Iraq presents a uniquely dangerous threat to the world. No other country has twice launched wars of aggression against neighbours. In the 77 years since the Geneva Convention against chemical weapons was signed, Iraq is the only country to have broken it. Saddam Hussein is not the world’s only dictator, but no other has used poison gas against civilians. No other country has flouted the United Nations’ authority so brazenly in pursuit of weapons of mass destruction.

Uniquely, the Iraqi regime led by Saddam Hussein is a threat to peace which cannot safely be ignored. It would be irresponsible to continue tolerating Iraq’s violation of the nine Security Council resolutions which seek to prevent him amassing a chemical, biological and nuclear capability. We cannot, by neglect, allow Iraq to start a third regional war into which the wider international community would be drawn; and in which our own forces would be vulnerable to Saddam’s weapons of terror. We must remove the threat.

The world has been patient. Iraq has been active. The policy of containment and inspection has been persistently frustrated by Iraq, which is now circumventing it by every possible means. We cannot allow Iraq to break out of containment, as it is currently seeking to do. Time is short.

In...the Joint Intelligence Committee reported that the ‘ring of containment around Saddam Hussein cannot hold’ (?). The British government has decided the threat has reached a point at which it is necessary to make public some of the intelligence material on which our assessment of Iraq is based. We cannot publish everything we know, because intelligence is often dangerous to acquire: we will not put people’s lives at risk. But the public deserves as much knowledge as possible.
This paper sets out in full the history of Iraq's efforts to equip itself with weapons of mass destruction. It details our knowledge of the weaponry unaccounted for [can we have a list, with a table of totals somewhere please? Perhaps in an annexe, so that the flow doesn't break up], in the absence of UN inspections. It lays out Saddam Hussein's record of murder and oppression. And it makes public for the first time our best publishable intelligence assessment of Iraq's weapons programme. Never before has a British government published so much intelligence material. This is a measure of the threat the international community faces. The public has a right to know the nature of the regime we are dealing with.

It is important to see the whole picture: the history of aggression and human rights abuse, as well as the most up-to-date information on weaponry. It is the aggressive intent and the casual indifference to human life which make Iraq a unique threat, as much as the weapons themselves.

****

It is nearly four years since the United Nations was last able to inspect Iraqi weapons facilities. Even when the inspectors were in Iraq, the regime did all it could to prevent them discovering the extent of its weaponry.

For example, Iraq claims to have 'lost' 550 shells filled with mustard gas. It argued that the chemical warfare agents in these weapons would have degraded long ago, so there was no need to account for them. However, a dozen shells were eventually found. Chemical tests, in April 1998, showed that the mustard was still of the highest quality and the shells were ready for combat use. [source: Unscom report, 1999] [source: Unscom report, 1999]

This single episode shows why the international community cannot afford to rely on Saddam Hussein's word, or neglect his capacity to make war. The weaponry which he has acquired, and
continues to seek, cannot be described as defensive. Its purpose is to terrorise, intimidate and de-stabilise.

The history of UN weapons inspections is a history of lies and evasions by Iraq, with the intention of concealing and maintaining as many offensive weapons as possible. Iraq has been alarmingly successful in doing so.

Because of Iraq's systematic dishonesty in the face of UN inspections, we have never had complete knowledge of the extent of its weaponry. We could establish a complete picture only if Saddam Hussein complied with the Security Council resolutions which call on Iraq to make available any location, any document, any scientist or technician to inspection at any time. That he refuses is the most damning evidence against him. If he has nothing to hide, he has nothing to fear from the UN.

Since 1998, the international community has been forced to rely on satellite imagery, and on intelligence, some of it gathered from those who have managed to escape the regime of torture, and execution without trial, behind which Saddam Hussein maintains his power and the weapons which underpin that power.

