



International Atomic Energy Agency

GOV/2816-GC(39)/10

2 August 1995

# BOARD OF GOVERNORS GENERAL CONFERENCE

GENERAL Distr.

Original: ENGLISH

## THE IMPLEMENTATION OF UNITED NATIONS SECURITY COUNCIL RESOLUTIONS 687, 707 AND 715 (1991) RELATING TO IRAQ

### Report by the Director General

1. On 18 July 1991 the Board of Governors, after considering a report by the Director General on non-compliance by Iraq with its obligations under its safeguards agreement with the Agency (INFCIRC/172), adopted a resolution (contained in document GOV/2532) in which it, inter alia, requested the Director General to keep the Board and the General Conference informed of progress in the implementation of United Nations Security Council resolution 687 (1991).
2. On 23 September 1994, the General Conference adopted, as it had in the three previous years, a resolution in the operative paragraph of which it requested the Director General, inter alia, to report to the Board and to the thirty-ninth regular session of the General Conference on his efforts to implement Security Council resolutions 687, 707 and 715 (1991) (GC(XXXVIII)/RES/19).
3. Pursuant to the above-referenced resolutions, the Director General has kept the Board of Governors informed about the IAEA's activities in Iraq and copies of the inspection mission reports containing detailed descriptions of inspectors' work and findings have been transmitted to the Board, to the IAEA's Member States, and to the Security Council.
4. The attached chronology by the Director General on "The IAEA's activities concerning Iraq in 1994-95 under United Nations Security Council resolutions 687, 707 and 715 (1991)" has been prepared with a view to updating the information provided last year to the General Conference in documents GOV/2747-GC(XXXVIII)/10. The chronology provides an overview of the major events that occurred during the period September 1994 - August 1995, with references to the relevant documents.
5. The document is being issued simultaneously to the Board of Governors and the General Conference.



**THE IAEA'S ACTIVITIES CONCERNING IRAQ IN 1994 - 1995  
UNDER UNITED NATIONS SECURITY COUNCIL  
RESOLUTIONS 687, 707 AND 715 (1991)**

**CHRONOLOGY**

1. The twenty-sixth inspection mission in Iraq under Security Council resolution 687 (1991) took place from **22 August to 7 September 1994**. It included an investigation of Iraq's former activities in the field of laser isotope separation and routine inspections at sites associated with the former nuclear weapons programme and marked the start of the continuous presence in Iraq of IAEA's resident inspectors in connection with the implementation of the Ongoing Monitoring and Verification (OMV) Plan.

In May 1994, the IAEA received information from Member States indicating that Iraq had invested significant resources into uranium enrichment through laser isotope separation (LIS) involving both molecular (MLIS) and atomic vapour (AVLIS) technologies. The subject of LIS had been first raised by IAEA-7 (October 1991), in the course of which the inspection team had received two written statements from a senior Iraqi official denying that Iraq had undertaken any laser enrichment activities and stating that, as a consequence, there were no Iraqi personnel who had been involved in such activities. Although it was difficult to accept that, having explored such a wide range of potential enrichment technologies, Iraq would have completely ignored LIS, there was no evidence available in 1991 to support further investigation. The information received in May 1994, however, prompted a thorough re-assessment of the situation. A detailed search for laser-related topics in the current Action Team information databases identified a number of activities with respect to laser component manufacture, particularly CO<sub>2</sub> lasers and the manufacture of components for use in laser-related experimentation. The investigation carried out by the IAEA-26 inspection team, which included five experts in laser enrichment technology, extended over five inspection days. The most significant event occurred during a seminar, presented by the Iraqi counterpart on the fifth inspection day, when a statement was made on behalf of Iraq to the effect that the Laser Section at Tuwaitha had "received an objective [in 1981] from the Iraqi Atomic Energy Commission [IAEC] to work in Laser Isotope Separation .... We started in two lines; one which was looking after the molecular and the other the atomic [vapour] direction". The IAEA team was also advised that when the achievements of the Laser Section were evaluated in 1987 it was decided that the project should be downgraded to a "watching brief" and that a number of key personnel should be transferred to other projects, notably electromagnetic isotope separation [EMIS]. The seminar provided a more detailed

explanation of the information given to the team in the course of the investigation; the major difference being that its connection with LIS was now acknowledged. One IAEC staff member, who had been brought to Tuwaitha specifically to take part in the seminar, described the work he had done on the photoionisation of sodium and rubidium. This individual appeared to be highly motivated and technically competent and described an experimental set-up that had a number of features similar to those of the equipment described in the information which had been provided to the IAEA by Member States. The subsequent transfer of this individual to the EMIS programme was consistent with the declared decision to downgrade the LIS related activities.

