

JIC Assessment, 1 December 2000

IRAQ'S MILITARY CAPABILITIES

**Key Judgements**

- I. Since Iraq's defeat in 1991, UN sanctions have prevented the reconstruction of Saddam's military machine. Although Iraqi forces are still large and well-organised by regional standards, a **military offensive outside Iraq's borders would be limited** by shortfalls in equipment and logistics. (Paras 1-4)
- II. While **US/UK forces remain** deployed in the region and prepared to intervene militarily, **an attack on Kuwait is very unlikely**. But **if the southern No Fly Zone and no drive zone became defunct**, warning time for an attack would shorten because the intent behind any Iraqi deployments in southern Iraq would be harder to judge. Should deterrence fail, US/UK forces currently in the region might be insufficient to defeat an Iraqi attack. (Paras 5-6)
- III. **If US and UK forces were withdrawn from the Gulf, and Saddam perceived that the west was no longer prepared to intervene militarily, he could try to re-take Kuwait**. In such circumstances he would succeed, **even with his current force levels**. [...](Para 7)
- IV. Iraq has probably concealed a **handful of 650 km range ballistic missiles** that could reach Kuwait, Saudi Arabia and even Israel, as well as some **chemical and biological agent**. But even if Saddam has such weapons, he is **unlikely to use them** except in extremis, in order to preserve his regime or as a final gesture of defiance. (Para 8)
- V. In the absence of UN inspectors, Iraq is completing work on a 150 km range **missile** permitted by the UN and developing prohibited longer range systems. It may already be producing **biological agent** and could produce **some chemical weapons** within weeks. (Para 9)
- VI. Without economic sanctions but with effective UN monitoring, Iraq **could develop though not produce longer range missiles**. Although its ability to rebuild dedicated chemical weapons or large scale biological weapons production capabilities would be constrained, it would be able to **use civil industry to produce chemical and biological agents**. UN monitoring would, however, act as a **deterrent to Iraqi development of its nuclear ambitions**. (Para 10)
- VII. Without both economic sanctions and UN monitoring, Iraq would **accelerate its WMD and missile programmes**. It could produce new 650 km range missiles within a year. But it would take **at least five years to make a crude nuclear device and a further two to manufacture a nuclear warhead for missiles**. (Para 10)
- VIII. **To rebuild its armed forces, Iraq would need military sanctions lifted**. This is unlikely while Saddam remains in power. But if it happened, it would take several years at least before Iraq's capabilities increased to a level which would alter significantly the military balance in the region. (Paras 11-12)

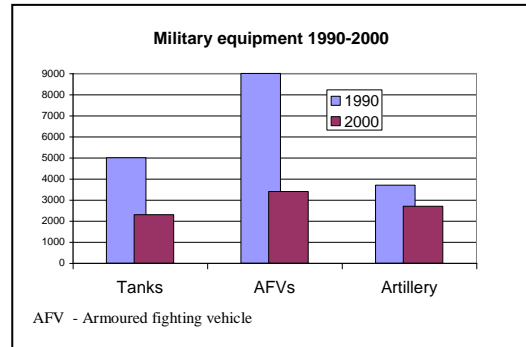
**Implications:** It will remain important for the US and UK to continue to demonstrate the political will to defend Kuwait, including by deploying forces in the region.

## IRAQ'S MILITARY CAPABILITIES

*In response to OD Sec and the inter-departmental policy review on Iraq, we assess Iraq's capability to threaten its neighbours with conventional force and weapons of mass destruction. We also analyse how changes in the sanctions regime might affect our judgements.*

### Conventional military capability

1. Iraq lost nearly half its military strength as a result of the Gulf War and the capability of what remains has declined since 1991. **UN sanctions have successfully prevented the procurement of new weapons systems** and have constrained equipment maintenance and repair. Unable to rebuild, Iraq has had to rely on indigenous programmes, reverse engineering, cannibalisation and a drip-feed of spare parts from abroad to keep existing forces viable. Logistics support is inadequate for sustained operations. Aircraft sortie rates have fallen by half in seven years. Iraq's most potent fighter, the MiG-29, flies occasionally but is non-operational.



