

20/11 September 2002

CONFIDENTIAL UNTIL RELEASED

FOREWORD

- The threat posed to international peace and security by the spread of weapons of mass destruction cannot be ignored. Unless members of the international community face up to the challenge represented by this threat, they will place at risk the lives of their own citizens.
- Saddam Hussein's Iraqi regime is a uniquely dangerous example of the general threat, both because of his record and his persistent flouting of international norms of behaviour.
- Saddam Hussein is the only modern leader to have used chemical weapons, against Iran in the war which he initiated in the 1980s, causing 20,000 casualties, and against Iraqi citizens at Halabja, resulting in several thousand deaths.
- He has shown his capacity for aggression, by invading Kuwait, terrorising its people and ransacking the country. [Many thousand] Kuwaiti civilians have never been accounted for and must be presumed to have been killed by forces loyal to Saddam.
- It was only because of firm action by the international community that Kuwait was freed. And it was only because of the international community's resolve, through the United Nations, that Saddam Hussein was forced to dismantle some of his weapons of mass destruction.
- In the 1990s UN Weapons Inspectors worked to implement UN Security Council Resolutions passed following the end of the Gulf conflict, which called for the elimination of Iraqi nuclear, biological and chemical weapons. Saddam Hussein worked throughout this period to thwart the efforts of the

CONFIDENTIAL UNTIL RELEASED

DOS/2/0002

UN personnel. And even after the US and British Air Forces were deployed in 1998 in operations designed to degrade Iraq's capability to use chemical, biological and nuclear weapons, it was assessed that he retained sufficient materials and technical capacity to rebuild his arsenal.

- Since then the UN has tried repeatedly to achieve compliance with UN Resolutions and accept the return of weapons inspectors able to go anywhere at any time to track down and destroy his nuclear, biological and chemical weapons and supporting infrastructure.
- At every turn Saddam has played games with the UN, flouting its authority. He has consistently sought to divert attention from his failure to comply with the will of the international community. The only reasonable explanation for his prevarication is that he has something to hide, something he is unwilling to give up.
- Containment of Saddam's ambitions through sanctions was intended to ensure Iraqi disarmament, as demanded by the United Nations. This policy had significant success when UN inspectors were able to operate. And it continues to slow Saddam's efforts to build weapons of mass destruction. But without effective enforcement of UN resolutions, he will achieve his ambitions.
- We cannot wait forever for the right answer from Saddam, when all the time he is engaged in work on weapons which could threaten the whole Gulf region and the Eastern Mediterranean. The UK's own vital interests and security could be directly threatened. If we were to do so, particularly after 11 September, and our patience were to be rewarded with another devastating attack, we would rightly be castigated for our inaction.

- The time has come for Saddam to comply with international law as set out most recently in [UNSCR...] and accept the deployment of UN Weapons Inspectors or face the consequences.
- This dossier sets out in detail our best assessment of the facts about Saddam Hussein's nuclear, biological and chemical weapons capabilities, his ballistic missile programmes, the history of UN weapons inspections in Iraq and Saddam's record of human rights abuses and aggression towards his neighbours. Taken individually each chapter is damning enough. As a whole they present a picture of a regime which is so opposed to international norms of behaviour that the threat it poses cannot be ignored.

EXECUTIVE SUMMARY

1. Under Saddam Hussein, Iraq has developed chemical and biological weapons, acquired missiles able to attack neighbouring countries with these weapons, and tried hard to develop a nuclear bomb. Iraq has admitted to all of these programmes to acquire weapons of mass destruction. And Saddam has used chemical weapons, both against Iran and against his own people.

2. This paper sets out the British Government's knowledge of these weapons programmes. It traces their history from the first use of chemical weapons against Iraq's own Kurdish population in 1987, through their further use against Iran and the details uncovered by UN inspectors after the Gulf War. Drawing on very sensitive intelligence, the paper also sets out our assessment of Iraq's current capabilities, and shows how the picture is continuing to develop as new information becomes available.

3. But the threat from Iraq does not depend solely on these capabilities. It arises also because of the violent and aggressive nature of Saddam's regime. His record of international repression and external aggression gives rise to unique concerns about the threat he poses. The paper briefly outlines his rise to power, the nature of his regime and his history of regional aggression. Vivid and horrifying accounts of Saddam's human rights abuses are also catalogued.

4. The importance of denying Saddam access to weapons of mass destruction was recognised by the United Nations in 1991. The paper sets out the key UN Security Council Resolutions, accepted by Iraq, which required the destruction of these weapons. It also summaries the history of the UN inspections regime. This includes both the extent of Saddam's capabilities uncovered by the inspectors and Iraq's history of dishonesty, deception, intimidation and concealment in its dealings with the UN

inspectors. It also describes the extent of Saddam's weapons programmes left unaccounted for at the end of the inspections process.

5. At the heart of the paper is an account, confirmed by secret intelligence as well as evidence from the UN inspections, of Iraq's current capabilities in the fields of chemical, biological and nuclear weapons and of the ballistic missiles to deliver them. Our judgement, based on all the available sources is that Iraq:

- has stocks of chemical and biological agents and weapons available, both retained from before the Gulf War, and probably from more recent production;
- is self-sufficient in the technology and expertise required to produce chemical and biological weapons, specifically: sulphur mustard, tabun, sarin, GF, VX; and anthrax, botulinum toxin, and aflatoxin;
- is refurbishing sites formerly associated with its chemical, biological and nuclear weapons programmes;
- retains a range of delivery means for chemical and biological weapons;
- has modified the L-29 jet trainer to make it capable of delivering chemical and biological agents;
- has assembled specialists to work on its nuclear programme, which was aimed at producing a 20-kiloton weapon, capable of causing 80 per cent casualties within 1.6 miles of the detonation;
- is covertly attempting to acquire technology and materials for use in nuclear weapons, including specialised aluminium controlled because of its potential use in enriching uranium;
- has retained up to 20 Al Hussein missiles, capable of carrying chemical or biological warheads;
- is deploying its Al-Samoud liquid propellant missile, and has used the absence of weapons inspectors to work on extending its range;

- is testing the solid-propellant missile Ababil-100, and is making efforts to extend its range;
- has constructed a new engine test stand bigger than the one used for its current missile systems, to test missiles with a range longer than permitted under Security Council resolution 687 and capable of threatening the UK Sovereign Bases in Cyprus, NATO members (e.g. Greece or Turkey), Israel and all Iraq's Gulf neighbours;
- is working to obtain improved guidance technology to increase missile accuracy;

6. Recent intelligence adds to this picture. It indicates that Iraq:

- attaches great importance to the possession of weapons of mass destruction and that Saddam Hussein is committed to using them if necessary;
- envisages the use of weapons of mass destruction in its current military planning, and could deploy such weapons within 45 minutes of the order being given for their use;
- has begun dispersing its most sensitive weapons, equipment and material, because Saddam is determined not to lose the capabilities developed in the last four years;
- is preparing plans to conceal evidence of its weapons of mass destruction from any renewed inspection, including by dispersing incriminating documents;
- has acquired mobile laboratories for military use, corroborating earlier report about the mobile production of biological warfare agents;
- has purchased large quantities of uranium ore, despite having no civil nuclear programme that could require it.

7. The paper also briefly sets out how Iraq is able to finance its weapons programme. Drawing on illicit earnings generated outside UN control, Iraq generated income of some

\$3 billion in 2001. Further substantial earnings may have been generated though abuse of the UN oil for food programmes.

[8. Finally, this paper includes an account of the recent history of intelligence assessment on Iraq's weapons of mass destruction. Reflecting the great importance of the risk posed by Saddam, we summarise key judgements reached by the Joint Intelligence Committee and briefed to the Prime Minister each year since the withdrawal of UN inspectors in 1998. Together with the even more recent intelligence referred to in this paper, these assessments demonstrate the continuing and growing grounds for concern about the Iraqi programmes and help explain the government's view that the time has now come to see decisive action taken to tackle them.]

SECTION 1

SADDAM'S REGIME AND HIS RISE TO POWER

Origins and early years

1. Saddam Hussein was born in the district of Tikrit in 1937. In 1955 he moved to Baghdad, where he joined the Ba'ath Party. After a bungled attempt at a political assassination in 1959, Saddam escaped, first to Syria and then to Egypt. He was sentenced to 15 years imprisonment in absentia.
2. Saddam returned to Baghdad in 1963. When the Ba'ath Party fell from power, he went into hiding. Captured and imprisoned, he eventually escaped in 1967 with the co-operation of his guards, and became a bodyguard responsible for Ba'ath Party security. In this capacity, he set about establishing himself at the centre of power, rapidly increasing his influence with the Party. [Brief details about his progress in the 1970s]
3. Following the Ba'ath Party's return to power, Saddam took over the Presidency of Iraq in July 1979. Within days, five fellow members of Iraq's Revolutionary Command Council were arrested and accused of involvement in a coup attempt. They and 17 others were summarily sentenced to death and executed.
4. After the revolution that ousted the Shah in Iran, Saddam started a campaign against the Shia majority of Iraq, fearing that they might be encouraged by the new Islamic regime. A campaign of mass arrests and executions of Islamic activists led to the execution of the Ayatollah Baqir al-Sadr and his sister in April 1980. In 1983, 80 members of another leading Shia family were arrested and six of them, all religious leaders, executed. A fuller account of Saddam's record on human rights is at Annex A.

5. Saddam attacked Iran in 1980, in an attempt to reverse earlier territorial concessions to the Shah. But the war went badly, and when the Iraqi army was driven back to the Iraqi frontier in 1982 he faced a serious crisis of confidence. The murmurers were purged, and Saddam's only potential rival conveniently died. In 1983 the army was cowed by the elimination of unsuccessful officers, and the Shia by the arrest of the family of their dead leader.

6. After the end of the conflict Saddam resumed his previous pursuit of primacy in the Gulf. When these efforts evoked international criticism, he challenged the presence of the US navy in the Gulf and threatened CW retaliation against the Israelis should they dare to attack Iraq. But his policies were expensive, and in a period of low oil prices left Iraq in severe financial difficulties.

7. By 1990, a number of factors, including his financial problems and resentment at Kuwait's oil production policies, prompted the invasion that led to the Gulf War (see section 2).

[The above section needs amendment]

Saddam's Iraq

8. Saddam now depends on a narrow inner circle of his relatives to convey his requirements to others, even members of the government. He has created a larger circle of trusted cronies from his home region of Tikrit at the centre of his Government.

9. Saddam keeps the various groupings in check by balancing the advantages he can offer and the fearful consequences of crossing him. His ruthlessness is demonstrated not only against those who have offended him, but also their families, friends or colleagues. For example a large number of officers from the Jabbur tribe were executed for the alleged disloyalty of a few of them. Saddam used the same system of

rewards, promises and punishment with the nations whose hostages he took during the war against Iran and the occupation of Kuwait.

10. To control the flow of rewards, inducements and penalties Saddam has to be the exclusive and individual source of all power in Iraq. To this end he has acted ruthlessly to ensure that there should be no other centres of power. The many security services report on the population and their colleagues upwards to him. Parties and tribes which might try to assert themselves, eg the Kurds and the communists have been crushed.

11 Army officers have been enmeshed in the government's web of informers. Suspicion that they have ambitions other than the service of the President leads to immediate execution. Even the war hero (and Saddam's erstwhile son in law) General Maher al Rashid was placed under house arrest, and his popular brother, General Taher al Rashid disposed of in a helicopter "accident".

12 It is routine for Saddam to pre-empt those who might conspire against him. He has said he knows who will conspire before they know it themselves. He constantly devises tests of his inner circle's reliability; and ostentatious enthusiasm for him or for his cause of the moment arouse his suspicions. He is perpetually aware that if he fails to deliver the benefits his supporters expect; or looks indecisive; or gives the impression of flagging, some of his supporters could be emboldened to dispose of him. So his need to retain their confidence, or to pre-empt them if they begin to doubt, constantly drives him to new adventures.

