

THE STATUS OF NUCLEAR INSPECTIONS IN IRAQ:  
AN UPDATE

Meeting of the  
United Nations Security Council

New York  
7 March 2003

Mohamed ElBaradei  
Director General



INTERNATIONAL ATOMIC ENERGY AGENCY

My report to the Council today is an update on the status of the International Atomic Energy Agency's nuclear verification activities in Iraq pursuant to Security Council resolution 1441 (2002) and other relevant resolutions.

## INSPECTION ACTIVITIES

When I reported last to the Council, on 14 February, I explained that the Agency's inspection activities had moved well beyond the "reconnaissance phase" — that is, re-establishing our knowledge base regarding Iraq's nuclear capabilities — into the "investigative phase", which focuses on the central question before the IAEA relevant to disarmament: whether Iraq has revived or attempted to revive its defunct nuclear weapons programme over the last four years.

At the outset, let me state one general observation: namely, that during the past four years, at the majority of Iraqi sites, industrial capacity has deteriorated substantially, due to the departure of the foreign support that was often present in the late 1980s, the departure of large numbers of skilled Iraqi personnel in the past decade, and the lack of consistent maintenance by Iraq of sophisticated equipment. At only a few inspected sites involved in industrial research, development and manufacturing have the facilities been improved and new personnel been taken on. This overall deterioration in industrial capacity is naturally of direct relevance to Iraq's capability for resuming a nuclear weapons programme.

### *Inspections*

The IAEA has now conducted a total of 218 nuclear inspections at 141 sites, including 21 that had not been inspected before. In addition, the Agency experts have taken part in many joint UNMOVIC–IAEA inspections.

### *Technical Methods*

Technical support for nuclear inspections has continued to expand. The three operational air samplers have collected, from key locations in Iraq, weekly air particulate samples that are being sent to laboratories for analysis. Additional results of water, sediment, vegetation and material sample analyses have been received from the relevant laboratories.

Our vehicle-borne radiation survey team has covered some 2000 kilometres over the past three weeks. Survey access has been gained to over 75 facilities, including military garrisons and camps, weapons factories, truck parks, manufacturing facilities and residential areas.

*Interviews*

Interviews have continued with relevant Iraqi personnel — at times with individuals and groups in the workplace during the course of unannounced inspections, and on other occasions in pre-arranged meetings with key scientists and other specialists known to have been involved with Iraq's past nuclear programme. The IAEA has continued to conduct interviews even when the conditions were not in accordance with the IAEA's preferred modalities, with a view to gaining as much information as possible — information that could be cross-checked for validity with other sources and which could be helpful in our assessment of areas under investigation.

As you may recall, when we first began to request private, unescorted interviews, the Iraqi interviewees insisted on taping the interviews and keeping the recorded tapes. Recently, upon our insistence, individuals have been consenting to being interviewed without escort and without a taped record. The IAEA has conducted two such private interviews in the last 10 days, and hopes that its ability to conduct private interviews will continue unhindered, including possibly interviews outside Iraq.

I should add that we are looking into further refining the modalities for conducting interviews, to ensure that they are conducted freely, and to alleviate concerns that interviews are being listened to by other Iraqi parties. In our view, interviews outside Iraq may be the best way to ensure that interviews are free. And we intend therefore to request such interviews shortly. We are also asking other States to enable us to conduct interviews with former Iraqi scientists that now reside in those States.

**SPECIFIC ISSUES**

In the last few weeks, Iraq has provided a considerable volume of documentation relevant to the issues I reported earlier as being of particular concern, including Iraq's efforts to procure aluminium tubes, its attempted procurement of magnets and magnet production capabilities, and its reported attempt to import uranium. I will touch briefly on the progress made on each of these issues.

*Uranium Enrichment*

Since my last update to the Council, the primary technical focus of IAEA field activities in Iraq has been on resolving several outstanding issues related to the possible resumption of efforts by Iraq to enrich uranium through the use of centrifuges. For that purpose, the IAEA assembled a specially qualified team of international centrifuge manufacturing experts.

With regard to *Aluminium tubes*, the IAEA has conducted a thorough investigation of Iraq's attempts to purchase large quantities of high-strength aluminium tubes. As previously reported, Iraq has maintained that these aluminium tubes were sought for rocket production. Extensive field investigation and document analysis have failed to uncover any evidence that Iraq intended to use these 81mm tubes for any project other than the reverse engineering of rockets.

The Iraqi decision-making process with regard to the design of these rockets was well documented. Iraq has provided copies of design documents, procurement records, minutes of committee meetings and supporting data and samples. A thorough analysis of this information, together with information gathered from interviews with Iraqi personnel, has allowed the IAEA to develop a coherent picture of attempted purchases and intended usage of the 81mm aluminium tubes, as well as the rationale behind the changes in the tolerances.

Drawing on this information, the IAEA has learned that the original tolerances for the 81mm tubes were set prior to 1987, and were based on physical measurements taken from a small number of imported rockets in Iraq's possession. Initial attempts to reverse engineer the rockets met with little success. Tolerances were adjusted during the following years as part of ongoing efforts to revitalize the project and improve operational efficiency. The project languished for long periods during this time and became the subject of several committees, which resulted in specification and tolerance changes on each occasion.

Based on available evidence, the IAEA team has concluded that Iraq's efforts to import these aluminium tubes were not likely to have been related to the manufacture of centrifuges and, moreover, that it was highly unlikely that Iraq could have achieved the considerable re-design needed to use them in a revived centrifuge programme. However, this issue will continue to be scrutinized and investigated.