2. Iraqi ground forces are **still large (some 400,000) and well-organised by regional standards**. It has more than 2,300 tanks, although not all are serviceable. Training, when not interrupted by political crises, is relatively good. Logistics support is still better than others in the Gulf. Iraq's 280 combat aircraft, less than half the number available before the Gulf War, are ageing and the air force has serious problems maintaining mission capability. It could mount only limited air strikes beyond Iraq's borders and support to ground forces would be minimal.

3. The six **Republican Guard** divisions are the **most capable military force in the Gulf** region. Any important operations, whether to safeguard Baghdad or to mount a major ground offensive, would be spearheaded by the Republican Guard. The Army has 17 divisions but is by comparison less well equipped and trained. Their combat capability is severely weakened by poor morale and undermanning levels of up to 40%. [...]

4. Forced down-sizing, the effects of sanctions and periodic internal unrest have combined to create a **largely defensive posture**. Shortfalls in equipment and logistics would prevent a conventional military offensive from being sustained for long. With its primary role to defend the regime in Baghdad, the Republican Guard is deployed mainly in the centre of Iraq, and opposite the Kurds in the north (see map). The majority of Iraq's strategic surface-to-air missile systems focus on the defence of key military and civilian facilities. Iraq's armed forces have the ability to defend against local insurgency or an attack by its immediate neighbours, of which only Iran is seen as a threat.

### Iraq's ability to threaten its neighbours

5. Saddam has not given up his claim to Kuwait. While Coalition forces remain deployed in the region, we judge that **an attack on Kuwait is unlikely** because Saddam would expect western intervention. The southern No Fly Zone (NFZ) and the "no drive zone" (which, on the basis of UNSCR 949 and a US demarche, prohibits additional or Republican Guard deployments below the 32<sup>nd</sup> parallel) serve as a buffer for Kuwaiti security. Major breaches would be seen as a warning of a potential Iraqi attack.

6. **Should the No Fly Zone and especially the no drive zone become defunct**, Saddam would move combat aircraft and some additional ground forces to southern Iraq. There would be less warning of an attack because the intention behind any additional Iraqi deployment would be harder to judge. The coalition would have a reduced opportunity to attack Iraqi forces before they reached the Kuwaiti border. **The threat to Kuwait, and to US/UK deterrent forces, would increase.** Saddam could **deploy additional forces towards Kuwait to test western resolve.** As in 1994, Saddam would be likely to withdraw if faced with a clear political and military response from the west. But if deterrence failed, US/UK forces currently in the region might be insufficient to defeat an Iraqi attack.

7. If US and UK forces were withdrawn from the Gulf, and Saddam perceived that the **west was no longer prepared to intervene militarily**, he **could try to re-take Kuwait.** In such circumstances he would **succeed, even with his current force levels.** [...] An attack on **Iran** would in all likelihood fail or, as in the 1980s, become bogged down in stalemate.

### WMD - a residual threat?

8. Since the Gulf War, most of Iraq's **ballistic missiles, chemical weapons** and nuclear programme have been destroyed. Iraqi claims to have destroyed its biological weapons capability cannot be confirmed. It is likely that Iraq has a **residual WMD and missile capability:**

- a handful of ageing SCUD-derived **missiles**, with a **range of up to 650 km**, are probably disassembled and concealed. These could be re-assembled quickly and used (albeit with little accuracy) against targets in Kuwait, Saudi Arabia and even Israel;
- some **chemical and biological agent** may be concealed, possibly weaponised;

#### An Iraqi deployment

- *In October, Saddam deployed a Republican Guard Division and almost three regular Divisions towards western Iraq, at short notice, to demonstrate support for Syria and the Palestinians against Israel. They have since withdrawn.*
- *Even if built on a smaller exercise already planned, the **deployment showed that Iraq can still move forces rapidly.***
- *But analysis of the deployment revealed **significant shortcomings in transport and logistics, and equipment reliability.** There was little forward movement of stores and ammunition in the quantities required for a deployment into Syria.*
- *Iraq **could not make a sustained contribution towards an Arab force against Israel** without major improvements in logistics support.*