13. His experience has made Saddam a wily and sophisticated manipulator. He does not allow himself to be trammelled by friendships or loyalties, and these are always subject to his suspicions. And he never forgives those he believes have betrayed or opposed him; several have been assassinated abroad long after they have lost any significance at home.

14. Saddam sees himself as the personification of the new Iraq. His ubiquitous pictures portray him in a variety of guises – Saddam the peasant, Bedouin, townsman, Kurd, Shiite, family man and embattled warrior. As his personality cult has developed, he has come to think that he is creating an Iraq to dominate the Gulf. At the same time, he has become hypersensitive to criticism, regarding it not only as a personal slight, but also derogatory to his mission.

15. Behind everything is Saddam's own ambitious hunger for the power which he manipulates with such skill. Throughout his career he has sought power and control, and now he will do everything to preserve the domination over Iraq which he has achieved.

[The above section needs further amendment]

SECTION 2

SADDAM'S WARS

1. Saddam Hussein has fought two wars of aggression; the Iran-Iraq war and the invasion of Kuwait. He has also pursued a long-term programme of persecution against Iraqi Kurds.

War on Iran

2. The Iran-Iraq war broke out when Saddam decided to take advantage of the state of weakness, isolation and disorganisation that he perceived in post-revolutionary Iran. He wanted to assert Iraq's position as a leader of the Arab world and to recover frontier territory ceded to Iran a few years earlier. In September 1980 he publicly abrogated the border treaty reached with Iran in 1975 and launched attacks on Iranian targets a few days later. Saddam expected it to be a short, sharp campaign. But the Iranians fought back and the bloody conflict lasted for eight years.

3. There were a million casualties in the conflict with Iran. Twenty thousand Iranians were killed by chemical weapons: mustard gas and the nerve agents tabun and sarin: all of which Iraq still possesses.

Persecution of the Kurds

4. In the early years of the war against Iran, Saddam had encouraged rivalry between the KDP (Kurdish Democratic Party, who supported Iran) and the PUK (Patriotic Union of Kurdistan). But the PUK started to move towards the KDP and Iran in the mid 1980s and Saddam, under pressure elsewhere, felt the need to reassert control over the Kurdish areas. Saddam appointed his cousin, Ali Hassan al'Majid, as his deputy in the north and a campaign of attacks on Kurdish villages – the notorious Anfal campaign – began. Chemical weapons were used from April 1987 and the countryside was progressively devastated by Saddam's forces. The most horrific attack was on Halabja in 1988, although it was far from unique.

5. Amnesty International estimates that more than 100,000 Kurds were killed or disappeared during Saddam's 1987-88 campaign to crush Kurdish insurgency. Kurdish villages were systematically razed. This was a policy of genocide.

Invasion of Kuwait

6. The invasion of Kuwait was the only case in recent times of one member of the United Nations taking over another.

7. Iraq invaded Kuwait on 2 August 1990. Abuses committed by its forces included robbery, rape of Kuwaitis and expatriates, and summary executions. Amnesty International documented many other abuses during the occupation of Kuwait.

8. Iraq denied access to the Red Cross, which has a mandate to provide protection and assistance to civilians affected by international armed conflict. The death penalty was extended to looting and hoarding of food.

9. As Iraq tried to implement a policy of Iraqisation of the occupied territory, Kuwaiti civilians were arrested for "crimes" such as wearing beards. People were dragged from their homes and held in improvised detention centres. In findings based on large number of interviews, Amnesty listed 38 methods of torture used by the Iraqi occupiers, including beatings, breaking of limbs, extracting finger and toenails, inserting bottle necks into the rectum, and subjecting detainees to mock executions.

10. More than 600 Kuwaiti POWs and missing are still unaccounted for. We believe some were still alive in 1998. Iraq refuses to comply with its UN obligation to account for the missing. It has provided sufficient information to close only three files.

11. In an attempt to deter military action to expel it from Kuwait, the Iraqi regime took several hundred foreign nationals (including children) in Iraq and Kuwait hostage, and prevented thousands more from leaving. Worse still, hostages were held as human shields at a number of strategic military and civilian sites, many in inhumane conditions. These acts constituted a flagrant violation of international law – the Fourth Geneva Convention, to which Iraq is a party – as was confirmed in United Nations Security Council resolutions 670 and 674.

12. At the end of the Gulf War, the Iraqi army fleeing Kuwait set fire to over 1,160 Kuwaiti oil wells, with serious environmental consequences. And inside Iraq, an uprising by Iraqi Kurds and Shi'a Muslims was brutally suppressed, with the loss of tens of thousands of lives.

Continuing abuses

13. Persecution of Iraq's Kurds continues, although the protection provided by the northern No-Fly Zone has curbed the worst excesses. The Baghdad regime has continued a policy of Arabisation in northern Iraq to remove Kurdish claims to the oil-rich area around the city of Kirkuk. Kurds and other non-Arabs are forcibly relocated to the three northern Iraqi governorates – Dohuk, Arbil and Sulaimaniyah – which are under de facto Kurdish control.

14. The United Nations Commission on Human Rights (UNCHR) Special Rapporteur for Iraq reports that 94,000 individuals have been expelled since 1991. Kurdish reports indicate that four million square metres of agricultural land owned by Kurds has been confiscated and redistributed to Iraqi Arabs. Arabs from southern Iraq have been offered incentives to move into the Kirkuk area and, in disputes with their Kurdish neighbours, are always favoured by the authorities.

15. In the wake of Operation Desert Storm, riots broke out in Basra on 1 March 1991, which spread quickly to other cities in Shia - dominated southern Iraq. A similar uprising against Baghdad's rule occurred in the Kurdish north. The Iraqi regime responded ruthlessly, killing or imprisoning thousands and prompting a humanitarian crisis as over a million Kurds fled into the mountains and tried to escape Iraq.

SECTION 3

IRAQ'S WMD PROGRAMMES - THE THREAT IN 1991

1. By the beginning of the Gulf War in 1991 Iraq had developed a wide range of chemical and biological weapons and had equipped a significant number of missiles to deliver them. Iraq also had an ambitious programme for the development of nuclear weapons.

2. The threat from **chemical weapons** was already well known. Iraq had made frequent use of a variety of chemical weapons during the Iran-Iraq War. (Many of the casualties are still alive in Iranian hospitals suffering from the long-term effects of numerous types of cancer and lung diseases) In 1988 Saddam also used mustard and

The Attack on Halabja

Shortly before sunrise on Friday, 17th March 1988, the village of Halabja was bombarded by Iraqi warplanes. The raid was over in minutes (?). In that short time, Saddam Hussein had committed a crime that no other dictator in recent times has carried out. A Kurd described the effects of a chemical attack on another village:

"My brothers and my wife had blood and vomit running from their noses and their mouths. Their heads were tilted to one side. They were groaning I couldn't do much, just clean up the blood and vomit from their mouths and try in every way to make them breathe again. I did artificial respiration on them and then I gave them two injections each. I also rubbed creams on my wife and two brothers."

(From "Crimes Against Humanity," Iraqi National Congress.)



Among the corpses at Halabja, children were found dead where they had been playing outside their homes. In places, ~~CONFIDENTIAL UNTIL RELEASED~~ and villagers died.

DOS/2/0016

nerve agents against Iraqi Kurds at Halabja in northern Iraq (see photo). Estimates vary, but according to Human Rights Watch up to 5,000 people were killed

3. A month after the attack on Halabja, Iraqi troops used over 100 tons of sarin nerve agent against Iranian troops on the Al Fao peninsula. Over the next three months Iraqi troops used sarin and other nerve agents on Iranian troops causing extensive casualties.

4. In 1988 Saddam Hussein also ordered the use of nerve agents against Iraqi Kurds in northern Iraq. And in 1991 Iraq used the biological warfare agent aflatoxin against the Shia population of Karbala [casualties]

5. We now know that Iraq had the following range of agents available at this time:

- **Mustard** is a liquid agent that causes burns and blisters to exposed skin. When inhaled, mustard damages the respiratory tract; when ingested, it causes vomiting and diarrhoea. It attacks and damages the eyes, mucous membranes, lungs, skin, and blood-forming organs. It can kill in [] minutes.
- **Tabun, sarin and VX** are all nerve agents of which VX is the most toxic. They all damage the nervous system, producing muscular spasms and paralysis. As little as 10 milligrammes of VX on the skin can cause rapid death.
- **Anthrax** is a disease caused by the bacterium *Bacillus anthracis*. Inhalation anthrax is the manifestation of the disease likely to be expected in biological warfare. The symptoms may vary [which are?]. If the dose is large (8,000 to 10,000 spores) death is common. The incubation period for anthrax is 1 to 7 days, with most cases occurring within 2 days of exposure.

- **Botulinum toxin** is a neurotoxin produced by the bacterium *Clostridium botulinum* and is one of the most toxic substances known to man. The first symptoms of botulinum toxin A poisoning may appear as early as 1 hour post exposure or as long as 8 days after exposure, with the incubation period between 12 and 22 hours. Paralysis leads to death by suffocation.
- **Aflatoxins** are fungal toxins, which are potent carcinogens. Most symptoms take a long time to show. Food products contaminated by aflatoxin can cause liver inflammation and cancer. It can also affect pregnant women, leading to stillborn babies and children born with mutations.
- **Ricin** is derived from the castor bean and can cause multiple organ failure leading to death within one or two days of inhalation.

6. Iraq also had the ability to deliver chemical and biological agents through a wide variety of means from artillery shells to ballistic missiles.

7. Iraqi plans for the development of a **nuclear weapon** were well advanced before the Gulf War. Iraq was planning and constructing fissile material production facilities and work on a weapon design was underway. Its declared aim was to produce a weapon with a 20-kiloton yield. A detonation of a 20-kiloton nuclear warhead over a city might flatten an area of approximately 3 square miles. Within 1.6 miles of detonation, blast damage and radiation would cause 80% casualties, three-quarters of which would be fatal. Between 1.6 and 3.1 miles from the detonation, there would still be 10% casualties, 10% of which would be fatal injuries

8. Iraq's ultimate aim was to deliver nuclear devices in a **ballistic missile** warhead. Prior to the Gulf War, Iraq had a well-developed missile industry. Iraq fired over 500 SCUD-type missiles at Iran during the Iran-Iraq War at both civilian and military targets, and 93 SCUD type-missiles during the Gulf War. The latter were targeted at

Israel and at Coalition forces stationed in the Gulf region. Armed with conventional warheads they did only limited damage. Iraq admitted to UNSCOM that it had 50 chemical and 25 biological warheads available for these missiles, but did not use them. Annex B gives a brief history of the Iraqi WMD programmes prior to 1991

Iraqi Declarations

9. From subsequent UN investigations, evidence from defectors and Iraqi admissions, we know that by the time of the Gulf War Iraq had produced:

- 19,000 litres of botulinum toxin, 8,500 litres of anthrax and 2,200 litres of aflatoxin, and to working on a number of other agents;
- 2,850 tonnes of mustard gas, 210 tonnes of tabun, 795 tonnes of sarin, 795 tonnes of cyclosarin; 3.9 tonnes of VX;
- 260 missile warheads including 75 "special" warheads for delivery of CBW;
- over 16,000 free-fall bombs for delivery of CBW;
- over 110,000 artillery rockets and shells for delivery of CBW;
- or purchased 819 missiles.

10. This was the substantial arsenal which the International Community set itself to dismantle once the war was over.

SECTION 4

THE RESPONSE OF THE INTERNATIONAL COMMUNITY

1. At the end of the Gulf War Iraq's conventional forces had been substantially reduced and weakened. But the International Community was determined that Saddam should be denied the ability to threaten the region and wider world through his possession of weapons of mass destruction.