Our judgement, based on these and other intelligence sources (?), is that Iraq:

- is close to 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 retained a dozen Al Hussein missiles, capable of carrying a chemical or biological warhead, either by hiding them from the UN as complete systems, or by re-assembling them;
- is developing as a priority longer-range missile systems capable of threatening NATO (Greece and Turkey?);
- has constructed a new engine test stand bigger than the one used for its current missile systems, and bigger than
the SCUD-testing stand dismantled under UN supervision; this will enable Iraq to test missiles with a range longer than permitted under Security Council resolution 687;
- is working to obtain improved guidance technology to increase missile accuracy;
- is building a plant for producing ammonium perchlorate, an ingredient in rocket motor production;
- is making concerted efforts to acquire weapons production technology, including machine tools, and the necessary raw materials, in contravention of UN sanctions;
- has recruited specialists to work on its nuclear programme, whose declared aim was to produce 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 with potential use in enriching uranium;
- has acquired uranium, despite having no civil nuclear programme, and which therefore has no other use than in nuclear weapons;
- retains chemical agent precursors, and production equipment for chemical weapons;
- is self-sufficient in the technology required to produce biological weapons, and has retained the necessary expertise;
- appears to be refurbishing sites formerly associated with its chemical and biological weapons programmes, including the Tareq facility;
- has stocks of chemical and biological agents available, either retained from before the Gulf War, or from more recent production;
- has the capability to produce the following chemical weapons agents: sulphur mustard, tabun, sarin, GF, VX;
- and the following biological agents: anthrax, botulinum toxin, and aflotoxin
[can we please have a side panel explaining in one sentence each what these things can do to people]
- retains conventional delivery means for chemical and biological weapons, for example free fall bombs and missile warheads;
- has modified the L-29 jet trainer to make it capable of delivering chemical and biological agents;
- has developed transportable laboratories and other means of enabling its chemical and biological programme to survive military action.

This is our assessment. It is based on a rigorous system in which ...
[very brief explanation of how the JIC system produces intelligence for ministers]. The section on intelligence (page...) sets out the detail and, where possible, the sourcing. It shows how intelligence has steadily built an increasingly compelling picture of a regime which is not only seeking strenuously to circumvent the international community's efforts to keep exceptionally dangerous weapons out of uniquely aggressive hands; but has succeeded to a degree which makes it no longer possible to regard UN sanctions as a safe means of containment.

On the basis of our best assessment, the British government is convinced that Iraq is actively assembling an arsenal of terror weapons with which to intimidate its neighbours and the wider international community. No country has a clearer record of being prepared to use such weaponry. No leader has shown himself to be so oblivious to impact of such weaponry. Iraq is testing, procuring, constructing and recruiting the personnel, infrastructure, materials and technology necessary for a major capability in mass destruction. Saddam cannot be allowed to put himself in a position to use it. We do not need a crystal ball to see how he would use it. The record speaks grimly for itself.

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THE NATURE OF THE REGIME

Saddam Hussein came to power by murder, has maintained power by torture, rape and execution, and used power to commit genocide.

He seized the Presidency of Iraq in 1979. Saddam’s predecessor, his uncle Ahmad Hassan al-Bakr, was killed [how? A bit more detail please] Five close friends who opposed him – members of the Revolutionary Command Council – were executed. [ditto].

As Saddam established control, leading clerics were arrested and killed: Ayatollah Mohammed Baqir al-Sadr in April 1980; many [how many? And why?] members of the Hakim family in May 1983. The range of Saddam’s murders went beyond Iraq’s borders. Sayed Mahdi al-Hakim was killed in Khartoum in 1988.

Murder is not the only means of dealing with dissenters outside Iraq. In June 2000, General Nahib al-Salehi, a political opponent living in Jordan, received a video showing a female relative being raped. Ten days later, he was contacted by Iraqi intelligence, who told him they were holding another woman in his family. They urged the general to stop his opposition activities.

Rape is a standard method of intimidation by the regime. The government personnel card produced here [picture] identifies its holder, Aziz Saleh Ahmed, as a ‘fighter in the popular army’ whose ‘activity’ is ‘violation of women’s honour’: in other words, he is a professional rapist [any more on these people? This is the ghastly single image of oppression we must get into people’s minds].

