must be placed on international controls.

Annex 2 Re-presentation of paragraph 75 of document S/1997/779

"In connection with its technical team visits, since May 1997, the IAEA has received clarification of many matters raised with the Iraqi counterpart. While containing little new information, Iraq's written statements provided a helpful collation of previously reviewed information. In one critical area Iraq was able to provide copies of correspondence which, if genuine, provide strong corroboration of Iraq's description of the status, as of the end of 1990, of its work to develop explosive lenses. However, the Iraqi counterpart:

- a. has not provided a comprehensive written statement of the membership, terms of reference and duration of authority of the Governmental Committee charged, inter alia, to "reduce the effect of NPT violation to the minimum";
- b. has stated that it has no further information regarding external assistance to its clandestine nuclear programme;
- c. has declared itself unable to describe the motives behind the actions ascribed to the late Lt. General Hussein Kamel which resulted in the concealment of the cache of documentation, material and equipment "discovered" at the Haider House farm;
- d. has declined to include, in its FFCD a summary of the practical and theoretical achievements of Iraq's clandestine nuclear programme, and;
- e. has yet to provide the promised written description of its post-war procurement system."

Note: Items a. and c. above were subsequently considered to be components of Iraq's abandonment of its clandestine nuclear programme, which is one of the remaining questions and concern.
Items d. and e. were subsequently satisfactorily resolved.

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Annex 3 Iraq Action Team budget forecast

| | 1999 | 2,000 |
|--|------------------|------------------|
| Staff costs - Action Team personnel | 2,193,000 | 2,191,000 |
| Staff costs- DSG personnel | 640,000 | 640,000 |
| Staff costs - member state experts (MSE) | 1,060,000 | 1,060,000 |
| Total staff costs | 3,893,000 | 3,891,000 |
| Travel costs HQ personnel to NMG | 426,000 | 447,000 |
| Travel costs - Member State experts to NMG | 397,000 | 417,000 |
| Travel costs - Member State specialists to NMG | 361,000 | 379,000 |
| Travel costs - HQ personnel to other locations | 104,000 | 109,000 |
| Total travel costs | 1,288,000 | 1,352,000 |
| Monitoring equipment NDA | 500,000 | 525,000 |
| WAEM equipment | 850,000 | 893,000 |
| WAEM sample analysis | 1,227,000 | 1,288,000 |
| WAEM data evaluation | 500,000 | 525,000 |
| WAEM SAL sample management | 500,000 | 525,000 |
| Total equipment / sample processing costs | 3,077,000 | 3,231,000 |
| Aerial radiation surveys | 900,000 | 945,000 |
| Total aerial radiation survey costs | 900,000 | 945,000 |
| Total supplies and miscellaneous services | 500,000 | 525,000 |
| Grand totals | 9,658,000 | 9,944,000 |