2. The method chosen to achieve this aim was the establishment of the UN Special Commission (UNSCOM) to carry out intrusive inspections within Iraq, to ensure compliance with the requirements of the UN Security Council. The Security Council passed [unanimously?] a series of resolutions establishing the authority of UNSCOM to carry out its work in Iraq. [see box]

UN Security Council Resolutions (UNSCR) relating to WMD

UNSCR 687, April 1991 created the UN Special Commission (UNSCOM) and required Iraq to accept, unconditionally, "the destruction, removal or rendering harmless, under international supervision" of its chemical and biological weapons, ballistic missiles with a range greater than 150km, and their associated programmes, stocks, components, research and facilities. The International Atomic Energy Agency (IAEA) was charged with abolition of Iraq's nuclear weapons programme. UNSCOM and the IAEA must report that their mission has been achieved before the Security Council can end sanctions. They have not yet done so.

UNSCR 707, August 1991, stated that Iraq must provide full, final and complete disclosure of all its WMD programmes and provide unconditional and unrestricted access to UN inspectors. Iraq must also cease all nuclear activities of any kind other than civil use of isotopes.

UNSCR 715, October 1991 approved plans prepared by UNSCOM and IAEA for the ongoing monitoring and verification (OMV) arrangements to implement UNSCR 687. Iraq did not accede to this to November 1993. OMV was conducted from April 1995 to 15 December 1998, when the UN left Iraq.

UNSCR 1051, March 1996 stated that Iraq must declare the shipment of dual-use WMD goods.

CONFIDENTIAL UNTIL RELEASED

3. Iraq accepted the UNSCRs and agreed to co-operate with UNSCOM. In reality, as subsequently became clear, Iraq immediately mounted a major effort to conceal weaponry, related equipment and information from the inspectors and to deceive the UN about the extent of their programmes for mass destruction weaponry.

CONFIDENTIAL UNTIL RELEASED

20

DOS/2/0021

SECTION 5

THE HISTORY OF UN WEAPONS INSPECTORS

1. The UN Special Commission (UNSCOM) was established by United Nations Security Council Resolution 687 (UNSCR 687) of 3 April. Its purpose was to oversee, in conjunction with the International Atomic Energy Agency (IAEA), the dismantling of Iraq's arsenal of weapons of mass destruction and to maintain a monitoring programme to ensure that it was never rebuilt.
2. The subsequent history of the UN weapons inspections was characterised by persistent Iraqi efforts to frustrate, deceive and intimidate inspectors. Despite the conduct of the Iraqi authorities towards them, both UNSCOM and the IAEA Action Team have valuable records of achievement in discovering and destroying biological and chemical weapons stocks, missiles and the infrastructure for Iraq's nuclear weapons programme.
3. By the end of 1998 there nevertheless remained significant uncertainties about the state of Iraq's prohibited programmes. A series of confrontations and the systematic refusal by Iraq to co-operate left UNSCOM unable to perform its disarmament mandate and the inspectors were consequently withdrawn on 13 December 1998. The US and the UK had made clear that anything short of full co-operation would make military action unavoidable. Operation Desert Fox (16-19 December 1998) was designed to degrade Saddam's ability to regenerate and deploy biological and chemical weapons and prevent him from threatening his neighbours with these or other weapons.
4. Since Operation Desert Fox in December 1998, Iraq has refused to comply with its UN disarmament and monitoring obligations and allow access to weapons inspectors. We judge that Iraq has used the intervening period to rebuild significant

aspects of its chemical, biological, nuclear and ballistic missile programmes. These actions not only present a direct challenge to the authority of the United Nations. They also breach Iraq's commitments under two key international arms control agreements:

- the Biological and Toxin Weapons Convention – which bans the development, production, stockpiling, acquisition or retention of biological weapons;
- and the Nuclear Non-Proliferation Treaty (NPT) – which prohibits Iraq from manufacturing or otherwise acquiring nuclear weapons

The Establishment of UNSCOM

5. One of the greatest threats to Allied forces during Operation Desert Storm in 1991 was Iraq's stockpile of chemical and biological weapons and long-range ballistic missiles. At the time, there were genuine concerns that Saddam Hussein would authorise the use of such weapons against Allied troops or Israeli civilians.

6. But the true scale of Iraq's programme to acquire WMD and their means of delivery only became apparent with the establishment of a UN weapons inspection regime in the aftermath of Desert Storm. UN Security Council Resolution (UNSCR) 687 obliged Iraq to provide declarations on all aspects of its WMD programmes within 15 days and accept the destruction, removal or rendering harmless under international supervision of its chemical, biological and nuclear programmes, and all ballistic missiles with a range beyond 150 km. UNSCR 687 mandated two inspection teams to handle Iraqi disarmament and establish long term monitoring regimes: the UN Special Commission (UNSCOM) would tackle the chemical, biological and missile programmes; and the Action Team within the International Atomic Energy Agency (IAEA) would be responsible for tracking down and dismantling Iraq's illicit nuclear weapons programme. UNSCOM and the IAEA were given the remit to designate any locations for inspection at any time, review any document and interview any scientist, technician or other individual and seize any prohibited items for destruction.

Iraqi Non-Co-operation with UN Weapons Inspectors

7. The UN passed a further Resolution in 1991 that set out in clear and specific terms the standard of co-operation the international community expected of Iraq. UNSCR 707 (August 1991) demanded that Iraq should allow inspection teams "immediate, unconditional and unrestricted access to any and all areas". For over a decade Iraq has consistently failed to meet this standard.

8. Prior to the first inspection, the Iraqi regime decided to do its utmost to hide its stocks of WMD. The former Chairman of UNSCOM, Richard Butler, reported to the UN Security Council that in 1991 a decision was taken by a high-level Government committee to provide inspectors with only a portion of its proscribed weapons, components, production capabilities and stocks. UNSCOM concluded that Iraqi policy was based on the following actions:

- to provide only a portion of extant weapons stocks, releasing for destruction only those that were least modern;
- to retain the production capability and documentation necessary to revive programmes when possible;
- to conceal the full extent of its chemical weapons programme, including the VX nerve agent project;
- to conceal the number and type of chemical and biological warheads for proscribed long-range missiles;
- and to conceal the very existence of its massive biological weapons programme.

9. At the same time, Iraq tried to maintain its nuclear weapons programme via a concerted campaign to deceive IAEA inspectors. In 1997 the Agency's Director General stated that the IAEA was "severely hampered by Iraq's persistence in a policy of concealment and understatement of the programme's scope."

10. Iraq's mistake was to underestimate the persistence and technical ability of the UN inspection teams and the will of the Security Council. Once inspectors had arrived in-country, it quickly became apparent that Iraq would resort to any measures (including physical threats and psychological intimidation of inspectors) to prevent UNSCOM and the IAEA from fulfilling their mandate. Examples of Iraqi obstruction are too numerous to list in full. But some of the more infamous examples include:

- firing warning shots in the air to prevent IAEA inspectors from intercepting nuclear related equipment (June 1991);
- keeping IAEA inspectors in a car park for 4 days and refusing to allow them to leave with incriminating documents on Iraq's nuclear weapons programme (September 1991). See Annex C for more details.

11. In response to such incidents, the President of the Security Council issued frequent statements calling on Iraq to comply with its disarmament and monitoring obligations

12. In December 1997 Richard Butler reported to the UN Security Council that Iraq had created a new category of sites – “Presidential” and “sovereign” – from which it claimed that UNSCOM inspectors would henceforth be barred. The terms of the ceasefire in 1991 foresaw no such limitation. However, Iraq consistently refused to allow UNSCOM inspectors access to any of these 8 Presidential sites. Many of these so-called “palaces” are in fact massive compounds which are an integral part of Iraqi counter-measures expressly designed to hide weapons material.

13. Despite UNSCOM's efforts, following the effective ejection of UN inspectors in December 1998, there remained a series of significant unresolved disarmament issues. In summarising the situation in a report to the Security Council, the UNSCOM Chairman, Richard Butler, set out a damning account of Iraqi deceit. For example:

- contrary to the requirement that destruction be conducted under international supervision, "Iraq undertook extensive, unilateral and secret destruction of large quantities of proscribed weapons and items";
- and Iraq "also pursued a practice of concealment of proscribed items, including weapons, and a cover up of its activities in contravention of Council resolutions."

Overall, Butler declared that obstructive Iraqi activity had had "a significant impact upon the Commission's disarmament work."

Operation Desert Fox

14. The US and the UK made clear, when suspending air strikes in November 1998, that anything short of full co-operation would lead to immediate military action against Iraq.

15. Richard Butler was requested to report to the UN Security Council in December 1998 and made clear that, following a series of direct confrontations, coupled with the systematic refusal by Iraq to co-operate, UNSCOM was no longer able to perform its disarmament mandate. As a direct result, on December 13 the weapons inspectors were withdrawn and Operation Desert Fox was launched by the US and the UK three days later.

16. During Operation Desert Fox (16-19 December 1998):

- Almost 80 per cent of the 100 targets identified were damaged or destroyed;
- There were attacks against missile production and research facilities and the destruction of infrastructure associated with the concealment of material and documents associated with the biological, chemical, nuclear and long-range missile programmes;
- The Iraqi Directorate of General Security, in particular, lost some of its most important buildings. We believe that these contained key equipment and documents;

- Key facilities associated with Saddam's Ballistic Missile programme were significantly degraded, setting this back between one and two years;
- Iraq's ability to deliver biological or chemical agents by ballistic missile was seriously weakened.

UNSCOM and IAEA Achievements

UNSCOM surveyed 1015 sites in Iraq, carrying out 272 separate inspections. Despite Iraqi obstruction and intimidation, UN inspectors uncovered details of chemical, biological, nuclear and ballistic missile programmes (see maps) the scale of which stunned the world. One of the most sobering discoveries was that at the time of the Gulf War, Iraq had been within 1-2 years of acquiring a nuclear weapon. Other major UNSCOM/IAEA achievements included:

- the destruction of 40,000 munitions for chemical weapons, 2,610 tonnes of chemical precursors and 411 tonnes of chemical warfare agent;
 - the dismantling of Iraq's prime chemical weapons development and production complex at Al-Muthanna, and a range of key production equipment;
 - the destruction of 48-SCUD type missiles, 11 mobile launchers and 56 sites, 30 warheads filled with chemical or biological agents, and 20 conventional warheads;
 - the destruction of the Al-Hakam biological weapons facility and a range of production equipment, seed stocks and growth media for biological weapons;
 - the discovery in 1991 of 15 kg of highly enriched uranium, forcing Iraq's acknowledgement of uranium enrichment programmes and attempts to preserve key components of its prohibited nuclear weapons programme; and
- the removal and destruction of the infrastructure for the nuclear weapons programme, including the Al-Athir weaponisation/testing facility

The Situation Since 1998

17. There have been no UN-mandated weapons inspections in Iraq since 1998. In an effort to enforce Iraqi compliance with its disarmament and monitoring obligations,

the Security Council passed resolution 1284 in December 1999. This established the United Nations Monitoring, Verification and Inspection Commission (UNMOVIC) as a successor organisation to UNSCOM and calls on Iraq to give UNMOVIC inspectors "immediate, unconditional and unrestricted access to any and all areas, facilities, equipment, records and means of transport.". It also set out the steps Iraq needed to take to in return for the eventual suspension and lifting of sanctions. A key measure of Iraqi compliance will be full co-operation with UN inspectors, including unconditional, immediate and unrestricted access to any and all sites. Given Iraq's track record of co-operation with UNSCOM and the IAEA between 1991-98, the prospects of Iraq meeting this standard are dim.

18. For the past three years, Iraq has allowed the IAEA to carry out an annual inspection of a stockpile of low-enriched uranium. This has led some countries and western commentators to conclude – erroneously – that Iraq is meeting its nuclear disarmament and monitoring obligations. As the IAEA has pointed out in recent weeks, this annual inspection does “not serve as a substitute for the verification activities required by the relevant resolutions of the UN Security Council.”

19. Dr. Hans Blix, the Executive Chairman of UNMOVIC, and Dr. Mohammed El-Baradei, the Director General of the IAEA, have declared that in the absence of inspections it is impossible to verify Iraqi compliance with its UN disarmament and monitoring obligations. In April 1999, an independent UN panel of experts noted that “the longer inspection and monitoring activities remain suspended, the more difficult the comprehensive implementation of Security Council resolutions becomes, increasing the risk that Iraq might reconstitute its proscribed weapons programmes.”

