JIC Assessment, 18 December 2002

AN INITIAL ASSESSMENT OF IRAQ'S WMD DECLARATION

This paper was discussed and approved by the JIC at their meeting on Wednesday 18 December 2002.

Key Judgements

- I. The Declaration fails to address the issues outstanding from UNSCOM's report to the UN Security Council in 1999.
- II. Iraq maintains that it currently has no proscribed WMD programmes.
- III. The majority of information in the Declaration has already been passed to the UN in some form.
- IV. The new material so far found does not alter UK assessments of Iraq's WMD programmes.
- V. The Declaration makes no attempt to deal with the points made in the UK Dossier.

AN INITIAL ASSESSMENT OF IRAQ'S WMD DECLARATION

- 1. Iraq provided the UN with a Declaration of its weapons of mass destruction (WMD) programmes on 7 December 2002 in line with its obligations under UN Security Council Resolution (UNSCR) 1441. The Declaration is 11,807 pages long and in English, Arabic and Russian. This assessment is based on the parts of the Declaration that are in English, and parts that have so far been translated. The Declaration has been assessed by the DIS against current UK intelligence databases, previous declarations to the UN and the UK Dossier on Iraqi WMD. A DIS summary of initial findings is attached.
- 2. Iraq also passed a backlog of semi-annual declarations of activity to UNMOVIC in November 2002. These declarations cover the period 1998 -2002, and are not currently available to the UK.

The situation prior to the Declaration

- 3. Following the Gulf War in 1991 the UN Security Council passed a number of resolutions. UNSCR 687 obliged Iraq to provide declarations on all aspects of its WMD programmes 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 150km. From a series of Iraqi declarations to the UN during the 1990s we know that by 1991 they had produced at least:
- 19,000 litres of botulinum toxin, 8,500 litres of anthrax, 2,200 litres of aflatoxin, and were working on a number of other agents;
- 2,850 tonnes of mustard gas, 210 tonnes of tabun, 795 tonnes of sarin and cyclosarin, and 3.9 tonnes of VX.
- 4. Iraq was also aiming to produce a nuclear warhead for a ballistic missile and had a well-developed programme to produce the necessary fissile material. Iraq also had an extensive ballistic missile programme which was aiming to develop both solid and liquid propellant missile systems with ranges over 1000km.
- 5. During the period 1991 to 1998 Iraq was forced to produce a succession of so-called Full, Final and Complete Declarations (FFCD). Based on the UNSCOM report to the UN Security Council in January 1999 and earlier UNSCOM reports, we assess that when the UN inspectors left Iraq they were unable to account for:
- up to 360 tonnes of bulk chemical warfare 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.
- 6. HMG published an assessment of Iraq's WMD in September 2002. The Dossier, which was based on intelligence, makes a number of judgements:

- Iraq has a useable chemical and biological weapons capability, which has included recent production of chemical and biological agents;
- Iraq continues to work on developing nuclear weapons;
- Iraq possesses up to 20 650km range al-Hussein missiles, is developing longer-range ballistic missiles, and is extending the ranges of UN permitted al-Samoud and Ababil-100 systems.

Intelligence on the Declaration

7. Intelligence indicated in early November that Iraq was considering a number of options for the Declaration called for by UNSCR 1441, including a possible admission of a small proportion of its illegal activity. But by late November intelligence indicated that Iraq's Declaration would omit references to its banned weapons and that the aim was to overload UNMOVIC with information. One senior official said that the Declaration would be general and lacking in detail and had been padded out with various scientific reports and studies. There has been no intelligence on how the Iraqis believe the Declaration has been received by UNMOVIC and the P5 states.

Overview of the Declaration

8. The Declaration is largely based on material already presented to the UN in previous FFCDs and other correspondence. No serious attempt has apparently been made to answer any of the unresolved questions highlighted by UNSCOM or to refute any of the points made in the UK Dossier on Iraq's WMD programme. Iraq continues to claim that it has not conducted any illicit WMD or ballistic missile programmes since 1991. Little new material has so far been found on the nuclear, chemical or biological weapons programmes. The missile section has produced some new material.