In a centralised tyranny, human rights abuse is not something which the leadership can claim no responsibility for. Saddam’s younger son, Qusayy (?), is head of the internal security agencies. He has encourage a policy of systematic torture and rape, and the threat of rape to coerce.
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 700 prisoners in 30 cells underground and a further 30 cells which used to be dog kennels.

Saddam’s prisons policy is tough. At the Sijin 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.

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 a floor made of mesh to allow detainees to defecate.

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.

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):

[use the quotes from the box]

Here is another personal testimony of Iraqi jail conditions:

[run the material in the Abu Ghraib box on page 50]

Two years ago, a husband and wife (names withheld) were arrested and taken for interrogation separately at Republican Guard facilities on the road to Abu Ghraib. [tell the story of ‘a tortured family’ on page 51]
In December 1996, a Kurdish businessman from Baghdad. [tell the story of B on page 46.

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.

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 (?).

No judicial process was evident when dozens of women accused of prostitution were beheaded in October 2000, along with men accused of pimping. Some, at least, were accused for political reasons.

Saddam favours 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’.

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.

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.

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.
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.

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].

Such is the nature of the regime in whose hands we would leave a formidable array of weapons of mass destruction: a regime without the slightest respect for human life. There can be no doubt how those weapons would be used by a regime founded on murder and entirely lacking in moral scruple, with a record of waging war against internal minorites and external opponents.

SADDAM’S WARS

[can I have more background on Halabja – what happened and why? Just enough to tell the story in one long paragraph, for people who don’t know about it]

Shortly before sunrise on Friday, 17th March 1988, the village of Halabja in....was bombarded by Iraqi warplanes. The raid was over in minutes (? This sort of detail, please). In that short time, Saddam Hussein had committed a crime that none of the 20th century’s dictators committed. Neither Hitler nor Stalin attacked civilians with chemical weapons. The bombs that fell on Halabja that Friday morning were equipped with (what chemical?). (what does the chemical do to the body – how does it kill? Sorry to be grisly, but this will have real impact on real people, not journalists who take it all as read). Victims were killed instantly. Among the corpses, children were found dead where they had been playing outside their homes. In places, streets were piled with corpses. Five thousand villagers died. (why Halabja?)
Saddam remains the only man to have used chemical weapons to wage war on civilians: so far, it is not speculative to suggest he would do so again if he could; he has done it. And we know that he is now re-equipping himself with chemical weapons, while seeking to extend the range of the missiles that would carry them.

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, comparable to the worst atrocities in modern history. A regime capable of genocide is not safe to be left in possession of the weapons with which to carry out racial mass murder.

Saddam Hussein has fought two wars of aggression; the Iran-Iraq war and the invasion of Kuwait. He shot a minister who argued for peace with Iran. A million died in that conflict. Twenty thousand Iranians were killed by chemical weapons: mustard gas and the nerve agents tabun and sarin: all of which Iraq still possesses. [perhaps we could have a paragraph or two on the history of this conflict please]

The invasion of Kuwait was the only (?) case since the founding of the United Nations of one of its members taking over another. We do not have to guess what Saddam would now do with his weapons if left unhindered by the international community – he has a record of external conquest. In 1990-1, he was deterred from going further, and turned back, only by military action. And since then he has been contained by sanctions: so far.

[insert here the passage on the Kuwait war, from the middle of 44 on, plus the passage on the persecution of the Kurds down to the middle of p. 46. Then a sentence or two to explain what the 1991 uprising was – assume total non-knowledge in the reader – and then run that passage from the middle of 46 to the middle of 47. Then should come the passage Charles Gray is writing on the treatment of the marsh Arabs. Can you please
check that I'm right, and that he's doing that, as I have no raw material. Then conclude this section as follows:

....Such is the nature of the regime: guilty of religious persecution, of oppressing minorities, of genocide, of using chemical weapons on civilians, of waging two wars on neighbours. This is not a regime entitled to the benefit of any doubt, or fit to possess weapons of mass destruction.