What Remains Unaccounted For?

20. The so-called “Butler Report” remains the single most authoritative document on the activities of UNSCOM inspectors in Iraq between 1991-98.

21. Based on the Butler Report and earlier UNSCOM reports, we assess that UN inspectors were unable to account for:

CONFIDENTIAL UNTIL RELEASED

- up to 360 tonnes of bulk chemical warfare (CW) agent, including 1.5 tonnes of VX nerve agent;
- up to 3,000 tonnes of precursor chemicals, including approximately 300 tonnes which, in the Iraqi CW programme, were unique to the production of VX;
- growth media procured for biological agent production (enough to produce over three times the 8,500 litres of anthrax spores Iraq admits to having manufactured);
- over 30,000 special munitions for delivery of chemical and biological agents; and
- up to 20 650 km-range Al Hussein ballistic missiles.

CONFIDENTIAL UNTIL RELEASED

DOS/2/0029²⁸

SECTION 6

IRAQI CHEMICAL, BIOLOGICAL, NUCLEAR AND BALLISTIC MISSILE PROGRAMMES: THE CURRENT POSITION

1. Intelligence plays a central role in informing government policy towards Iraq's weapons of mass destruction and ballistic missile programmes. The reports are often very sensitive. Much of the detail cannot be made public since great care has to be taken to protect our sources. But, taken with Saddam's record of using chemical weapons and the evidence from UN weapons inspections, the intelligence builds a compelling picture of Saddam's capabilities.

2. This section sets out what we now know of Saddam's chemical, biological, nuclear and ballistic missile programmes, drawing on all the available evidence. The **main conclusions** are that:

- Iraq has a useable chemical and biological weapons capability, in breach of UNSCR 687. And it is able to add to this capability despite sanctions;
- Iraq can deliver chemical and biological agents using an extensive range of artillery shells, free-fall bombs, sprayers and ballistic missiles;
- Iraq continues to work on developing nuclear weapons, in breach of its obligations under the Non-Proliferation Treaty, and in breach of UNSCR 687. Uranium to be used in the production of suitable fissile material has been purchased from Africa. But sanctions continue to hinder development of a nuclear weapon;
- Iraq possesses extended-range versions of the SCUD ballistic missile, capable of reaching Israel and Gulf States in breach of UNSCR 687. It is also developing longer range ballistic missiles to improve its capability to target neighbouring countries;
- Iraq's current military planning specifically envisages the use of chemical and biological weapons;

- Iraq's military forces maintain the capability to use chemical and biological weapons, with command, control and logistical arrangements in place;
- Iraq's WMD and ballistic missiles programmes are not short of funds, despite the parlous state of the Iraqi economy.

WHY ARE WE CONCERNED?

3. While the successful enforcement of the sanctions regimes and the UN arms embargo have impeded Iraq's efforts to reconstitute its weapons of mass destruction, they have not halted them. Much of Iraq's missile infrastructure has been rebuilt; the nuclear weapons programme is being reconstituted; and Iraq continues to have the capability to produce chemical and biological weapons, and has probably already done so. Since the withdrawal of inspectors in 1998, monitoring of Iraqi attempts to restore a WMD capability has become more difficult.

4. **Intelligence** from reliable and well-informed sources has become available in the last few weeks. This has confirmed that Iraq has chemical and biological weapons and the Iraqi leadership has been discussing a number of issues related to them. These include:

- **The important role of chemical and biological weapons in Iraq's military thinking:** Saddam attaches great importance to the possession of weapons of mass destruction which he regards as being the basis for Iraq's regional power. Respect for Iraq rests on its possession of chemical and biological weapons and the missiles capable of delivering them. Saddam is determined to retain this capability and recognises that Iraq's political weight would be diminished if Iraq's military power rested solely on its weakened conventional military forces.
- **Iraqi attempts to retain its existing banned weapons systems: Iraq is already taking steps to undermine the return of any UN weapons inspectors: We know from intelligence that Iraq has begun removing sensitive equipment and papers relating to its chemical and biological programmes and dispersing them beyond the gaze of inspectors, for example by hiding sensitive documents in the homes of his trusted officials. Saddam is determined not to lose the capabilities that he has been able to develop in the four years since inspectors left.**

- **Saddam's willingness to use chemical and biological weapons:** intelligence indicates that Saddam is prepared to use chemical and biological weapons. Saddam would not hesitate to use chemical and biological weapons against any internal uprising by the Shia population.

This intelligence confirms Saddam's readiness to use these weapons, even against his own people, and his disregard for the terrible consequences of using chemical and biological weapons.

CHEMICAL AND BIOLOGICAL WEAPONS

Existing chemical warfare stocks

5. We do not know precisely how many **chemical** agent-filled munitions from before the Gulf War have been destroyed, degraded or remain at the disposal of the Iraqi government. Declarations to UNSCOM deliberately obscure the picture. But, whatever the fate of these stocks, we judge that Iraq has retained production equipment and at least small amounts of chemical agent and precursors. There is intelligence that Iraqi firms are currently trying to procure precursors for mustard, Tabun and VX. Unaccounted for at the time of UNSCOM withdrawal were:

- up to 360 tonnes of bulk chemical warfare (CW) agent, including 1.5 tonnes of VX nerve agent;
- up to 3,000 tonnes of precursor chemicals, including approximately 300 tonnes which, in the Iraqi CW programme, were unique to the production of VX.

6. Iraq repeatedly claims that if it had retained any chemical agents they would have deteriorated sufficiently to render them harmless. Iraq has admitted having the knowledge and capability to add stabilisers to nerve agent, which would prevent such decomposition. In 1997 UNSCOM examined some munitions which had been filled with mustard gas prior to 1991 and found that they remained very toxic and showed little sign of deterioration.

Chemical agent production capabilities

7. During the Gulf War a number of facilities which intelligence reporting indicated were directly or indirectly associated with Iraq's CW effort were attacked and damaged. Following

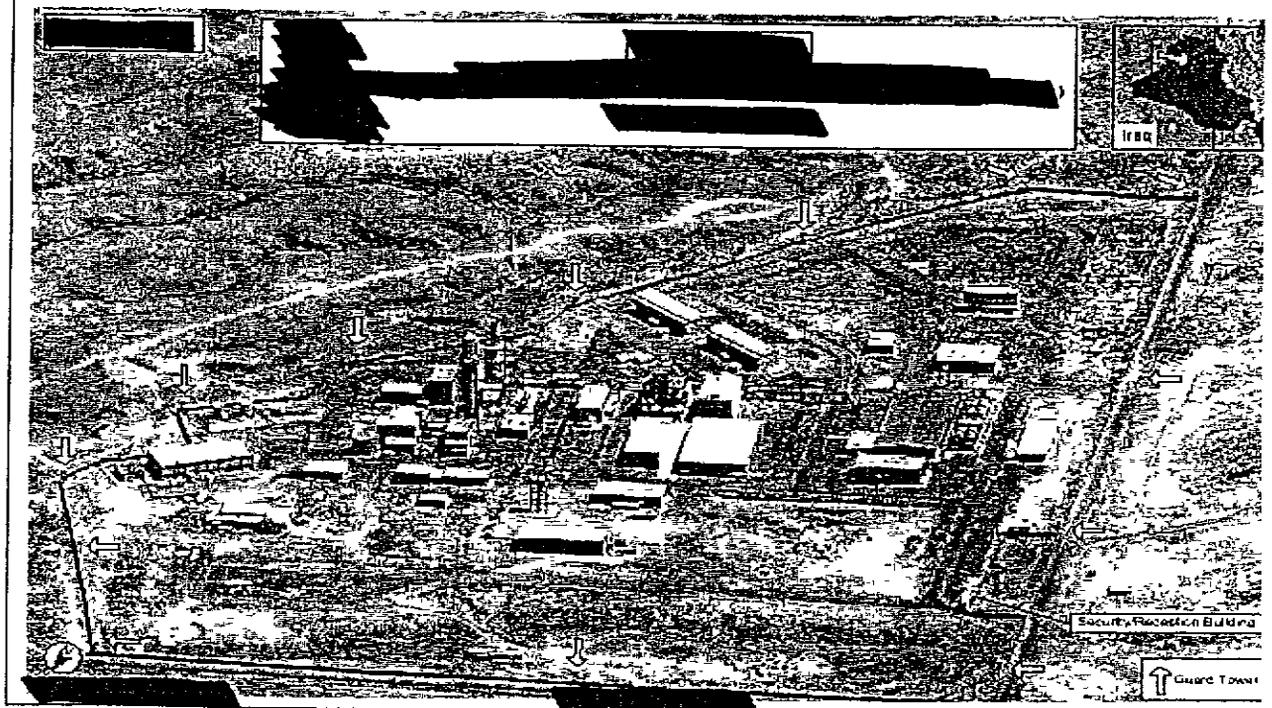
the ceasefire UNSCOM destroyed or rendered harmless facilities and equipment used in Iraq's CW programme. Other equipment was released for civilian use either in industry or academic institutes, where it was tagged and regularly inspected and monitored, or else placed under camera monitoring, to ensure that it was not being misused. This monitoring ceased when UNSCOM withdrew from Iraq in 1998. However, capabilities remain and, although the main chemical weapon production facility at al-Muthanna was completely destroyed by UNSCOM and has not been rebuilt, other plants formerly associated with the chemical warfare programme have been rebuilt. This includes the chlorine plant at Fallujah 2.

8. Other dual use facilities, which could be used to support the production of CW agent and precursors, have been rebuilt and re-equipped. New chemical facilities have been built, some with illegal foreign assistance, and are probably fully operational or ready for production. These include the al-Daura State Establishment for Heavy Equipment Engineering and the Ibn Sina Company at Tarmiya (imagery requested). Parts of the al-Qa'Qaa chemical complex damaged in the Gulf War have also been repaired and are operational. Of particular concern, elements of the phosgene production plant at Al Qa'Qaa which were severely damaged during the Gulf War, and dismantled under UNSCOM supervision, have since been rebuilt. While phosgene does have industrial uses it can be used by itself as a chemical agent or as a precursor for nerve agents.

The Problem of Dual Use Facilities

Almost all components and supplies used in chemical and biological agent production are dual-use. Any major petrochemical or biotech industry, as well as public health organisations, will have legitimate need for most materials and equipment required to manufacture chemical and biological weapons. Without UN weapons inspectors it is very difficult therefore to be sure about the true nature of many of Iraq's facilities.

For example, Iraq has built a large new chemical complex, Project Baiji, in the desert in north west Iraq at Ash Sharqat. This site is a former uranium enrichment facility, which was damaged during the Gulf War, and rendered harmless under supervision of the IAEA. Part of the site has been rebuilt, with work starting in 1992, as a chemical production complex. Intelligence indicates the site will be a carbon copy of, and under the control of, al-Qa'Qaa State Company, Iraq's foremost chemical establishment. Despite the site being far away from populated areas it is surrounded by a high wall with watch towers and guarded by armed guards. Intelligence reports indicate that it will produce nitric acid, which can be used in explosives, missile fuel, and in the purification of uranium.



9. Iraq also retained the expertise for chemical research, agent production and weaponisation. The bulk of the personnel previously involved in the programme remain in country. Indeed, intelligence indicates that Haidar Husain Taha, recently reported in the media as being the factory manager of the Fallujah 2 plant, is almost certainly the same individual who from 1984 until the end of the Gulf war worked at Iraq's CW programme at the Muthanna State Establishment researching mustard gas. While UNSCOM found a number of technical manuals (so called "cook books") for the production of chemical agents and critical precursors, Iraq's claim to have unilaterally destroyed the bulk of the documentation cannot be confirmed and is almost certainly untrue. Recent intelligence indicates that Iraq is still discussing methods of

concealing such documentation in order to ensure that it is not discovered by any future UN inspections.