Chemical Weapons

- 9. The Declaration is based on the June 1996 FFCD, and includes additional information provided in response to UNSCOM requests prior to 1998. Some of this information has not previously been seen by the UK. But the Declaration does not:
- address the issue of chemical agents, precursors and munitions which UNSCOM could not account for in their 1999 report to the UN Security Council;
- provide a key document detailing the consumption of special munitions in the 1980s (although this may now have been passed to UNMOVIC). This was previously removed from UNSCOM by the Iraqis and the UN Security Council has demanded its return;
- substantiate denials to UNSCOM that attempts were made to manufacture and weaponise VX.
- 10. The Declaration includes a list of over 30 sites in which chemical activity takes place. This list is incomplete. The nuclear section includes Ibn Sina where previously unknown chemical activity is described which could support precursor production, although there is no known link to the chemical weapons programme.

11. This section of the Declaration also includes pages marked "UNSCOM SENSITIVE DISSEMINATION PROHIBITED", which could suggest that Iraq had illicit access to UNSCOM or UNMOVIC documents.

Biological weapons

- 12. The Declaration reiterates information already provided to the UN. The UN and others have already reviewed this information, and concluded that it fails to provide a technically coherent account of Iraq's biological weapons programme. The only new material relates to 40 sites, which Iraq claims have no connection with proscribed activity, but which we judge could support a biological weapons programme. But the Declaration fails to mention some dual-use sites previously monitored by UNSCOM. Names of individuals previously included in FFCDs have been systematically removed, although the Declaration states that these will be provided to UNMOVIC on request. The Declaration does not:
- address the issue of unaccounted for growth media highlighted by UNSCOM;
- provide fully documented accounts of biological agent and weapons production prior to 1991, or recognition of the military application of the programme as a whole;
- acknowledge any proscribed activity post-1991, despite the fact that Iraq was forced to admit to the programme in 1995;
- mention transportable agent production facilities.

Nuclear weapons

13. The Declaration is largely the same as the FFCD of activity prior to 1991, issued to the IAEA in 1998, with a new extended summary. We judge it to be accurate as far as it goes, although not complete. The Declaration maintains that no weapons-related work has been undertaken since inspectors left in 1998 and does not address points in the UK Dossier, such as seeking uranium in Africa.

Ballistic missiles

- 14. The majority of data provided relates to pre-1991 programmes. The Declaration does acknowledge some facilities established since 1998, which were known from intelligence, and provide some limited new evidence of proscribed missile development post-1991. A technical paper dated December 2001 discusses modelling of three missile designs, probably variants of the al-Samoud, a missile which is permitted at ranges below 150km. We judge that two of these designs would have a maximum range beyond 150km. The Declaration states that one of these missiles has been flight tested 23 times since 2001 to ranges below 150km, and that the results are included in the semi-annual declarations recently passed to UNMOVIC. The major omissions in the Declaration are:
- no attempt to resolve outstanding issues related to SCUD missiles or the destruction of SCUD propellant. UNSCOM could not account for two SCUD missiles, nor verify the destruction of all stocks of propellant;
- no mention of any post 1998 activity at many missile related facilities, including the al-Rafah engine test stand, which is capable of testing engines for missiles with ranges over 1000km;

• no details of recent procurement activity associated with more advanced missile propellant.

Un-manned Aerial Vehicles (UAVs)

- 15. Iraq continues to develop and possibly deploy other delivery means capable of disseminating chemical and biological agents. The Declaration:
- claims that the L-29 pilotless aircraft is a target-drone. There was no mention of a chemical or biological
 agent delivery capability. We judge that the Iraqis have more aircraft and have conducted more flight
 tests than stated in the Declaration, and that they have understated the aircraft's range;
- provides limited, but new, information on two UAV programmes. Iraq claims these started after 1998
 and that the UAVs will be used as target-drones. Iraq also claims that it has included these systems in
 the semi-annual reports recently passed to UNMOVIC. We judge that the configurations described will
 have a significantly better performance than those claimed and that these platforms can be adapted to
 chemical and biological agent delivery;
- provides references to aborted attempts to convert the HY-2 anti-ship missile into a land attack weapon
 with a claimed range of 95km. While below the UN range limit of 150km, we judge this system would be
 suitable for chemical and biological agent delivery.