- Iraq has developed a **missile with a range of 150 km**, which is permitted under UN controls. Although not fully operational, this could reach Kuwait and Saudi Arabia; and
- Iraq is converting the L-29 jet trainer aircraft into a crude **remotely piloted vehicle** which could carry an explosive, chemical or biological weapon to Kuwait and against other targets in the northern Gulf

Even if Saddam has a few chemical or biological weapons, he is **unlikely to use them** except in extremis, in order to try to preserve his regime or as a final gesture of defiance.

### **Prospects - WMD and long range missiles (see Annex)**

9. In the absence of UN inspections for two years:

- Iraq has increased the pace and scope of its **missile** research and development programmes. Series **production of the 150 km range Al Samoud could begin within months**. A longer range version (up to 200 km) is being worked on. We have no evidence of a revival in the 650 km range Al Hussein missile programme. But according to intelligence, preliminary work is under way on another missile with a possible range of over 700 km;
- intelligence suggests some **biological** and **chemical** warfare activity. Iraq is rebuilding its civil chemical industry, including facilities formerly associated with chemical weapons. We judge that **Iraq may already be producing biological agent and could produce a small number of chemical weapons within weeks** of a decision to do so and, were economic sanctions lifted, build a **large scale production capability within a few years**. The same is probably true for **biological weapons**;
- there is little evidence of **nuclear** weapons research. But, as in all areas of WMD, Iraq retains expertise and is trying to buy dual-use materials.

10. We judge that **Saddam will seek to re-establish all his WMD and missile programmes**:

- **effective UNMOVIC and IAEA monitoring** would act as a **deterrent** and constraint to his ambitions, in particular the nuclear and longer range missile programmes. But it would be less effective in monitoring Iraq's development of chemical and biological weapons, which could be more easily concealed;
- **without economic sanctions** but with **effective UN monitoring**, Iraq could conduct research and development on longer range missiles. It could not, however, put them into production. Its ability to rebuild a dedicated chemical weapons or large scale biological weapons production capability would be constrained. But Iraq could use its restored civil chemical industry and existing biotechnology industry to produce chemical and biological agent. Effective UN monitoring would act as a deterrent to Iraqi development of its nuclear ambitions.
- **without either economic sanctions** or an effective UN **monitoring** presence, Iraq would **significantly increase its procurement and accelerate its WMD and missile programmes**. Iraq could begin to produce a small number of new **650 km range Al Hussain missiles within a year**. We would be less likely to detect

progress in other areas. It would take Iraq **at least five years to make a crude nuclear device and a further two years to manufacture a nuclear warhead for missiles.**

### **Rebuilding military capability**

11. Anecdotal reporting over the last year suggests that indigenous programmes, supported by components and spares supplied illegally from overseas, are slowing down the deterioration in Iraq's military capability. Nevertheless, **Saddam cannot significantly re-establish Iraq's military power without access to foreign weapons systems.** Even if economic sanctions were lifted, and Iraq given back control of its oil wealth, military sanctions would be likely to remain in force for longer. Saddam would then argue that Iraq should be allowed to import weapons to defend its sovereignty. But it is more likely that military sanctions will remain until there is a new regime in Baghdad. An erosion of military sanctions would make it easier for Iraq to obtain small arms and spare parts but it is **unlikely to acquire major new weapon systems.** Nor would indigenous production provide advanced capabilities.

12. Assuming economic and military sanctions are eventually lifted, Iraq would face competing demands for reconstruction: paying off at least \$100 billion debt, rebuilding its economic infrastructure and **restoring military capability.** Both Saddam and any likely successor are likely to give **high priority** to the last, **including WMD.** Massive spending would be required across the board - on personnel and training as well as major weapon systems. It would take several years at least before Iraq's conventional capabilities increased to a level which would alter significantly the military balance in the region. It would take comparatively less investment to revive some of Iraq's WMD programmes. Although Saddam is unlikely to use such weapons, their development as a means of coercive diplomacy would give him an additional political tool to use in his attempts to re-establish his regional and international standing.