Existing biological warfare stocks

10. Iraq has claimed that all its **biological agents and weapons** have been destroyed, although no convincing proof of any kind has been offered to support the claim. UN inspectors could not account for up to 20 tonnes of growth media (nutrients required for the specialised growth of agent) procured for biological agent production, enough to produce over three times the amount of anthrax Iraq admits to having manufactured. Reports that Iraq has conducted research on smallpox and a number of toxins cannot be corroborated.

Biological agent production capabilities

11. We know that Iraq is self-sufficient in the technology required to produce **biological weapons (BW)**. As with some CW equipment, UNSCOM only destroyed equipment that could be directly linked to BW production. Iraq also has its own engineering capability to design and construct BW associated fermenters and other equipment. Some dual-use equipment, including(DIS to provide) has also been purchased under the Oil for Food programme, but without monitoring of the equipment by UN inspectors Iraq could have diverted it to their BW programme. This newly purchased equipment and others previously subject to monitoring could be used in a resurgent BW programme. Facilities of concern include: the Castor Oil Production Plant at Fallujah, the residue from the castor bean pulp is used in the production of ricin biological agent; and the Al-Daura Foot and Mouth Disease Vaccine Plant, which was involved in BW agent production and research before the 1991 Gulf War. Evidence has emerged from defectors over the last two years that Iraq has sought to develop mobile facilities to produce biological agents. Other intelligence confirms that the Iraqi military have acquired such facilities, which Iraq hopes will conceal and protect biological agent production from military attack or UN inspection.

Chemical and biological agent delivery means

12. Iraq has a variety of **delivery means** available for both chemical and biological agents, some of which are very basic. These include:

- free fall bombs - Iraq acknowledged to UNSCOM the deployment to four sites of free fall bombs filled with biological agent during 1990-91. These bombs were filled with anthrax, botulinum toxin and aflatoxin. Iraq also acknowledged possession of four types of aerial bomb with various fills including sulphur mustard, tabun, sarin, cyclosarin, and VX
- artillery shells and rockets - Iraq made extensive use of artillery munitions filled with chemical agents during the Iran-Iraq War. Mortars can also be used for chemical agent delivery. Iraq also claimed to have tested the use of shells and rockets filled with biological agents. Over 20,000 artillery munitions remain unaccounted for by UNSCOM;
- helicopter and aircraft borne sprayers - Iraq carried out studies into aerosol dissemination of biological agent using these platforms prior to 1991. UNSCOM was unable to account for many of these devices and we judge that it is probable that Iraq retains a capability for aerosol dispersal of both chemical and biological agent;
- Al Hussein ballistic missiles (range 650km) - Iraq told UNSCOM that it filled 25 warheads with anthrax, botulinum toxin and aflatoxin. Iraq also developed chemical agent warheads for Al Hussein. Iraq also admitted to producing 50 CW warheads for Al Hussein which were intended for the delivery of a mixture of sarin and cyclosarin. Intelligence indicates Iraq retains up to 20 Al Husseins;
- Al Samoud/Ababil 100 ballistic missiles (range 150km plus) - It is unclear if chemical and biological warheads have been developed for these systems, but given their experience on other missile systems, Iraq probably has the technical expertise for doing so;
- L-29 remotely piloted vehicle programme - we judge that the modification of the L-29 jet trainer could allow it to be used as a pilot-less aircraft for the delivery of chemical and biological agents. The L-29 was subject to UNSCOM inspection for this reason;

Chemical and biological warfare: command and control

13. Special Security Organisation (SSO) and Special Republican Guard (SRG) units would be involved in the movement of any chemical and biological weapons to military units. The Iraqi

military holds artillery and missile systems at Corps level throughout the Armed Forces and conducts regular training with them. The Directorate of Rocket Forces has operational control of strategic missile systems and some Multiple Rocket Launcher Systems. Within the last month intelligence has suggested that the Iraqi military would be able to use their chemical and biological weapons within 45 minutes of an order to do so

Conclusion

14. Intelligence confirms that Iraq has covert **chemical and biological weapons** programmes, in breach of UN Security Council Resolution 687. We also judge that:

- Iraq has chemical and biological agents and weapons available, either from pre-Gulf War stocks or more recent production;
- Iraq has the capability to produce the chemical agents sulphur mustard, tabun, sarin, cyclosarin, and VX within weeks of an order to do so;
- Iraq has a biological agent production capability and can produce at least anthrax, botulinum toxin, aflatoxin and ricin within days of an order to do so. Iraq has also developed mobile facilities to produce biological agents.
- the order to produce to chemical and biological agents has been given;
- Iraq has a variety of delivery means available;
- Iraq's military forces maintain the capability to use these weapons, with command, control and logistical arrangements in place.

NUCLEAR WEAPONS

15. In 1991 we assessed that Iraq was less than three years away from possessing a nuclear weapon. After the Gulf War, Iraq's nuclear weapons infrastructure was dismantled by the IAEA. But we judge that Iraq is still working to achieve a nuclear weapons capability, in breach of its NPT obligations and UN Security Council Resolution 687. Much of its former

expertise in fissile material production and weapons design has been retained. In 1991 Iraqi nuclear weapons programme had gone some way to developing a workable nuclear weapon design and were researching some more advanced concepts. **Intelligence has indicated that scientific specialists were recalled to work on a nuclear weapons programme in the autumn of 1998.**

16. Judging on the basis of the available intelligence it is almost certain that the present Iraqi programme is based on gas centrifuge uranium enrichment, which was one of the routes Iraq

Gas Centrifuge Uranium Enrichment

Uranium in the form of uranium hexafluoride is separated into its different isotopes in rapidly spinning rotor tubes of special centrifuges. Many hundreds or thousands of centrifuges are connected in cascades to enrich uranium. If the lighter U235 isotope is enriched to more than 90% it can be used in the core of a nuclear weapon

was following for producing fissile material before the Gulf War. But Iraq needs certain key equipment, such as gas centrifuge components, and materials for the production of the fissile material necessary

before a nuclear bomb could be developed.

17. Following the expulsion of weapons inspectors in 1998 there has been an accumulation of intelligence indicating that Iraq is making concerted covert efforts to acquire technology and materials with nuclear applications. Iraq's existing holdings of processed uranium are under IAEA supervision. But **there is compelling evidence that Iraq has sought the supply of significant quantities of uranium from Africa.** Iraq has no known civil nuclear programme or nuclear power plants, therefore it has no legitimate reason to acquire uranium. It also has sufficient indigenous uranium deposits for any small needs it has.

18. Other suspicious procurement since 1998 includes vacuum pumps, magnets, filament winding machines, and balancing machines. All are needed to manufacture gas centrifuges. Since 2001 Iraq has made a particularly determined effort -illicitly to acquire specialised aluminium, which is subject to international export controls because of its potential application in gas centrifuges used to enrich uranium.

19. So long as sanctions continue to hinder the import of crucial goods for the production of fissile material..., Iraq would find it difficult to

Improved nuclear device

produce a nuclear weapon. After the lifting of sanctions we assess that Iraq would need at least five years to produce a weapon. If Iraq acquired sufficient fissile material from abroad we judge it would take at least two years to make a working nuclear device. However, Iraq could produce an improvised nuclear device within a few months but this would be unreliable.

BALLISTIC MISSILES

20. Since the Gulf War, Iraq has been openly developing two short-range missiles up to a range of 150km, which are permitted under UN Security Council Resolution 687. The Al-Samoud liquid propellant missile has been extensively tested and is being deployed to military units.

Intelligence indicates that Iraq has also worked on extending its range to at least 200km in

breach of UN Security Resolution 687.

Testing of the solid propellant Ababil-100 (Figure 1) is also underway, with plans to extend its range to at least 200km. Compared to liquid propellant missiles, those powered by solid propellant offer greater ease of storage,

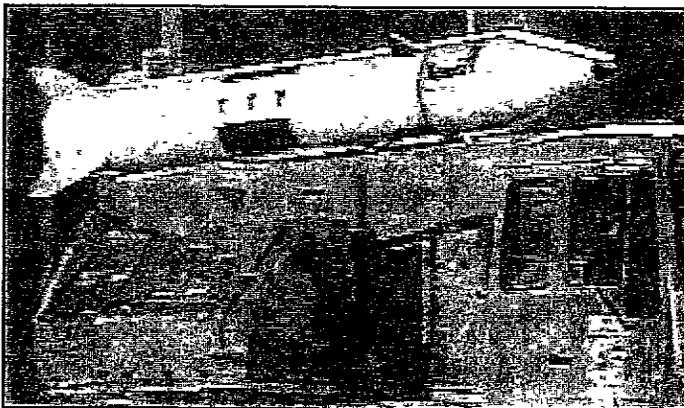


FIGURE 1: ABABIL-100

handling and mobility. They are also quicker to take into and out of action and can stay at a high state of readiness for longer periods

21. **According to intelligence, Iraq has retained up to 20 Al Hussein missiles (Figure 2), in breach of UN Security Council Resolution 687.**

These missiles were either hidden from the UN as complete systems, or re-assembled using illegally retained engines and other components. Intelligence indicates that the engineering expertise available would allow these missiles to be maintained effectively. We assess that some of these missiles could be available for use. They could be used with a conventional, chemical or

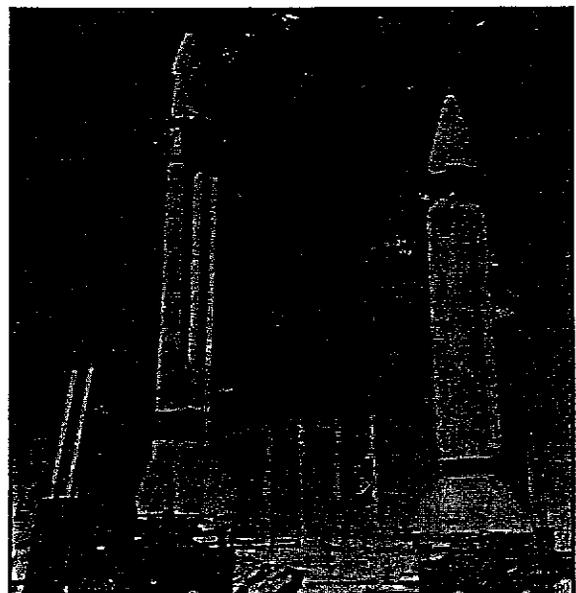


FIGURE 2: AL HUSSEIN

biological warheads and are capable of reaching a number of countries in the region including Israel, Iran, Saudi Arabia, and Turkey.