IN DEFIANCE OF THE UNITED NATIONS

This is the regime which the United Nations has tried in vain to disarm, throughout a decade of deceit by Saddam Hussein. Despite Iraqi obstruction, the inspectors of the United Nations Special Commission and the International Atomic Energy Authority managed to find and destroy much of Saddam’s chemical and biological stockpiles, many missiles, and the infrastructure of his nuclear weapons programme. That was done in accordance with Security Council resolution 687, under which Iraq must agree to the ‘destruction, removal or rendering harmless, under international supervision of’:

- all ballistic missiles with a range over 150km;
- all repair and production facilities;
- all chemical and biological weapons, stocks of agents and related subsystems and components;
- all research and development, support and manufacturing facilities.

Iraq remains in breach of this, and eight other, resolutions. Even when the inspectors were in Iraq, the disclosure statements required by the resolutions were never complete. Iraq violated the resolutions by conducting secret, unsupervised destruction, and it persistently concealed and covered up as much as it could get away with. Saddam
eventually made inspections impossible: the inspectors were finding too much for his comfort.

The inspectors succeeded in discovering enough material to prove beyond doubt the scale of Saddam's military programme, but not enough to give confidence that that programme had been disabled. Iraq's repeated claim, including in the latest contacts with the UN in July (?), that it possesses no prohibited weapons or materials, is a demonstrable lie: on the basis of what was left unaccounted for when the inspectors left, even without the latest intelligence and satellite evidence. While lying to the UN, Iraq has been carrying out construction work at sites associated with its nuclear programme, according to satellite surveillance reported by the IAEA on 6 September (?). In the absence of inspectors on the ground, the international community cannot have any guarantee of safety.

***

Iraq has a long record of misleading the UN. In 1995, the inspectors uncovered a cache of documents which showed that Iraq had been giving them false information for four years. Iraq's word cannot be trusted.

From the beginning of inspections in 1991, Iraq's aim was to:
- conceal its VX nerve agent project
- conceal the very existence of its biological programme;
- conceal the number of warheads it possessed, capable of long-range delivery of chemical and biological weapons.

[source? Is this from a report? It's on p 2?]

In 1997, the director general of the International Atomic Energy Authority said his inspectors had been 'severely hampered by Iraq's persistence in a policy of concealment and understatement'. This is why the international community insists on 'immediate, unconditional and unrestricted access' for inspectors, as laid down in resolution 707. And it is why the British government has responded to
recent Iraqi attempts to play games with the UN by repeating the need for unfettered access.

Iraq’s long history of playing games – at times dangerous games - with the inspectors include:
[the material in the box on page 30, but not in a box, just as a list]

In December 1997, Iraq flouted the UN by creating a category of sites – ‘presidential and sovereign’ – from which it claimed a non-existent authority to bar the inspectors. It took the intervention of the UN Secretary General in February 1998 to persuade Iraq to allow inspectors to enter these presidential ‘palaces’: in fact, massive compounds long associated with Iraq’s weapons programme[then run from page 33] These dots are not meant to be here. Please get rid.

The International Atomic Energy Authority has continued to assess Iraq’s nuclear capacity and intentions. Its latest report (can I have the key points here please?)

[Here should come the section on money requested by the PM]

THE INTELLIGENCE ASSESSMENT

Delete everything until *** on page 21, which starts ‘In the last year...’ The background should all be done by the time we get to the intelligence, which should come straight into the latest information. Instead of little boxes summarising the resolutions, let’s have them in full, as an annexe, plus the list of the 23 breaches out of 27.
IRAQI WMD PROGRAMMES

NUCLEAR WEAPONS:

Iraq has a nuclear weapons programme, in breach of its NPT and IAEA obligations and of UNSCR 687, but will find it difficult to produce fissile material while sanctions remain in place.

- Comprehensive programme prior to the Gulf War;
- Recalled scientists to work on a nuclear weapons programme;
- Covert efforts to procure nuclear related materials and technology.

CHEMICAL AND BIOLOGICAL WEAPONS:

Iraq has a capability to produce chemical and biological weapons in breach of UNSCR 687.

