

Iraqi declarations fail to answer UN's questions

UNMOVIC's reports on 27 January and 27 February may provide new information on Iraq's WMD programmes, or a *casus belli*. In this report

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collates the available information on Iraq's nuclear programme and highlights some of the unresolved questions.

Iraq "did not even attempt to submit a credible declaration", President Bush told US soldiers at Fort Hood, Texas on 3 January.

Bush was commenting on the Currently Accurate, Full and Complete Declaration (CAFCD) regarding weapons of mass destruction (WMD) made by Iraq on 7 December 2002.

The table below collates information on Iraq's nuclear materials, facilities, personnel and documents that has been published by the International Atomic Energy Agency (IAEA) and other sources. It indicates the dates on which facilities have been inspected by the IAEA, and shows those facilities that were declared in Iraq's 7 December declaration.

The list of sites and facilities has been compiled from the Table of Contents of the 7 December declaration, IAEA press briefings between 27 November 2002 and 15 January 2003, three IAEA reports, one United Nations Special Commission (UNSCOM) report, two think-tank reports, and one article from Jane's Intelligence Review.

Iraq's declarations

Since Iraq's nuclear declarations, from its Full, Final, and Complete Declaration A (FFCD-A) following the Gulf war in 1991, to FFCD-F in 1996 and including the current declaration, are classified it is not possible to know if there are other facilities, sites or materials that have been declared. However, some idea of the extent of the recent declaration can be gained from comments by those who have seen the report.

Hans Blix, executive chairman of UNMOVIC, said the agency considers that "the declaration failed to answer a great many questions", when he briefed the Security Council on 9 January.

"Section 1, the 2,000 pages in English, is basically a rehashed version of an old, 1996 declaration," says former UNSCOM inspector David Albright, now director of the Institute for Science and International Security (ISIS), who has seen the new declaration. This section covers Iraq's nuclear weapons programme up to 17 January, 1991, the start of Operation 'Desert Storm'. "Section two, 300 pages translated from Arabic, is supposed to cover from 1991 up to 2002 and include new information, but so far we haven't seen anything we didn't already know in 1998."

Some hard data is provided in the leaked eight pages of the Table of Contents. Iraq has declared it has no nuclear-related materials beyond those already known, as evinced by Chapter 10 covering the old programme, titled 'Transfer and destruction of equipment and materials (60 pages)', which relates to Iraq's uranium supply; and by Chapter 5, part 5.11, 'Exploitation of new and depleted fuel within the accelerated apparatus development programme (68 pages)', which relates to the nuclear reactor fuel that Iraq clandestinely diverted in 1991 in a crash 'accelerated' programme to make one or two nuclear weapons.

In total, 28 facilities operating at 16 separate sites are mentioned in the Table of Contents.

Two of these are listed in the old section and are presumably no longer operating. 'Petrochemical 3' in Baghdad was the master control centre for Iraq's former nuclear weapons programme, and the 'Design Centre' in Rashdiya was Iraq's main centrifuge uranium enrichment facility.

Section 2 on current activities lists eight 'major sites' including the Al-Tuwaitha Nuclear Research Centre, Iraq's largest nuclear site, and 18 'secondary sites', all now operating and declared to be doing so in Non-Proliferation Treaty compliance, though all were previously involved in Iraq's nuclear weapons programme.

The declaration also provided the names of some 50 nuclear scientists, and 2,381 pages of nuclear-related documents. On 30 December, a day before required, Iraq submitted separately a list naming 500 scientists involved in its former WMD programmes, including 50 nuclear scientists.

Unresolved questions

Thanks to detailed IAEA reports from inspections up to 1998, and other sources existing prior to UNSCR 1441, much about Iraq's former nuclear weapons-related materials, facilities, personnel and documents is known. There are 511 tonnes of uranium compounds stored in a facility known as Location C, at the Al-Tuwaitha Nuclear Research Centre, 40km south of Baghdad. Around 100 tonnes was produced indigenously, mined at the Akashat phosphate/uranium ore mine, and purified at the Al-Qaim uranium processing plant. Around 400 tonnes was acquired from uranium suppliers in Europe, Africa and South America.

Within two weeks of first resuming inspections on 27 November 2002, five teams of IAEA inspectors arrived at Location C. For the better part of a week they conducted a detailed audit. Although the results have yet to be published, it is unlikely that much of this uranium could be missing since this would constitute a clear and undeniable breach of UN resolutions, something Saddam would surely wish to avoid.

However, Iraq's uranium supply is so large that a more immediate concern is whether the actual amount recorded is accurate. Last month Washington expressed concerns along these lines, noting irregularities in records of uranium shipments to Iraq from Niger.

Iraq has no known highly enriched uranium (HEU). The 39kg of HEU it did have in the form of unburned fuel for the Osirak research nuclear reactor, and partially burned fuel for its IRT-5000 research nuclear reactor, has long since been removed.

The discovery of the fuel in 1991 highlights the importance of on-the-ground inspections and conversations with personnel: "We would never have found the five buried canisters, each at least ten feet tall and several feet across, holding the spent nuclear fuel rods from that reactor, if it weren't for working with people on the ground who told us where to look," said Ron Cleminson, formerly an UNSCOM commissioner, who found the fuel as a member of the first IAEA team in Iraq. He is now Canada's commissioner on UNMOVIC.