The IAEA team noted that, as now acknowledged by Iraq and contrary to Iraq's written statements in October 1991 and the FFC<sup>1/</sup> report (June 1992), a specific task to explore the feasibility of LIS as a means of producing enriched uranium had existed. The task appears to have been poorly focused and its limited achievements appear to be consistent with the equipment, personnel resources and expertise available. The team was satisfied that the information regarding the resources, capabilities and activities of the Laser Section which it had gathered during the investigation, was consistent with a loosely co-ordinated and largely empirical approach to LIS, but was not consistent with the achievement of substantial progress in what is a complex technology. There were no indications that the efforts of the Laser Section had reached the point of an integrated experiment that achieved any isotopic separation of either elemental uranium or UF<sub>6</sub> or that they had developed even the most rudimentary capabilities in either AVLIS or MLIS technologies. It was also apparent from statements made in the course of the inspection by the Iraqi scientists and senior officials that export controls and voluntary refusals on the part of several equipment suppliers had severely hampered the Iraqi LIS activities by preventing the procurement from abroad of critical pieces of equipment, most notably copper vapour laser systems. A report on the twenty-sixth inspection mission can be found in document GOV/INF/757.

2. At its thirty-eighth regular session, on **23 September 1994**, the IAEA's General Conference adopted resolution GC(XXXVIII)/RES/19 commending the Director General and the IAEA's staff for their strenuous efforts to implement Security Council resolutions 687, 707, and 715 (1991) and requesting them to continue their efforts; noting that the IAEA was in a position to implement its Ongoing Monitoring and Verification Plan (the OMV Plan); stressing the need for Iraq to fully cooperate with the IAEA in achieving the complete and long term implementation of the relevant Security Council resolutions especially regarding the Ongoing Monitoring and Verification Plan; noting in this connection that the IAEA retained the right to investigate further any aspects of Iraq's past nuclear weapons capability, in particular

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<sup>1/</sup> The Full, Final, and Complete Report of Iraq's nuclear programme required under the Security Council resolution 707 (1991).

as regards any new information obtained by the IAEA and assessed as warranting further investigations; and requesting the Director General to report the views of the General Conference to the Secretary General and to report to the Board of Governors and to the thirty-ninth General Conference on his efforts to implement Security Council resolutions 687, 707 and 715 (1991).

3. On **6 October 1994**, the Director General transmitted to the United Nations Secretary-General the sixth semi-annual report on the implementation of the IAEA's Plan for Ongoing Monitoring and Verification of Iraq's compliance with paragraph 12 of resolution 687 (1991). The report concluded that, with the establishment at the end of August of the IAEA continuous presence in Iraq, all elements of the IAEA's OMV Plan were in place. The conclusion recalled that monitoring and verification measures would evolve as technical needs arose and as advanced technologies became available. The report further noted that implementation of the OMV Plan did not foreclose the exercise by the IAEA of its right to investigate any aspect of Iraq's former nuclear weapons programme, in particular through the follow-up of any new information developed by the IAEA or provided by Member States and assessed as warranting further investigation. A copy of the Director General's report can be found in document GOV/INF/753.
4. On **17 October 1994**, the Director General addressed the forty-ninth session of the United Nations General Assembly. In presenting the IAEA's annual report he summarised the results of the IAEA's activities in Iraq as follows:

*"Since May 1991, the IAEA has carried out 26 inspection missions in Iraq under the mandate of Security Council resolution 687 (1991). Based on these inspections and the analysis of documents, samples, procurement data and other information, the course of Iraq's clandestine nuclear weapons programme has been thoroughly investigated and charted. As also required by resolution 687, the IAEA has completed the destruction, removal or rendering harmless of Iraq's weapons usable materials, facilities and equipment. We are confident that, as a result of these activities, no practical capability for the production of nuclear weapons remains in Iraq. Nevertheless the IAEA retains the right to investigate any further aspects of Iraq's former programme if new information should warrant such action. Concurrently with these mapping and dismantling activities, the IAEA has been phasing in elements of its plan for the ongoing monitoring and verification of Iraq's compliance with resolutions 687, 707 and 715. All the elements of the IAEA's plan are now in place and a continuing presence of IAEA inspectors in Iraq has been established at the Baghdad Monitoring and Verification Centre, with the assistance of the UN Special Commission. Monitoring and verification measures will continue to evolve as technical needs arise and advanced technologies become available. A mechanism for monitoring future sales and supplies of designated items to Iraq has been jointly developed with the UN Special Commission in consultation with the Security Council's*

*Sanctions Committee. Once approved by the Council, this mechanism will form an integral part of the ongoing monitoring and verification system.”*