- The amount of chemical and biological material, including weapons and agents, left unaccounted for when the UNSCOM inspections terminated would provide a significant offensive capability;
- Produced and used proficiently a variety of chemical weapons in 1980s against Iran and its own citizens;
- Concealed large scale production of the nerve agent VX until discovered by UNSCOM;
- Produced and weaponised at least three BW agents but concealed this capability until forced to declare it in 1995;
- Failed to convince UNSCOM of the accuracy of its declarations.

BALLISTIC MISSILES:
Retains more than a dozen prohibited Al Hussain missiles (650km) in breach of UNSCR 687; Working on designs for longer-range missiles in breach of UNSCR 687;

- Infrastructure damaged in the Gulf War and Operation Desert Fox has now largely been reconstituted;
- Infrastructure for longer-range missiles is under construction;
- UNSCOM unable to account for all imported missiles; others could have been built using hidden retained components.
IRAQI
WEAPONS OF MASS DESTRUCTION
PROGRAMMES

Introduction

- Nuclear, chemical and biological weapons are collectively known as Weapons of Mass Destruction (WMD). Several countries have WMD programmes and missile systems capable of delivering nuclear, chemical or biological warheads. They are working to develop more accurate and longer-range missiles that will allow them to threaten more than just their immediate neighbours.

- Most countries have promised not to acquire these weapons. They have signed relevant international agreements including the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the Chemical Weapons Convention (CWC), and the Biological and Toxins Weapons Conventions (BTWC).

- A few countries have either failed to sign these agreements or have decided to break them. The position of Iraq is a particular concern. Iraq is a signatory to the NPT, but since the late 1980s it has not abided by its obligations. Since the Gulf War Iraq has been bound by five UN Security Council Resolutions (UNSCRs) relating to its WMD programmes. It remains in breach of all of them. In 1980 and 1990 Saddam Hussain used his conventional forces to mount unprovoked attacks against his neighbours, Iran and Kuwait respectively. He has used chemical weapons both against Iran and against his own Kurdish people.

- The International Community has repeatedly sought to disrupt Iraq’s efforts to acquire WMD. On each occasion Saddam has sought to rebuild his capabilities. His efforts are making progress. The Government monitors these efforts very closely. This paper sets out what the Government is able to say about them.
Background

Before the Gulf War, Saddam Hussain demonstrated his readiness to deploy extensively WMD in the form of chemical weapons both against his neighbours and his own population. Since the Gulf War, he has failed to comply with UN Security Council Resolutions, which his government accepted.

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 may already have done so.

Since the withdrawal of inspectors in 1998, monitoring of Iraqi attempts to restore a WMD capability has become more difficult.

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### 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 abolishing 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 monitoring and verification arrangements to implement UNSCR 687.

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

UNSCR 1284, December 1999, established UNMOVIC (United Nations Monitoring, Verification and Inspection Commission) as a successor 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"
Saddam's Weapons

Nuclear Weapons

Before the Gulf War, Iraqi plans for the development of a nuclear weapon were well advanced. Iraq was planning and constructing fissile material production facilities and work on a weapon design was underway. Their declared aim was to produce a weapon with a 20 kiloton yield, which would ultimately be delivered in a ballistic missile warhead.

We assessed in 1991 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 and IAEA obligations and UN Security Council Resolution 687. Much of its former expertise has been retained.

Effect of a 20 kiloton nuclear device in a built up area

A detonation occurring 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.

START HERE, and get rid of all these horrible boxes and break outs. Let's have a clean text, telling the story. This lay-out makes me dizzy. I don't propose to rewrite this until I take delivery of the new version.

****

In the last year intelligence has indicated that specialists were recalled to work on a nuclear weapons programme in the autumn of 1998. We judge that the Iraqi programme is based on gas centrifuge uranium enrichment, which was the route Iraq was following for producing fissile material before the Gulf War. But Iraq needs certain key equipment and materials for the production of the fissile material necessary before a nuclear bomb could be developed.

Iraq is covertly attempting to acquire technology and materials with nuclear applications. This includes specialised aluminium, which is subject to international export controls because of its potential application in gas centrifuges used to enrich uranium. Although this material has applications in a range of other weapon systems. There is also compelling evidence that Iraq has sought the supply of significant quantities of uranium from Africa.
So long as sanctions continue to hinder the import of such crucial goods, Iraq would find it difficult to produce a nuclear weapon. After the lifting of sanctions we assess that Iraq would need at least five years to produce a weapon.