Of the 81 facilities believed to have been involved in Iraq's nuclear weapons programme (all but eight confirmed by the IAEA), 19 facilities are of immediate concern. New buildings, and construction of at least six new facilities, have been confirmed at six of Iraq's declared nuclear sites: Tuwaitha, Al-Atheer, Baghdad, Al-Jazirah, Taji and Tarmiya. There are also at least four sites known to the IAEA that do not appear to have been declared: Falluja, Al-Hadre, Mansour and Ramadi. Two further sites at Basra and the Hamrin mountains are not recognised by the IAEA but are alleged by the opposition Iraqi National Congress to harbour secret facilities.

There are also possible discrepancies between the number of personnel declared by Iraq. Some open sources, including the Federation of American Scientists, estimates the number of scientists, engineers, and technicians involved in Iraq's former nuclear weapons programme to have been around 3,000. This compares to the 500 declared by Iraq.

The number of pages of documents declared also appears small in comparison to what is known to have been obtained by the IAEA in the past. The agency's reports reveal that 500,000 pages of documents related to Iraq's nuclear weapons programme were recovered by inspectors in 1995, following the defection of Hussein Kamel, Saddam Hussein's son-in-law and a former head of Iraq's nuclear weapons programme.

The only example of a significant amount of Materials Unaccounted For is 1,765kg of uranium compounds, missing from the uranium waste facility for the Al-Jazirah uranium processing facilities. Extracting the pure uranium from this waste would not be easy, it would still need hidden facilities to convert them to enriched uranium and then a weapon, but it is significant because it contains 11kg of U235, enough for two-thirds of a critical mass.

IAEA inspections in the 1990s indicated that significant quantities of equipment at facilities like Tarmiya and Rashdiya may have been removed by Iraqi forces before IAEA inspectors arrived in 1991. Also missing are the PC-3 weapons design documents, obtained by and then forcibly removed from IAEA inspectors on 23 September 1991, which remain unaccounted for to this day. Other IAEA obtained documents show that by 1991 Iraq already had a working "basic atom bomb design based on implosion using enriched uranium". One tonne in weight and a metre in diameter, the design was too large for any then-existing Iraqi ballistic missile; however, the missing PC-3 documents purportedly showed a 600kg, 0.6 metre diameter design.

Other documents missing include those involving Iraq's centrifuge programme, particularly those at Rashdiya.

Questioning personnel

Aware of the challenges that UNMOVIC and the IAEA would face in answering some of the questions outlined above, even with inspectors on the ground (as it had in North Korea), resolution 1441 invoked a new power to interview key Iraqi personnel outside Iraq. Only they know the truth about missing materials, facilities, staff and documents. "If Iraq is absolutely sure that there is nothing they have to hide then they should be anxious that the interviewees could speak without intimidation," Hans Blix told CNN on 16 January.

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Table of Iraqi nuclear facilities, materials, and staff
Details are believed correct as of 15 January 2003
Sites
Facilities
Sources
Dates of inspection by current IAEA team
Facility declared in latest Iraqi declaration
22 sites with details on nuclear-related materials, staff and documents
81 facilities in total, comprising: 11 former nuclear weapons facilities; 11 former uranium enrichment facilities; three former nuclear reactors; 16 former uranium processing facilities; 40 former nuclear weapons programme support facilities
Letters a-i refer to information sources used to compile the table. Further details in footnotes.

EXISTING SOURCES

(a) IAEA, 15 locations with 40 sites, in Fourth consolidated report of the Director General of the International Atomic Energy Agency under paragraph 16 of Security Council resolution 1051 (1996), IAEA, 1997, see www.iaea.or.at/worldatom/Programmes/ActionTeam/nwp2.html, select S/1997/779 (b) IAEA, 24 Locations, in Report on the Twenty-Fifth IAEA On-site Inspection in Iraq Under Security Council Resolution 687 (1991), 1994, see www.iraqwatch.org/un/IAEA/IAEA25.htm

(c) IAEA, 19 Locations, in IAEA Iraq Action Team, Fact Sheet: Iraq's Nuclear Weapon Program, April 25, 2002, see www.iaea.or.at/worldatom/Programmes/ActionTeam/nwp2.html

(d) UNSCOM, 10 Locations, in Major Sites Associated With Iraq's Past WMD Programs, 3 December 1997, see www.fas.org/news/un/iraq/s/971203_sites.htm

(e) ISIS, 8 Locations, in Iraq's Programs to Make Highly Enriched Uranium and Plutonium for Nuclear Weapons Prior to the Gulf War, by David Albright, director, Institute for Science and International Security, see www.isis-online.org

(f) FAS, 15 Locations, in Iraq Special Weapons Facilities, Federation of American Scientists, see www.fas.org/nuke/guide/iraq/facility/index.html

(g) INC, 24 Locations, in Iraq's main nuclear, biological and chemical weapons facilities, Iraqi National Congress, see Jane's Intelligence Review, March 1998, pp. 24-25

CURRENT SOURCES:

(h) Iraq Nuclear Declaration Table of Contents, 7 Dec 2002

see www.iraqwatch.org

(I) IAEA press briefings, 26 Nov to 15 Jan, 2002

see www.iaea.org/worldatom/Press/Focus/iaealraq/pr_archive.shtml

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