5. The twenty-seventh IAEA inspection mission under Security Council resolution 687 (1991) took place from **14 to 21 October 1994**. As mentioned in paragraph 1 of this attachment, since August 1994 - i.e., concurrently with the twenty-sixth inspection mission - the IAEA had established a continuous presence in Iraq in order to fully implement the OMV Plan. This is accomplished through the stationing in Iraq of a team composed of a chief inspector and one or more experts to tours of duty at the Baghdad Monitoring and Verification Centre (BMVC) established by the United Nations Special Commission in consultation with the IAEA. This evolution in the pattern of the IAEA's activities in Iraq will entail a change in the mechanism for reporting to the IAEA's Board of Governors, which has until now been based on the issuance of GOV/INF documents containing detailed reports of each and every inspection in Iraq. It is proposed that, starting 1 January 1995, the description of the IAEA's activities in Iraq will be covered in detail only in the semi-annual reports (in April and October) to the Security Council prepared in accordance with paragraph 8 of resolution 715 (1991). These semi-annual reports will also be issued as GOV/INF documents. It should be noted, however, that the IAEA will, of course, continue to make use of large inspection teams whenever special circumstances warrant this form of inspection.

IAEA-27 provided additional staffing resources to facilitate the carrying out of the semi-annual radiometric survey of Iraq's principal watercourses. This periodic survey is one of the components of the environmental monitoring system established under the OMV Plan to detect signature of undeclared nuclear activities in Iraq. This survey had been initiated in November 1992 when a comprehensive baseline of the natural radioactivity background of Iraqi main waterbodies was established on the basis of samples taken in more than 50 sampling locations.

6. On **16 December 1994**, the Director General transmitted to the UN Secretary-General the seventh semi-annual report on the implementation by the IAEA of the plan for the destruction, removal, or rendering harmless of the items specified in paragraph 12 of Security Council resolution 687 (1991).

This report reflected the completion of the reprocessing of the irradiated nuclear fuel removed from Iraq, which had been carried out in Russia under a contract with the Russian Ministry of Atomic Energy (Minatom). As provided for in this contract, Minatom has reprocessed the spent fuel and downgraded the content of the U-235 isotope to slightly below 20 percent. The recovered material, amounting to a total quantity of 141 kilograms of uranium (metal equivalent) was shipped to the designated storage site in Russia and has been verified and sampled by IAEA safeguards inspectors on 14-15 December 1994. With the completion of this operation, the

IAEA plan for destruction, removal or rendering harmless of items listed in paragraph 12 of resolution 687 (1991) had come to its practical end. The IAEA retains, however, the right to destroy, remove or render harmless, as appropriate, any additional item of paragraph 12 list not previously discovered or declared. Copy of the Director General's report can be found in UN document S/1994/1438.

7. On **5 April 1995**, the Director General transmitted to the UN Secretary-General the seventh semi-annual report on the implementation of the IAEA's OMV Plan. In the summary and conclusions section of this report the Director General stated that:

*"...[the] IAEA is confident that the essential components of Iraq's clandestine nuclear programme have been identified and have been destroyed, removed or rendered harmless and that the scope of the past programme is well understood. This assessment is based not only on the verification of Iraqi statements, which may be presumed to be biased and incomplete, but also on information gathered during inspections, on information provided by suppliers and Member States and, to a great extent, on an analysis of the large cache of original Iraqi documentation which was seized in Iraq by the teams of the sixth and seventh IAEA inspection missions. Despite the absence in this cache of original Iraqi documentation regarding its gas centrifuge programme and the suspected withholding by Iraq of some documents from the cache, the areas of residual uncertainty, regarding Iraq's former nuclear weapons programme, have been progressively reduced to a level of detail, the full knowledge of which is not likely to affect the overall picture.*

*The IAEA's extensive knowledge of the scope of Iraq's past nuclear weapons programme has facilitated the design and implementation of a credible and sustainable plan for the ongoing monitoring and verification of Iraq's compliance with its obligations under relevant Security Council resolutions.*

*The Plan has been operational since the end of August 1994, when the continuous presence of IAEA inspectors in Iraq - the Nuclear Monitoring Group - was established. The refurbishing and modification of the Canal Hotel in Baghdad to accommodate the Baghdad Monitoring and Verification Centre is practically complete and the Centre provides adequate facilities for the implementation of the Plan.*

*During the period under review [October 1994-April 1995], Nuclear Monitoring Groups have conducted more than 160 inspections at some 70 facilities, including 23 facilities not previously inspected.*

*A number of requests for the release, relocation and change of use of equipment, material and facilities, to be used in non-nuclear activities, have been approved, with the concurrence of the Special Commission and in compliance with the provisions of paragraph 3 iii) of Security Council resolution 707 (1991).*