Progress would be much quicker if Iraq was able to buy suitable fissile material.

Chemical And Biological Weapons

Iraq made frequent use of a variety of chemical weapons during the Iran-Iraq War. Iraq used significant quantities of mustard, tabun and sarin resulting in over 20,000 Iranian casualties. In 1988 Saddam also used mustard and nerve agents against the Kurds in northern Iraq. Estimates vary, but according to Human Rights Watch up to 5,000 people were killed. Iraq's military maintains the capability to use these weapons, with command, control and logistical arrangements in place.

Iraq admitted in 1991 to the production of blister agent (mustard) and nerve agents (tabun, sarin, and cyclosarin).

Effects of chemical agents

Mustard is a liquid agent that causes burns and blisters to exposed skin. It attacks and damages the eye, mucous membranes, lungs, skin, and blood-forming organs. When inhaled, mustard damages the respiratory tract; when ingested, it causes vomiting and diarrhoea.

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 death.

A chemical weapon is the agent combined with a means of dispersing it.

After years of denial Iraq admitted to producing about 4 tons of VX nerve agent, but only after the defection of Saddam’s son-in-law, Husain Kamal in 1995. Iraq maintains that the chemical weapons programme was halted in January 1991 and all agents under its control were destroyed by the summer of 1991. However, there are inconsistencies in Iraqi documentation on destruction.

Analysis of figures provided by UN weapons inspectors indicate that they have been unable to account for:
- up to 360 tonnes of bulk chemical warfare agent, including 1.5 tonnes of VX nerve agent;
- up to 3000 tonnes of precursor chemicals including approximately 300 tonnes which, in the Iraqi CW programme, were unique to the production of VX;
- over 30,000 special munitions for delivery of chemical and biological agents.

We cannot be sure whether these have been destroyed or remain at the disposal of the Iraqi government. But we judge that Iraq retains some production equipment and at least small amounts of chemical agent precursors.

Following four years of pressure from weapons inspectors and the information provided by Hussein Kamal, Iraq finally admitted to the existence of a biological weapons programme in 1995.

Iraq admitted to:
- producing anthrax spores, botulinum toxin and aflatoxin and to working on a number of other agents;
- weaponising some agents, which included the filling of warheads for its Al Hussain ballistic missiles;
- testing spraying devices for agents.

Iraq has claimed that all its biological agents and weapons have been destroyed, although no convincing proof of this has been offered. UN inspectors could not account for large quantities of growth media 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. Iraq is assessed to be self-sufficient in the technology required to produce biological weapons.

We assess that Iraq has a covert chemical and biological weapons programme, in breach of UN Security Council Resolution 687.

All the necessary expertise has been retained. Iraq appears to be refurbishing sites formally associated with its chemical and biological weapons programmes. This includes facilities near Habbaniyah, previously associated with the production of CW precursors. One of the facilities, the Castor Oil Production Plant, could be used in the production of ricin BW agent. Other sites of concern include the Al-Dawrah Foot and
Mouth Disease Vaccine Facility, which was involved in BW Agent production before the Gulf War. Iraq is assessed to have some chemical and biological agents available, either from pre-Gulf War stocks or more recent production.

We judge Iraq has the capability to produce the chemical agents:
- sulphur mustard, tabun, sarin, cyclosarin, and VX.

We judge Iraq has the capability to produce the biological agents:
- anthrax, botulinum toxin, aflatoxin and ricin.

Iraq retains conventional delivery means for chemical and biological weapons such as free fall bombs and missile warheads. But given Iraq's admission of testing spray devices, we judge that the modification of the L-29 jet trainer could allow it to be used for the delivery of chemical and biological agents. The L-29 was subject to UNSCOM inspection for this reason.

**Effects of biological agents**

**Anthrax**

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. 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**

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 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.