22. Intelligence has confirmed that Iraq's priority is to extend the range of its missile systems to over 1000km, enabling it to threaten other regional neighbours. These programmes employ hundreds of people. Satellite imagery (Figure 3) has shown a new engine test stand being constructed (A), which is larger than the current one used for Al Samoud (B), and that formerly used for testing SCUD engines (C) which was dismantled under UNSCOM supervision. This new stand will be capable of testing engines for **missiles with ranges over 1000km, which are not permitted under UN Security Council Resolution 687**. Such a facility would not be needed for systems that fall within the UN permitted range of 150km. The Iraqis have recently taken measures to conceal activities at this site

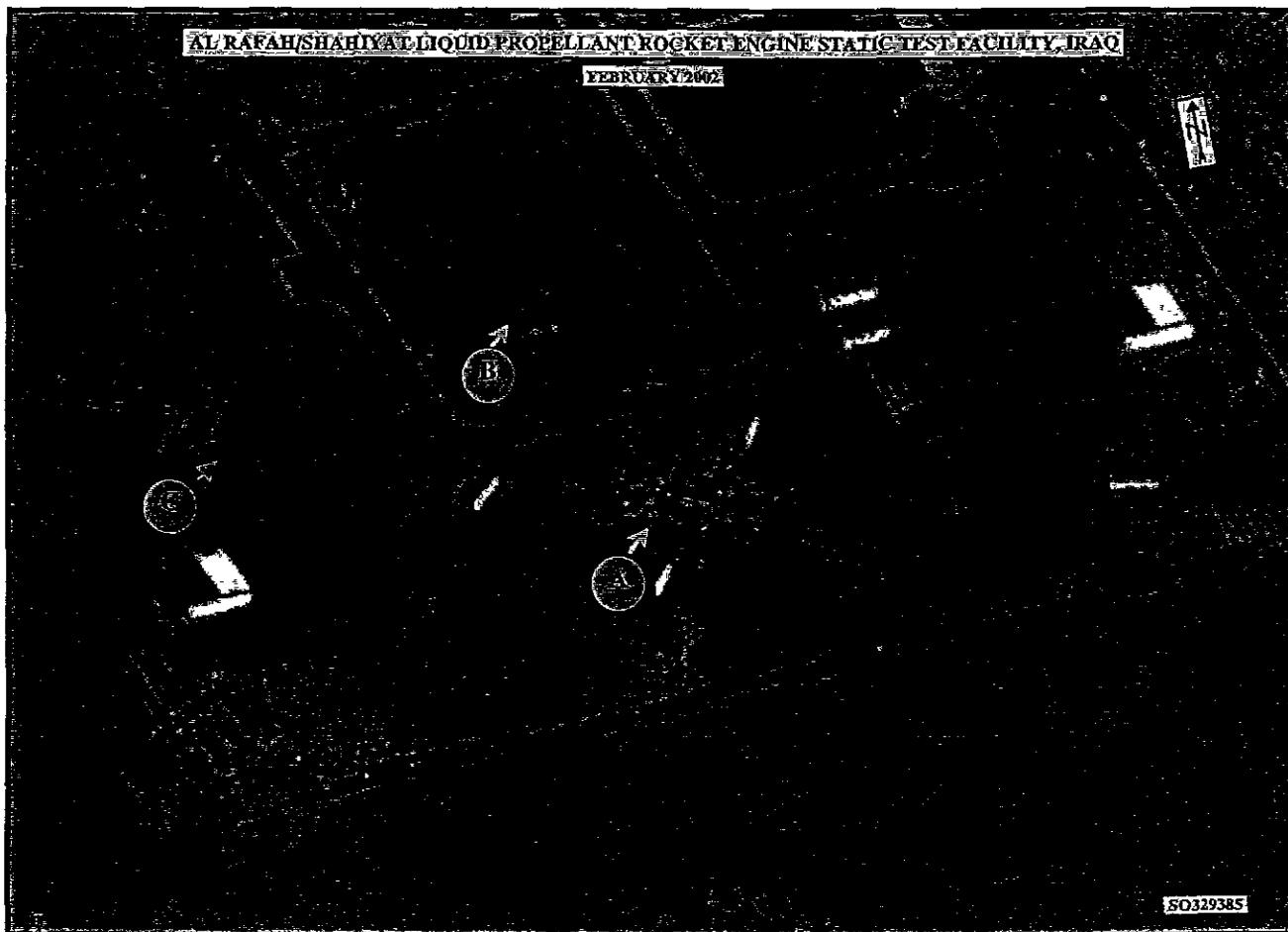


FIGURE 3: AL RAFAH/SHAHIYAT LIQUID PROPELLANT ENGINE STATIC TEST STAND

24. Iraq is also working to obtain improved guidance technology to increase missile accuracy. The success of UN restrictions means the development of new longer-range missiles is likely to be a slow process. These restrictions impact particularly on the:

- availability of foreign expertise;
- conduct of test flights to ranges above 150km;
- acquisition of guidance and control technology.

Saddam remains committed to developing longer-range missiles. We assess that, if sanctions remain effective, Iraq might achieve a missile capability of over 1000km within 5 years (Figure 4 shows the range of Iraq's various missiles).

25. Iraq has managed to rebuild much of the missile production infrastructure destroyed in the Gulf War and in Operation Desert Fox in 1998. New missile-related infrastructure is also under construction. **Some aspects of this, including rocket propellant mixing and casting facilities at the Al Mamoun Plant, appear to replicate those linked to the prohibited BADR-2000 programme (with a planned range of 700-1000km) that were destroyed in the Gulf War or by UNSCOM. A new plant for indigenously producing ammonium perchlorate, which is a key ingredient in the production of solid propellant rocket motors, has been constructed.** This has been provided illicitly by NEC Engineers Private Limited, an Indian chemical engineering firm with extensive links in Iraq, including to other suspect facilities such as the Fallujah 2 chlorine plant. After an extensive investigation, the Indian authorities have recently arrested NEC's General Manager for export control violations and suspended its export licence, although affiliated individuals and companies in the Middle East are still illicitly procuring for Iraq.

26. Despite a UN embargo, Iraq has also made concerted efforts to acquire additional production technology, including machine tools and raw materials, **in breach of UN Security Council Resolution 1051.** The embargo has succeeded in blocking many of these attempts, such as requests to buy magnesium powder and ammonium chloride. But, despite the dual use

nature of some of the items, we know from intelligence that some items have found their way to the Iraqi ballistic missile programme. More will inevitably continue to do so. Intelligence makes clear that Iraqi procurement agents and front companies in third countries are undertaking a global drive illicitly to acquire propellant chemicals for Iraq's ballistic missiles. This includes production level quantities of near complete sets of solid propellant motor ingredients such as aluminium powder and ammonium perchlorate. There have also been attempts to acquire large quantities of liquid propellant chemicals such as unsymmetrical dimethylhydrazine (UDMH) and hydrogen peroxide. We judge this is intended to support production and deployment of the Al Samoud and Ababil-100 and development of longer range systems.

Iraq: Current and Planned/Potential Ballistic Missiles

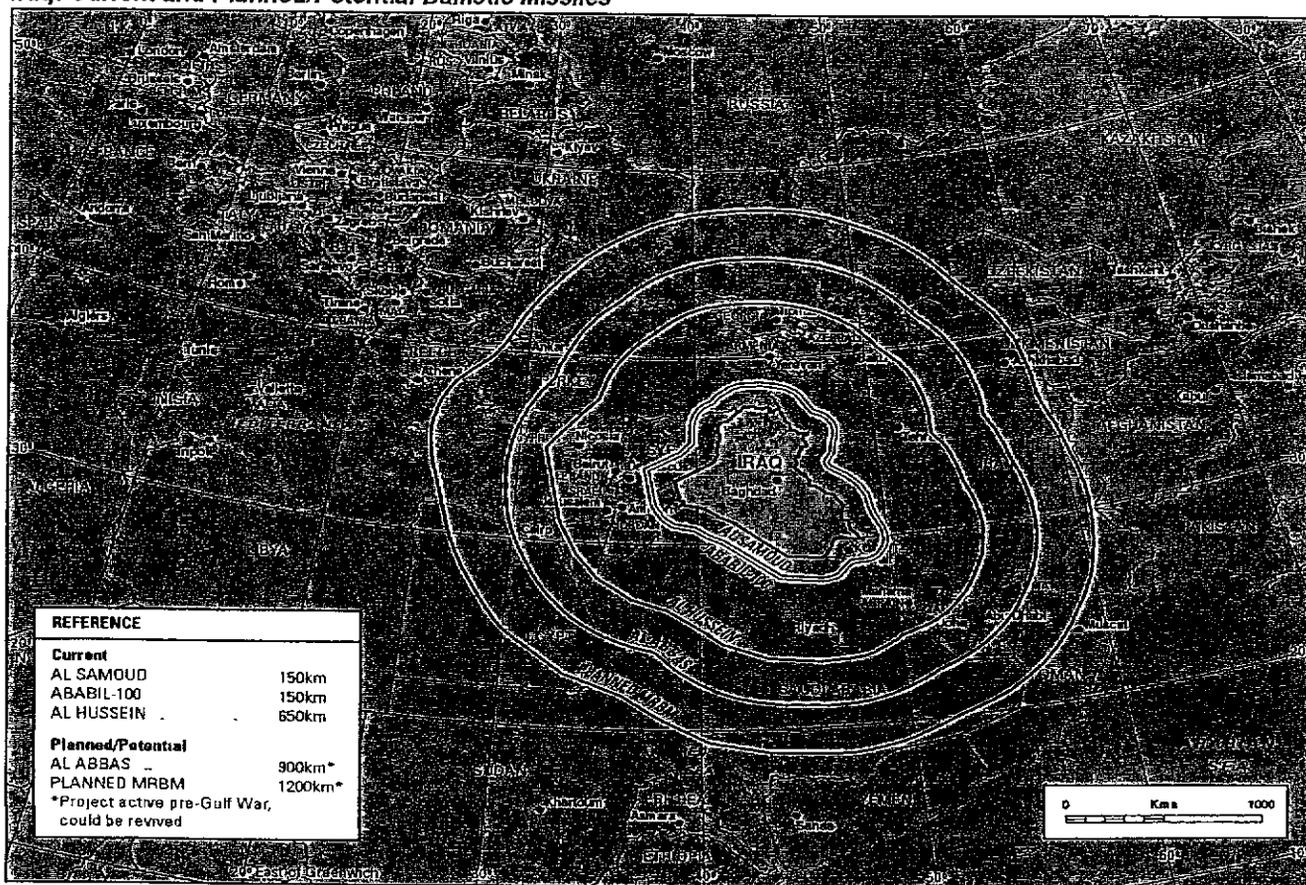


FIGURE 4: CURRENT AND PLANNED/POTENTIAL BALLISTIC MISSILES

FUNDING FOR THE WMD PROGRAMME

27. The UN has sought to restrict to generate funds for its military and WMD programmes. For example, Iraq earns money legally under the UN Oil For Food Programme (OFF) established

by UNSCR 986, whereby the proceeds of oil sold through the UN is used to buy humanitarian supplies for Iraq. This money remains under UN control, and cannot be used for military/WMD procurement.

28. However, the Iraqi regime continues to generate income outside UN control, either in the form of hard currency, or barter goods (which in turn means existing Iraqi funds are freed up to be spent on other things) Iraq's illicit earnings amounted to around USD 3 billion during 2001. Of this, illegal oil exports may have been worth around USD 2 billion. A further USD 1 billion may have been generated through abuses of OFF, including placing a surcharge on every barrel of oil sold, and charging commissions for contracts either to lift Iraqi oil or supply Iraq with humanitarian goods. Iraq also generates further income through the export of non-oil goods. We assess that Iraq will generate up to a further USD 3 billion during 2002.

29. These illicit earnings go to the Iraqi regime. They are used for building new palaces, as well as purchasing luxury goods and other civilian goods outside OFF. Some of these funds are also used by Saddam to maintain his armed forces, and to develop or acquire military equipment, including for chemical, biological and nuclear programmes. There is no indication as to what proportion of these funds may be used in this fashion but we have seen no evidence that Iraqi attempts to develop its weapons of mass destruction and its ballistic missile programme, e.g. through covert procurement of equipment from abroad has been inhibited in any way by lack of funds.

ANNEX A

HUMAN RIGHT ABUSES IN IRAQ

1. In a centralised tyranny, human rights abuse is something for which the leadership must take responsibility. Saddam's younger son, Qusai, is head of the internal security agencies. He has encouraged a policy of systematic torture and rape, and the threat of rape to coerce.
2. You do not have to be a criminal, or even a political opponent of the regime, to be held in an Iraqi jail. You can go to jail for being related to members of the opposition. Sometimes relatives are held as 'substitute prisoners' until the person wanted for arrest is found.
3. This happened to the father and two brothers of Al-Shaik Yahya Muhsin Ja'far al-Zeini, a theology student from Saddam City. When he was finally arrested, this is what happened (source: testimony to Amnesty International):
4. "...I saw a friend of mine, al-Shaikh Nasser Taresh al-Sa'idi, naked. He was handcuffed and a piece of wood was placed between his elbows and his knees. Two ends of the wood were placed on two high chairs and al-Shaikh Nasser was being suspended like a chicken. This method of torture is known as *al-Khaygania* (a reference to a former security director known as al-Khaygani). An electric wire was attached to al-Shaikh Nasser's penis and another one attached to one of his toes. He was asked if he could identify me and he said "this is al-Shaikh Yahya". They took me to another room and then after about 10 minutes they stripped me of my clothes and a security officer said "the person you saw has confessed against you". He said to me "You followers of [Ayatollah] al-Sadr have carried out acts harmful to the security of the country and have been distributing anti-government statements coming from abroad". He asked if I have any contact with an Iraqi religious scholar based in Iran who has been signing these statements. I said "I do not have any contacts with him"... I was then left suspended in the same manner as al-Shaikh al-Sa'idi. My face was looking upward. They attached an electric wire on my penis and the other end of the wire is attached to an electric motor. One security man was hitting my feet with a cable. Electric shocks were applied every few minutes and were increased. I must have been suspended for more than an hour. I lost consciousness.