*Progress has been made in developing the export/import monitoring mechanism called for in paragraph 7 of resolution 715 (1991) to monitor any future sale or supply to Iraq of items relevant to the implementation of Section C of resolution 687 (1991), to the temporary restriction on nuclear activities in Iraq pursuant to paragraph 3 iv) of resolution 707 (1991) and to the Plan approved in resolution 715 (1991).*

*At the suggestion of the Sanctions Committee and in accordance with the procedures for amending the Annexes provided for in the Plan, the IAEA has revised Annex 3 thereof with the assistance of international experts on export control. The revised version reflects the need to provide customs and export control authorities with a more detailed description of items subject to notification.*

*The Plan provides a sound basis for the ongoing monitoring and verification of Iraq's compliance with the requirements of the relevant Security Council resolutions in the area of nuclear weapons and will continue to be developed as technical needs arise and as advanced technologies become available.*

*The implementation of the Plan does not foreclose the exercise by the IAEA of its right to investigate any aspect of Iraq's former nuclear weapons programme. Indeed, vigorous exercise of the right - provided in the Plan - to immediate, unconditional and unrestricted access to any and all areas, facilities, equipment, records and means of transportation represents an important confidence-building measure.*

*Recent information made available through the media suggesting the existence of a secret project which, prima facie, could be related to a nuclear weapons programme, requires further investigation to verify its authenticity."*

At the request of the President of the Security Council, the Leader of the IAEA Action Team introduced the Director General's report to the Council at its informal meeting on **13 April 1995**. The full text of the Director General's report is contained in document GOV/INF/770, dated 11 May 1995.

8. On **17 July 1995**, the Director General transmitted to the UN Secretary-General an addendum to the seventh semi-annual report on the implementation of the OMV Plan. This addendum had been prepared at the request of the Security Council and addressed the issue of five documents which an anonymous sender asserted to be official Iraqi documents, generated in 1993 and 1994, and which, according to the source, provided proof that a nuclear weapons programme had been reconstituted in Iraq. A lengthy investigation was undertaken by the IAEA aimed at assessing the nature and veracity of these documents. This investigation entailed a detailed analysis of the form and content of the documents, including their comparison with the

extensive database of documents seized in Iraq during the sixth IAEA inspection; an in-depth analysis of current and past correspondence and records provided by Iraq; interviews with Iraqi personnel allegedly involved, or known to have relevant technical competence; interviews with private Iraqi civilians - not employed by the Government; interviews with journalists associated with the documents; and the carrying out of on-site inspection activities, including environmental monitoring, using the most sensitive analytical techniques.

Based on the results of these activities and the IAEA's extensive knowledge of Iraq's past programme and present situation, a large number of errors and inconsistencies were identified in the documents, typified by the following:

- Linguistic correctness and conformity with Iraqi practice:

These documents contain technical wording which differs from that found in the IAEA's extensive database of seized Iraqi documents and terms which are not in conformance with standard Iraqi usage.

- Conformity of layout and construction of documents with established Iraqi practices:

The layout of the documents is not consistent with contemporary Iraqi usage. In addition, the documents reveal errors in construction, suggesting poor adaptation of authentic Iraqi documents.

- Scientific validity:

Some technical elements of the programme, inferred from the documents, have been assessed as unlikely by experts from nuclear-weapon States. Some of those elements are also inconsistent with available information on the status of Iraq's clandestine programme during the last years of the programme.

- Accuracy:

Significant inaccuracies in qualifications, titles and names of individuals, as well as in technical and administrative organisational structures, have been clearly established.

The investigation undertaken by the IAEA and the basis for its conclusions have been comprehensively documented. In view, however, of the sensitive nature of the subject and of the process, it is considered prudent to keep this documentation confidential.

As a result of this investigation, the IAEA has reached the conclusion that, on the basis of all available evidence, these documents are not authentic. Furthermore, no credible evidence has been found to suggest that the activities reported in these documents were or are being carried out in Iraq.

It should be noted that the IAEA will continue, under its ongoing monitoring and verification plan, to actively pursue any evidence that might point to the conduct of activities proscribed under the relevant Security Council resolutions.

A copy of the addendum to the seventh semi-annual report can be found in document GOV/INF/770/Add.1.

9. On 24 July 1995, the Chairman of the UN Sanctions Committee transmitted to the President of the Security Council the report called for in paragraph 7 of Security Council resolution 715 (1991). This report was jointly prepared by the Sanctions Committee, the Director General of the IAEA and the Special Commission and sets out a proposal for monitoring future sales or supplies by other countries to Iraq of items relevant to the implementation of Section C of resolution 687 (1991). In the covering note, the Chairman of the Sanctions Committee expressed the hope that it would be possible for the Council to take an early decision on the mechanism proposed in the report, so that preparations, as necessary, could be pursued at the national level for its implementation.