## IRAQ'S WMD AND BALLISTIC MISSILE PROGRAMMES

*This annex addresses the question of how sanctions and UN monitoring have affected the development of Iraq's weapons of mass destruction (WMD) programmes and how the progressive lifting of both could affect the future of Iraq's WMD capability against its neighbours.*

1. The absence of a UN monitoring presence makes current Iraqi WMD capabilities more difficult to judge. But in some areas, especially missiles, the pace and scope of these programmes has increased since the departure of UN inspectors. Were UN inspectors allowed into Iraq, this would act as a deterrent to some of Iraq's WMD programmes, especially missiles. But we judge Iraq could still advance its WMD programmes, in particular CBW, in such a way that it would be difficult to detect. **Without trade sanctions and UN monitoring, we judge it likely that Iraq would increase procurement and accelerate its WMD and missile programmes.**

### **Iraqi ballistic missile capability**

2. Prior to the Gulf War, Iraq had converted most of its 300 km range liquid propellant Scud B missiles into 650 km range Al Hussein missiles and was developing longer range versions and the capability to produce ballistic missiles. It was also developing the solid propellant 700-1000 km range Badr-2000. Following the Gulf War, we judge that Iraq probably concealed components and a small number of disassembled Al Hussein missiles.

3. Since then, Iraq has expanded its liquid propellant expertise with the Al Samoud missile, which has a range of 150 km, the maximum permitted under UN controls. Sanctions have slowed Iraq's ability to import necessary materials and equipment. But the **development of this missile has accelerated** over the past year as a result of increased funding and Saddam Hussein's personal interest. [...] Iraq has also been working on extending its range to at least 200 km. The Iraqis believe that, with further imports, they could complete development work for this version within 6 months.

4. Iraq is also expanding a number of sites associated with its solid fuel missile programme. Preliminary work is underway on the 150 km range Ababil 100. [...]

5. **In current circumstances** (trade sanctions, but no UNMOVIC) Iraq could **assemble a number of Al Hussein missiles for deployment within weeks** and could target Israel. **Series production of Al Samoud could begin within months.** A longer range version might be developed over the same period. Both missiles could target Kuwait City, albeit from vulnerable southern locations. Iraq would continue with the development of the Ababil-100, and the longer range solid propellant project.



6. Were **UNMOVIC** allowed into Iraq, and if it was effective, it could act as a **deterrent to the development of Iraq's prohibited longer range missiles**. But the **production of Iraq's 150 km range missile would be unaffected**. With no sanctions but with UN monitoring (see box) Iraq could produce 150 km range missiles and conduct R&D on, but not produce longer range missiles. Without trade sanctions and UN monitoring, **Iraq could produce a small number of new Al Hussein missiles within a year**. Production of the permitted 150 km range missile would be easier. Iraq could complete the development of its longer range missiles.

### **Chemical warfare programmes**

7. Prior to the Gulf War, Iraq had a large production capability for mustard and nerve agents and was close to self sufficiency in the production of most precursors. All known CW production facilities and dedicated precursor plants were disassembled or destroyed during the Gulf conflict or subsequently under UNSCOM supervision. But Iraq could have concealed some CW agents, munitions, warheads, precursor chemicals and production equipment from UN inspectors.

8. Since the War, sanctions and monitoring have slowed but not stopped the **reconstruction of some of the facilities formerly associated with its CW programme**. Iraq has continued to restore its civil chemical industry, which could help in any revival of its CW programme. While there is no firm evidence of a chemical warfare programme, Iraq has continued to acquire **dual use chemicals** and conduct research. This and intelligence of **research into weaponising aerial bombs** suggests that some chemical warfare activity continues.