**Aflatoxin**

Aflatoxins are fungal toxins, which are potent carcinogens. Aflatoxin contaminated food products can cause liver inflammation and cancer.

**Ricin**
Ricin is derived from castor beans and can cause multiple organ failure within one or two days of inhalation.

A biological weapon is the agent combined with a means of dispersing it.
Saddam’s Missiles

Ballistic Missiles

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 and 93 SCUD type-missiles during the Gulf War. The latter were targeted at Coalition forces stationed in the Gulf region and Israel. Armed with conventional warheads they did limited damage. Iraq had chemical and biological warheads available but did not use them.

Most of the missiles fired in the Gulf War were an Iraqi produced stretched version of the SCUD missile, the Al Hussain, with an extended range of 650 km. Iraq was working on other longer-range stretched SCUD variants, such as the Al Abbas, which had a range of 900 km. Iraq was also seeking to reverse engineer the SCUD engine with a view to producing new missiles; recent evidence indicates they may have succeeded at that time. In particular Iraq had plans for a new SCUD-derived missile with a range of 1200 km. Iraq also conducted a partial flight test of a multi-stage satellite launch vehicle based on SCUD technology, known as the Al Abid.

SCUD missiles

The short-range mobile SCUD ballistic missile was developed by the Soviet Union in the 1950s, drawing from the technology of the German liquid-propellant V-2 which saw operational service towards the end of World War II. 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.

Also during this period, Iraq was developing the BADR-2000, a 700-1000 km 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 1200-1500 km range solid propellant follow-on systems.
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, has appeared on public parade in Baghdad and is judged to be nearing deployment. In the absence of UN inspectors, Iraq has also worked on extending its range to at least 200km. Testing of the solid propellant Ababil-100 is also underway, with plans to extend its range to at least 200km.

Any extension of a missile's range to beyond 150km would be in breach of UN Security Resolution 687.

Compared to liquid propellant missiles, those powered by solid propellant offer greater ease of storage, 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. We judge that Iraq has retained more than a dozen Al Hussain missiles, in breach of UN Security Council Resolution 687.

These missiles were either hidden from the UN as complete systems, or could have been re-assembled using illegally retained engines and other components. We judge that the engineering expertise available would allow these missiles to be effectively maintained. We assess that some of these missiles could be available for use.

Although not very accurate when used against other countries, they are still an effective system, which could be used with a conventional, chemical or biological warhead.
Reporting has recently confirmed that Iraq’s priority is to develop longer-range missile systems, which we judge are likely to have ranges over 1000km, enabling it to threaten regional neighbours, Israel and some NATO members. These programmes employ hundreds of people. Imagery below 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.

We judge that 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.

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 in place, the earliest Iraq could achieve a limited missile capability of over 1000km is 2007, but it is more likely to be towards the end of the decade (Figure 4 shows the range of Iraq's various missiles).

To be confident that it has successfully developed a longer-range missile Iraq would need to conduct a flight-test. Current UN Security Council Resolutions do not permit tests of over 150km.

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 currently under construction, including a plant for indigenously producing ammonium perchlorate, which is a key ingredient in the production of solid propellant rocket motors. This was obtained through an Indian chemical engineering firm with extensive links in Iraq.

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, but, despite the dual use nature of some of the items, we know some items have found their way to the Iraqi ballistic missile programme and will inevitably continue to do so.

**Concealment**

Strategies to conceal and protect key parts of Iraq's WMD and ballistic missile programmes from a military attack or a UN inspection have been developed. These include the:

- use of transportable laboratories in their chemical and biological weapons programmes;
- use of covert facilities;
- dispersal of equipment when a threat is perceived.

In particular we know that the Iraqi leadership has recently ordered the dispersal of its most sensitive WMD equipment and material. This order is being carried out.
CONCLUSION

- Iraq retains some prohibited missile systems.

- Iraq is developing longer-range ballistic missiles capable of delivering weapons of mass destruction throughout the Middle East and Gulf Region.

- Iraq is seeking a nuclear weapons capability.

- Iraq has a chemical weapons capability, and has used it. It also has a biological weapons capability.