They took me to another room and made me walk even though my feet were swollen from beating... They repeated this method a few times.”

5. Here is another personal testimony of Iraqi jail conditions:
6. Abdallah, a member of the Ba'ath Party whose loyalty became suspect has still-vivid personal memories from his four years of imprisonment at Abu Ghraib in the 1980s, where he was held naked the entire time and frequently tortured.
7. On the second day of his imprisonment, the men were forced to walk between two rows of five guards each, to receive their containers of food. While walking to get the food, they were beaten by the guards with plastic telephone cables. They had to return to their cells the same way, so that a walk to get breakfast resulted in twenty lashes. “It wasn't that bad going to get the food”, Abdallah said, “but coming back the food was spilled when we were beaten.” The same procedure was used when the men went to the bathroom.
8. On the third day, the torture began. “We were removed from our cells and beaten with plastic pipes. This surprised us, because we were asked no question. Possibly it was being done to break our morale”, Abdallah speculated. The torture escalated to sixteen sessions daily. The treatment was organized and systematic. Abdallah was held alone in a 3x2-meter room that opened onto a corridor.
9. “We were allowed to go to the toilet three times a day, then they reduced the toilet to once a day for only one minute. I went for four years without a shower or a wash”, Abdallah said. He also learned to cope with the deprivation and the hunger that accompanied his detention:
10. “I taught myself to drink a minimum amount of water because there was no place to urinate. They used wooden sticks to beat us and sometimes the sticks would break. I found a piece of a stick, covered with blood, and managed to bring it back to my room. I ate it for three days. A person who is hungry can eat anything. Pieces of our bodies started falling off from the beatings and our skin was so dry that it began to fall off. I ate pieces of my own body.

11. "No one, not Pushkin, not Mahfouz, can describe what happened to us. It is impossible to describe what living this day to day was like. I was totally naked the entire time. Half of the original groups [of about thirty men] died. It was a slow type of continuous physical and psychological torture. Sometimes, it seemed that orders came to kill one of us, and he would be beaten to death".

12 In December 1996, B (name withheld), a Kurdish businessman from Baghdad, married with children, was arrested outside his house by plainclothes security men. Initially his family did not know his whereabouts and went from one police station to another inquiring about him. Then through friends they found out that he was being held in the headquarters of the General Security Directorate in Baghdad. The family was not allowed to visit him.

13. Eleven months later in November 1997 the family was told by the authorities that he had been executed and that they should go and collect his body. His body bore evident signs of torture. His eyes were gouged out and the empty eye sockets were filled with paper. His right wrist and left leg were broken. The family was not given any reason for his arrest and subsequent execution. However, they suspected that he was executed because of his friendship with a retired army general who had links with the Iraqi opposition outside the country and who was arrested just before B's arrest and also executed.

14. Executions are carried out with no judicial process. We know that in February 2000, 64 male prisoners were executed at Abu Ghraib, followed in March by a further 58. In October 2001, 23 political prisoners were executed there. The worst known case is the execution of 4,000 prisoners at Abu Ghraib in 1984. Prisoners at the Mahjar jail have been executed by machine gun. Mahjar has an execution area called 'Hadiqa' (garden) where 3,000 prisoners were executed between 1993 and 1998.

15. Between 1997 and 1999, an estimated 2,500 prisoners were executed in what was called a 'prison cleansing' campaign: they were killed in order to reduce prison overcrowding(?).

16. No judicial process was evident when dozens of women accused of prostitution were beheaded in October 200, along with men accused of pimping. Some, at least, were accused for political reasons.

17. At the Mahjar prison in central Baghdad, which is part of the Police Training College(?), women prisoners are routinely raped by their guards. All prisoners are beaten twice a day. They receive no medical treatment. The normal occupancy is between 600 and 7800 prisoners in 30 cells underground and a further 30 cells which used to be dog kennels.

18. At the Sijn Al-Tarbut jail, three floors underground (?) at the Directorate of General Security building in Baghdad, prisoners are kept in rows of rectangular steel boxes, similar to the boxes in which bodies are stored in mortuaries. There are between 100 and 150 boxes. They are opened for half an hour a day, to allow the prisoner light and air. Prisoners have no food, only liquids. They remain in their boxes until they confess or die.

19. The Qurtiyya prison in the Talbiyyah area of the Saddam City district, Baghdad, consists of 50 to 60 metal boxes the size of tea chests in which prisoners are kept on the same confess-or-die basis. Each box has floor made of mesh to allow detainees to defecate.

20. Saddam favours such barbaric punishments. He has issued a series of decrees authorising amputation, branding, cutting off prisoners' ears. Methods of torture used in Iraqi jails include using electric drills to mutilate hands, pulling out fingernails, knife cuts, sexual attacks and 'official rape'.

21. He believes in the punishment fitting the crime. The penalty for slandering the President is to have your tongue cut out. Iraqi television has broadcast this form of political punishment as a warning.

22. Saddam and the head of his private office, General 'Abd Hamud, have both signed death warrants. The archives holding these warrants are held in the cafeteria on the eighth floor of the main Ministry of the Interior building in Baghdad.

23. Saddam's sons take after their father. Udayy once maintained a private torture chamber known as the Red Room in a building on the banks of the Tigris disguised as an electricity installation. It was Udayy who ordered the Iraq football team to be caned on the soles of the feet for losing a World Cup match.

24. He created a militia in 1994 which has used swords to execute victims outside their own homes. He has personally executed dissidents, for instance in the uprising at Basra which followed the Gulf War

25. But members of Saddam's family are far from being safe from persecution. A cousin of Saddam called Ala Abd Al-Qadir Al-Majid fled to Jordan ... [tell the story on page 49].

26. In mid 2001, 'Ala 'Abd Al-Qadir Al-Majid fled to Jordan from Iraq, citing disagreements with the regime over business matters. 'Ala was a cousin of Saddam Hussein, a former intelligence officer and, latterly, a businessman. He returned to Iraq after the Iraqi Ambassador in Jordan declared publicly that his life was not in danger. He was met at the border by Tahir Habbush, Head of the Iraqi Intelligence Service (the Mukhabarat), and taken to a farm owned by 'Ali Hasan Al-Majid. At the farm 'Ala was tied to a tree and executed by members of his immediate family who, following orders from Saddam, took it in turns to shoot him.

27. Saddam has a history of dealing with disloyalty by arranging for traitors, as Saddam see them, to be killed by their family or tribal associates. This helps to prevent blood feuds between different family/tribal groups and to distance his involvement.

28. 'Ala is just the latest of some 40 of Saddam's relatives, including women and children, that he has had killed. In February 1996, his sons-in-law Hussein Kamal and Saddam Kamal were executed. They had defected in 1995 and returned to Iraq from Jordan after the government had announced amnesties for them.

ANNEX B

**A SHORT HISTORY OF IRAQI WMD PROGRAMMES PRIOR TO
1991**

1. Iraq has been involved in Chemical and Biological Warfare (CBW) research for over 30 years. Its **Chemical Warfare (CW)** research commenced in 1971 at a small, well guarded site at Rashad to the Northeast of Baghdad. Here research was conducted on a number of CW agents including Mustard Gas, CS and Tabun. Later, in 1974 a dedicated organisation called Al-Hassan Ibn Al-Haitham was established. At the same time plans were made to build a large research and commercial-scale production facility in the desert some 70km Northwest of Baghdad under the Project cover of No 922. This was to become Muthanna State Establishment, also known as al-Muthanna, and operated under the front name of Iraq's State Establishment for Pesticide Production. It became partially operational in 1982-83. It had five research and development sections each tasked to pursue different programmes. In addition, the al-Muthanna site was the main CW agent production facility, and it also took the lead in weaponising CBW agents including all aspects of weapon development and testing, in association with the military. According to information supplied by the Iraqis, the total production capacity in 1991 was 4,000 tonnes of agent per annum, but we assess it could have been higher. Al-Muthanna was supported by three separate storage and precursor production facilities known as Fallujah 1, 2 and 3 near Habbaniyah, some of which were not completed before they were heavily bombed in the 1991 Gulf War.

2. Iraq started **Biological Warfare (BW)** research in the mid-1970s. The work started as small-scale research but Iraq believed in its utility, and authorised a purpose-built research and development facility at al-Salman, also known as Salman Pak, which is surrounded on 3 sides by the Tigris river and situated some 35km South of Baghdad. Intelligence suggests that although some progress was made in BW research, some staff were accused of mismanagement and fraud; also it appears that

Iraq decided to concentrate on developing CW agents and their delivery systems at al-Muthanna. However, the BW programme was revived with the outbreak of the Iraq/Iraq war in the early 80s . But it was Dr Rihab Taha's appointment in 1985, to head a small BW research team at al-Muthanna, which revived and developed the programme. At about the same time plans were made to develop the Salman Pak site into a secure BW research facility. Dr Taha continued to work with her team at Muthanna until 1987 when it moved to Salman Pak which were under the control of the Directorate of General Intelligence. Significant resources were poured into the programme, including the construction of a dedicated production facility, (Project 324) at al-Hakam. Agent production began in 1988 and weaponisation testing and later filling of munitions was conducted in association with the staff at Muthanna State Establishment. Even after the Gulf War, Iraq denied it had an offensive BW programme and the al-Hakam production facility was passed off as a facility for producing animal feed and bio-pesticides research. From mid-1990, other civilian facilities were taken over and some adapted for use in the production and research and development of BW agents. These included:

- Daura Foot and Mouth Vaccination Plant where it produced botulinum toxin and conducted virus research. But there is some intelligence which suggests that work was also conducted on anthrax
- al-Fudaliyah Agriculture and Water Research centre where Iraq admitted it undertook Aflatoxin production and genetic engineering:
- Amariyah Sera and Vaccine institute was used for the storage of BW seed stocks, and involved in genetic engineering

3. Iraq's nuclear programme was established under the Iraqi Atomic Energy Commission in the 1950s. Under a nuclear co-operation agreement signed with the Soviet Union in 1959, a nuclear research centre, equipped with a research reactor, was

built at Tuwaitha, the main Iraqi nuclear research centre. The surge in Iraqi oil revenues in the early 1970s supported an expansion of the research programme. This was bolstered by the signing of co-operation agreements with France and Italy in the mid-1970s. France agreed to supply two research reactors powered by highly enriched uranium fuel, and Italy supplied equipment for fuel fabrication and handling. By the end of 1984 Iraq was self-sufficient in uranium ore. One of the reactors was destroyed in an Israeli air attack in June 1981 shortly before it was to become operational the other was never completed.

4. By the mid-1980s Iraq's deteriorating situation in the Iran-Iraq War prompted renewed interest in the military use of nuclear technology, and additional resources were put in developing technologies to enrich uranium for use in nuclear weapons. Enriched uranium was preferred because it could be produced more covertly than plutonium. Iraq followed parallel programmes to produce highly enriched uranium - electromagnetic isotope separation (EMIS) and gas centrifuge enrichment. By 1991 one EMIS enrichment facility was nearing completion and another was under construction. Centrifuge facilities were also under construction, but the centrifuge design was still being developed. In August 1990 Iraq instigated a crash programme to develop a single nuclear weapon within a year, and considered the rapid development of a small 50 machine gas centrifuge cascade to produce the highly enriched uranium required. By the time of the Gulf War, the programme had made little progress. But it appears Iraq had probably decided to concentrate on gas centrifuges as a means for producing the necessary fissile material.