9. Under **current trade sanctions, (with or without UNMOVIC)**, Iraq **could produce small but significant amounts of mustard agent within weeks** of a decision to do so. It could **produce nerve agent within months**, using retained stocks of precursors and equipment and with the support of the civil chemical industry. It could **also produce small numbers of CW munitions and missile warheads**. In the absence of sanctions but with an effective UNMOVIC Iraq's ability to develop dedicated CW facilities would be impeded. But Iraq could use its restored civil chemical industry. Were trade sanctions lifted, and in the absence of UNMOVIC, Iraq could re-establish a large scale production capability within a few years.

*The lifting of trade sanctions would take place in two stages:*

#### *Suspension of sanctions*

- *Trade sanctions would be suspended once UNMOVIC reports to the Security Council that Iraq has co-operated and made progress on disarmament in accordance with UNSCR 1284.*
- *Controls would remain over those items deemed by the UN to be dual use.*
- *The military embargo would remain.*
- *UNMOVIC would continue disarmament and monitoring work.*
- *The Security Council has still to decide the extent of Iraq's control over its revenue and over imported goods.*

#### *Lifting of trade sanctions*

- *Trade sanctions would be lifted once Iraq is judged to have met the conditions of UNSCR 687.*
- *Iraq would be allowed to trade normally except for military goods and those defined by the UN and existing arms control regimes as dual use.*
- *Iraq would have full control over its oil revenues.*
- *UNMOVIC would have completed its disarmament work in Iraq, but would continue monitoring.*

### **Biological warfare programme**

10. Iraq told UNSCOM that it conducted laboratory work, produced in bulk a range of BW agents, and weaponised them. It claimed to have terminated its programme at the end of the Gulf War and destroyed all related materials and weapons. But we judge Iraq may retain hidden production equipment, stocks of agent and even biological weapons.

11. Since the Gulf War, [...] continued **BW related activity**. Sanctions have slowed but not prevented imports of dual use equipment that could be used in a BW programme. [...]

12. Under **current trade sanctions, (with or without UNMOVIC)**, Iraq still **has sufficient expertise, equipment and material to produce BW** without procurement from abroad. It could **use legitimate civil or dedicated BW facilities, including mobile laboratories** for this work. With no trade sanctions, but with an effective UNMOVIC, Iraq would find it more difficult to restore a large scale dedicated BW production capability. **With no trade sanctions, and without UNMOVIC, Iraq's ability to acquire a large scale production capability would be made easier.**

### **Nuclear weapons programme**

13. Prior to the Gulf War, Iraq had procured raw materials and was conducting research **into uranium enrichment, including a centrifuge programme, and weapons design**. This programme was dismantled with all key facilities destroyed and equipment placed under UN controls. IAEA inspections under UNSCR 687 have not revealed evidence of new prohibited activity. But no such inspections have taken place since December 1998.

14. [...] Iraq has retained the scientific cadre associated with nuclear weapons work. Iraqi entities, some formerly associated with its nuclear programme, seek **dual use equipment that could be used in association with a centrifuge programme**. Unconfirmed intelligence indicates **Iraqi interest in acquiring uranium and continuing nuclear weapons related research after the Gulf War**. None of the intelligence acquired since the war is "smoking gun" evidence. But it remains suspicious and seems indicative of attempts to retain a cadre of expertise, which will decline over time without international access.

15. Iraq still lacks fissile material and the infrastructure to make it. With:

- **trade sanctions but no UN monitoring**, we judge that it would be **difficult in these circumstances for Iraq to build a nuclear weapon**. It would take **at least five years, probably longer, and only in the context of eroding sanctions and foreign assistance**, for Iraq to make such a weapon;
- **trade sanctions and UN monitoring**, we think it unlikely that Iraq could make much progress towards the acquisition of fissile material or requisite infrastructure;
- **no trade sanctions, but with effective UN monitoring**, we think Iraq would be deterred from producing fissile material.
- with no trade sanctions and no UN monitoring, we judge that it would take Iraq 5 years, probably longer, to manufacture a crude nuclear weapon and probably two further years to manufacture a nuclear warhead. But



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were Iraq able to acquire sufficient fissile for a weapon or centrifuges and feed material from outside Iraq, with foreign assistance this time period could be significantly shortened, with or without current controls.

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