*Magnets:* With respect to reports about Iraq's efforts to import high-strength permanent magnets — or to achieve the capability for producing such magnets — for use in a centrifuge enrichment programme, I should note that, since 1998, Iraq has purchased high-strength magnets for various uses. Iraq has declared inventories of magnets of twelve different designs. The IAEA has

verified that previously acquired magnets have been used for missile guidance systems, industrial machinery, electricity meters and field telephones. Through visits to research and production sites, reviews of engineering drawings and analyses of sample magnets, IAEA experts familiar with the use of such magnets in centrifuge enrichment have verified that none of the magnets that Iraq has declared could be used directly for a centrifuge magnetic bearing.

In June 2001, Iraq signed a contract for a new magnet production line, for delivery and installation in 2003. The delivery has not yet occurred, and Iraqi documentation and interviews of Iraqi personnel indicate that this contract will not be executed. However, they [centrifuge enrichment experts] have concluded that the replacement of foreign procurement with domestic magnet production seems reasonable from an economic point of view. In addition, the training and experience acquired by Iraq in the pre-1991 period makes it likely that Iraq possesses the expertise to manufacture high-strength permanent magnets suitable for use in enrichment centrifuges. The IAEA will continue therefore to monitor and inspect equipment and materials that could be used to make magnets for enrichment centrifuges.

With regard to *Uranium Acquisition*, the IAEA has made progress in its investigation into reports that Iraq sought to buy uranium from Niger in recent years. The investigation was centred on documents provided by a number of States that pointed to an agreement between Niger and Iraq for the sale of uranium between 1999 and 2001.

The IAEA has discussed these reports with the Governments of Iraq and Niger, both of which have denied that any such activity took place. For its part, Iraq has provided the IAEA with a comprehensive explanation of its relations with Niger, and has described a visit by an Iraqi official to a number of African countries, including Niger, in February 1999, which Iraq thought might have given rise to the reports. The IAEA was also able to review correspondence coming from various bodies of the Government of Niger, and to compare the form, format, contents and signatures of that correspondence with those of the alleged procurement-related documentation.

Based on thorough analysis, the IAEA has concluded, with the concurrence of outside experts, that these documents — which formed the basis for the reports of recent uranium transactions between Iraq and Niger — are in fact not authentic. We have therefore concluded that these specific allegations are unfounded. However, we will continue to follow up any additional evidence, if it emerges, relevant to efforts by Iraq to illicitly import nuclear materials.

#### *Procurement Patterns*

Many concerns regarding Iraq's possible intention to resume its nuclear programme have arisen from Iraqi procurement efforts reported by a number of States. In addition, many of Iraq's efforts to procure commodities and products, including magnets and aluminium tubes, have been conducted in contravention of the the sanctions controls specified under Security Council resolution 661 and other relevant resolutions.

The issue of procurement efforts remains under thorough investigation, and further verification will be forthcoming. In fact, an IAEA team of technical experts is currently in Iraq, composed of customs investigators and computer forensic specialists which is conducting a series of investigations, through inspections at trading companies and commercial organizations, aimed at understanding Iraq's patterns of procurement.

## CONCLUSION

In conclusion, I am able to report today that, in the area of nuclear weapons — the most lethal weapons of mass destruction — inspections in Iraq are moving forward. Since the resumption of inspections a little over three months ago — and particularly during the three weeks since my last oral report to the Council — the IAEA has made important progress in identifying what nuclear-related capabilities remain in Iraq, and in its assessment of whether Iraq has made any efforts to revive its past nuclear programme during the intervening four years since inspections were brought to a halt. At this stage, the following can be stated:

One, there is no indication of resumed nuclear activities in those buildings that were identified through the use of satellite imagery as being reconstructed or newly erected since 1998, nor any indication of nuclear-related prohibited activities at any inspected sites.

Second, there is no indication that Iraq has attempted to import uranium since 1990.

Third, there is no indication that Iraq has attempted to import aluminium tubes for use in centrifuge enrichment. Moreover, even had Iraq pursued such a plan, it would have encountered practical difficulties in manufacturing centrifuges out of the aluminium tubes in question.

Fourth, although we are still reviewing issues related to magnets and magnet production, there is no indication to date that Iraq imported magnets for use in a centrifuge enrichment programme.

As I stated above, the IAEA will naturally continue further to scrutinize and investigate all of the above issues.

After three months of intrusive inspections, we have to date found no evidence or plausible indication of the revival of a nuclear weapons programme in Iraq. We intend to continue our inspection activities, making use of all the additional rights granted to us by resolution 1441 and all additional tools that might be available to us, including reconnaissance platforms and all relevant technologies. We also hope to continue to receive from States actionable information relevant to our mandate. I should note that, in the past three weeks, possibly as a result of ever-increasing pressure by the international community, Iraq has been forthcoming in its co-operation, particularly with regard to the conduct of private interviews and in making available evidence that could contribute to the resolution of matters of IAEA concern. I do hope that Iraq will continue to expand the scope and accelerate the pace of its co-operation.

The detailed knowledge of Iraq's capabilities that IAEA experts have accumulated since 1991 — combined with the extended rights provided by resolution 1441, the active commitment by all States to help us fulfil our mandate, and the recently increased level of Iraqi co-operation — should enable us in the near future to provide the Security Council with an objective and thorough assessment of Iraq's nuclear-related capabilities. However credible this assessment may be, we will endeavour — in view of the inherent uncertainties associated with any verification process, and, particularly in light of Iraq's past record of co-operation — to evaluate Iraq's capabilities on a continuous basis as part of our long-term monitoring and verification programme, in order to provide the international community with ongoing and real time assurances.