5. Prior to the Gulf War, Iraq had a well-developed **ballistic missile** industry. Iraq fired over 500 SCUD-type missiles at Iran during the Iran-Iraq War. 93 SCUD type-missiles were fired during the Gulf War. The latter were targeted at Israel and Coalition forces stationed in the Gulf region. Armed with conventional warheads they did limited damage. Iraq admitted to UNSCOM that it had 50 chemical and 25 biological warheads available but did not use them. Most of the missiles fired in the

Gulf War were an Iraqi produced version of the SCUD missile, the Al Hussein, with an extended range of 650 km. Iraq was working on other stretched SCUD variants, such as the Al Abbas, which had a range of 900km. Iraq was also seeking to reverse engineer the SCUD engine with a view to producing new missiles; recent evidence indicates that they may have succeeded at that time. In particular Iraq had plans for a new SCUD-derived missile with a range of 1200km. Iraq also conducted a partial flight test of a multi-stage satellite launch vehicle based on SCUD technology, known as the Al Abid. Also during this period, Iraq was developing the BADR-2000, a 700-1000km range two-stage solid propellant missile (based on the Iraqi part of the 1980s CONDOR-2 programme run in co-operation with Argentina and Egypt). There were plans for 1200-1500km range solid propellant follow-on systems.

SCUD missiles

The short-range mobile SCUD ballistic missile was developed by the Soviet Union in the 1950s, drawing on the technology of the German liquid-propellant V-2.

For many years it was the mainstay of Soviet and Warsaw Pact tactical missile forces, and it was also widely exported. Recipients of Soviet-manufactured SCUDs included Iraq, North Korea, Iran, and Libya, although not all were sold directly by the Soviet Union.

ANNEX C

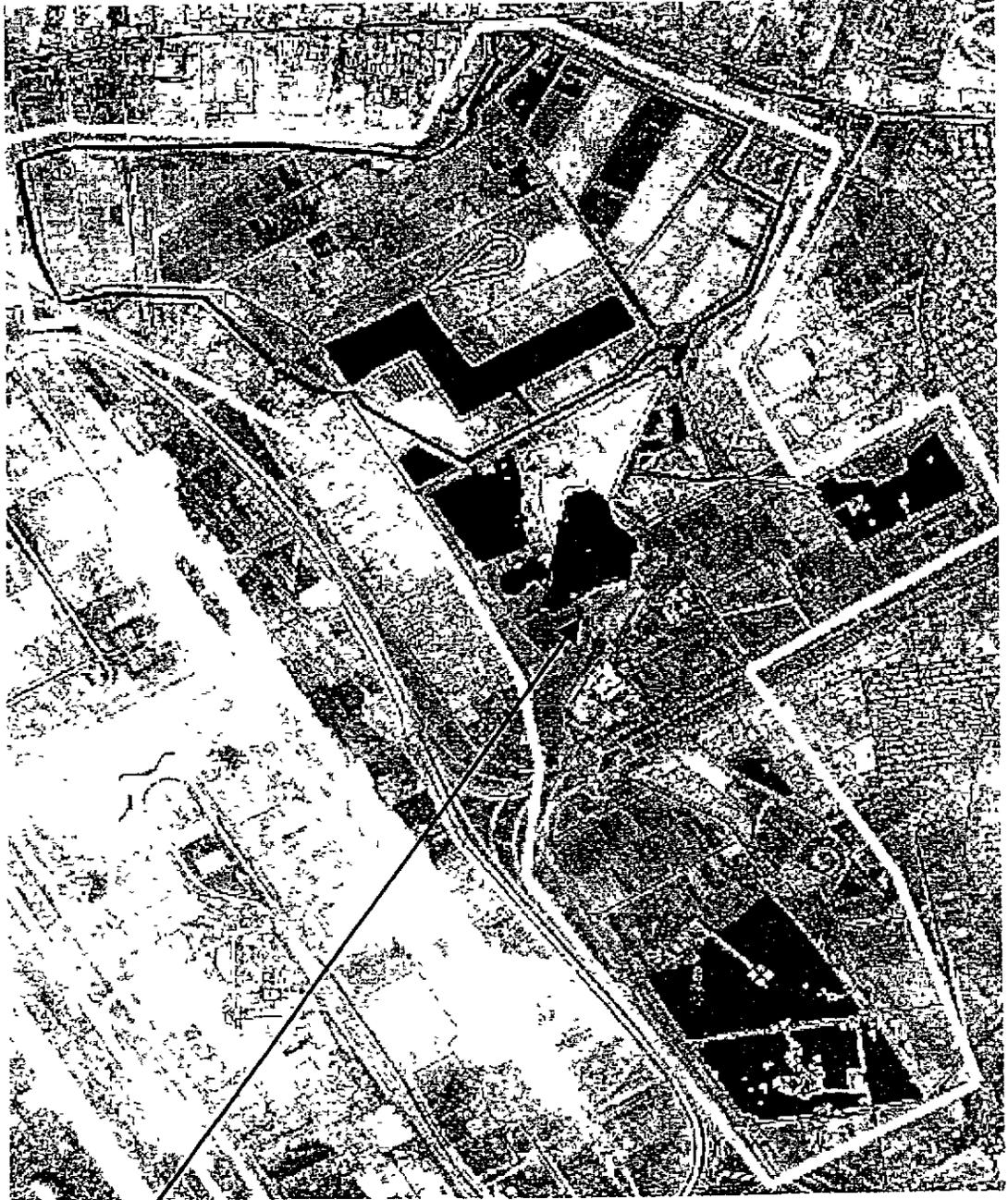
WEAPONS INSPECTIONS: OBSTRUCTION AND CONCEALMENT

Obstruction

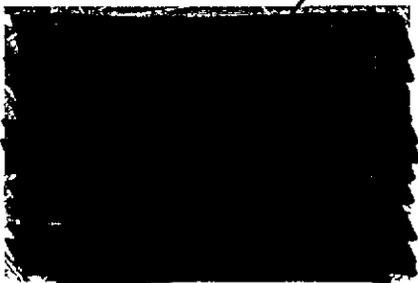
1. In addition to the examples given in the body of the paper, Iraqi steps to obstruct the UN weapons inspectors included:

- announcing that UN monitoring and verification plans were “unlawful” (October 1991);
- refusing UNSCOM inspectors access to the Ministry of Agriculture. Threats were made to inspectors who remained on watch outside the building. The inspection team had reliable evidence that the site contained archives related to proscribed activities;
- refusing to allow UNSCOM the use of its own aircraft to fly into Iraq (January 1993). In 1991-2 Iraq objected to UNSCOM using its own helicopters and choosing its own flight plans;
- refusing to allow UNSCOM to install remote-controlled monitoring cameras at two key missile sites (June-July 1993),
- repeatedly denying access to inspection teams (1991- December 1998);
- interfering with UNSCOM’s helicopter operations, threatening the safety of the aircraft and their crews (June 1997);
- demanding end of U2 overflights and the withdrawal of US UNSCOM staff (October 1997);
- destroying documentary evidence of WMD programmes (September 1997); and
- refusing access to inspection teams on the grounds that certain areas and even roads were deemed “Presidential Sites” (1997-98)

A photograph of a presidential site or what have been called "palaces".



Buckingham palace has been superimposed to demonstrate their comparative size



Buckingham Palace and grounds

Concealment

2. Iraq has admitted having a large, effective, system for hiding proscribed material including documentation, components, production equipment and, possibly, biological and chemical agents and weapons from the UN. Shortly after the adoption of UNSCR 687 in April 1991, an Administrative Security Committee (ASC) was formed with responsibility for advising Saddam on the information which could be released to UNSCOM and the IAEA. The Committee consisted of senior Military Industrial Commission (MIC) scientists from all of Iraq's WMD programmes. The Higher Security Committee (HSC) of the Presidential Office was in overall command of deception operations. The system was directed from the very highest political levels within the Presidential Office and involved, if not Saddam himself, his youngest son, Qusai. The system for hiding proscribed material relies on high mobility and good command and control. It uses lorries to move items at short notice and most hide sites appear to be located close to good road links and telecommunications. The Baghdad area was particularly favoured. In addition to active measures to hide material from the UN, Iraq has attempted to monitor, delay and collect intelligence on UN operations to aid its overall deception plan.

3. Nowhere was Iraqi obstruction of UN inspectors more blatant than in the field of biological weapons. Iraq denied that it had pursued a biological weapons programme until July 1995. Between 1991 and 1995, Iraq refused to disclose any details of its past programme.

4. In the course of the first biological weapons inspection in August 1991, Iraq claimed that it had merely conducted a military biological research programme. At the site visited, Al-Salman, Iraq had removed equipment, documents and even entire buildings. Later in the year, during a visit to the Al-Hakam site, Iraq declared to UNSCOM inspectors that the facility was used as a factory to produce proteins derived from yeast to feed animals. Inspectors subsequently discovered that the plant was a central site for the production of anthrax spores and botulinum toxin for weapons. The factory had also been sanitised by Iraqi officials to deceive inspectors.

5. Another key site, the Foot and Mouth Disease Vaccine Institute at Daura which produced botulinum toxin and probably anthrax, was not divulged as part of the programme. Five years later, after intense pressure, Iraq acknowledged that tens of tonnes of bacteriological warfare agent had been produced there and at Al-Hakam. Amazingly, Iraq *continued to develop* the Al-Hakam site into the 1990s, misleading UNSCOM about its true purpose.

6. Iraq consistently tried to obstruct UNSCOM's efforts to investigate the scale of its biological weapons programme. It created forged documents to account for bacterial growth media, imported in the late 1980s, specifically for the production of anthrax, botulinum toxin and probably plague. The documents were created to indicate that the material had been imported by the State Company for Drugs and Medical Appliances Marketing for use in hospitals and distribution to local authorities. Iraq also censored documents and scientific papers provided to the first UN inspection team, removing all references to key individuals, weapons and industrial production of agents.

7. Iraq has yet to provide any documents concerning production of agent and subsequent weaponisation. Iraq destroyed, unilaterally and illegally, biological weapons in 1991 and 1992 making accounting for these weapons impossible. In addition Iraq cleansed a key site at Al-Muthanna - its main research and development, production and weaponisation facility for chemical warfare agents - of all evidence of a biological programme in the toxicology department, the animal-house and weapons filling station.

8. The first biological inspection team tasked with establishing monitoring of compliance was denied access in March 1993. In July 1995, Iraq acknowledged reluctantly that biological agents had been produced on an industrial scale at Al-Hakam. Following the defection in August 1995 of Hussein Kamel, Iraq released over 2 million documents relating to its WMD programmes and acknowledged that it had pursued a biological programme that led to the deployment of actual weapons.

CONFIDENTIAL UNTIL RELEASED

Iraq admitted producing in excess of 200 biological weapons with a reserve of agent to fill considerably more.

9. As documents recovered in August 1995 were assessed, it became apparent that the full disclosure required by the UN was far from complete. Successive inspection teams went to Iraq to try to gain greater understanding of the programme and to obtain credible supporting evidence. In July 1996 Iraq refused to discuss its past programme and doctrine forcing the team to withdraw in protest. Monitoring teams were at the same time finding undisclosed equipment and materials associated with the past programme. In response, Iraq grudgingly provided successive disclosures of their programme which were judged by UNSCOM, and specially convened international panels, to be technically inadequate.

10. Iraq refused to elaborate further on the programme during inspections in 1997 and 1998, confining discussion to previous topics. In July 1998, Tariq Aziz personally intervened in the inspection process stating that the biological programme was more secret and more closed than other WMD programmes. He also played down the significance of the programme. This is consistent with Iraq's policy of trivialising the biological weapons programme as the personal adventure of a few misguided scientists.

11. In late 1995, Iraq acknowledged weapons testing the biological agent ricin, but did not provide production information. Two years later – in early 1997 – UNSCOM discovered evidence that Iraq had produced ricin.

12. Iraq has used the biological agent, aflatoxin, against the Shia population in Karbala in 1991 and there is substantial evidence that biological weapons were deployed ready for use during the Gulf War. Defectors' reports also indicate that Iraq also carried out biological experiments on human beings.

CONFIDENTIAL UNTIL RELEASED

DOS/2/0057⁵⁶