Conclusion

16. The parts of the Declaration so far analysed fail to address the outstanding issues from UNSCOM's report to the Security Council in 1999, despite the prominence of these issues over recent months. The Declaration makes no attempt to answer any of the points outlined in the UK Dossier published in September 2002. The Iraqis may feel they dealt with these points in their previous rebuttal of the Dossier. Some of these deficiencies may be addressed in the parts yet to be translated, but this does not look likely.

ANNEX to JIC Assessment of 18 December 2002

16 December 2002

IRAQ: INITIAL DIS ASSESSMENT OF THE 'CURRENTLY ACCURATE, FULL AND COMPLETE DECLARATION'.

- 1. This initial assessment is based on our analysis of the text provided in English, and a partial (but ongoing) translation of the text in Arabic. With regard to the Arabic text, we have attempted to identify and translate the key sections, but are not yet in a position to guarantee that all information of potential interest has been identified. We understand from the US that they do not currently intend to undertake a full translation a UN translation is expected on 24 December, but could be delayed.
- 2. The Declaration is assessed against our own database; previous declarations to the UN, and the UK Dossier on Iraqi WMD. We share US concern that UNMOVIC has not made available all material provided to them by Iraq, and to which there are references in the Declaration. For example, the possible movement of tagged, dual-use equipment, cannot be identified because of the absence of this information.
- 3. There is some new information of interest, including possible proscribed ballistic missile activity since1991, involving the Al Samoud. There is information of potential concern regarding a previously unknown civil chemical capability at the Ibn Sina site that could support a CW programme. Information on a range of UAV developments gives serious cause for concern also, given their potential use in a WMD context. Iraq states that the L29 programme remains active, but repeats the earlier claim that it is a target drone. [...] It should however be noted that while some of the information may be new to the UK, we cannot rule-out that it has been provided previously to the UN.
- 4. We have considered the Declaration against the report presented in 1999 to the President of the Security Council by Richard Butler, Chairman of UNSCOM. This provided a detailed account of disarmament and monitoring activities undertaken by UNSCOM. The key outstanding issues in the missile area were Iraq's account of special chemical and biological warheads and accounting of fills with VX and anthrax; full accounting for conventional warheads; proscribed single use liquid missile propellant and proscribed indigenous missile production. In the chemical area, the concern was with the material balance for chemical munitions in the 1980s (i.e.use in the Iran/Iraq war), mustard filled artillery shells unaccounted for; accounting for R400 aerial bombs filled with chemical and biological agents; accounting for the industrial scale production of the nerve agent VX; and the material balance of CW agent, precursor and production equipment. In the BW area, the requirement was for a total account of the BW programme including weaponisation, production of bulk agent, research, acquisition of raw materials and equipment, planning, and organisation. Despite the new information provided, we assess that Iraq has failed to address the outstanding issues from the Butler Report.
- 5. No attempt has been made by the Iraqis to address the detailed issues raised in the UK Dossier.

- 6. We do not have an authoritative statement regarding the US assessment of the Declaration, but informal contact suggests there are no significant divergences.
- 7. Iraq's limited declaration on the status of its facilities and equipment procurement may reflect Baghdad's reported concern that illicitly procured military-industrial infrastructure could be destroyed, whether or not linked specifically to prohibited programmes.
- 8. Overall, we judge that the Declaration is neither current, accurate, nor complete.

Ballistic Missiles

- 9. The Declaration covers the major ballistic missile projects, but many of the documents appear to comprise material provided to UNSCOM. The majority of the data relates to activity prior to the Gulf War. There is, however, very limited new evidence of proscribed missile development post-1991, i.e modelling of Al Samoud variants which is dated December 2001. Significant information on this activity came from the Arabic text, and it is possible that there is additional data within the untranslated material.
- 10. Despite approximately 7000 pages in the missile section, the Declaration does not contain new information on missile associated facilities.
- 11. The Declaration reiterates past statements from the Iraqis claiming that all SCUD issues have been resolved. No attempt is made to resolve the possible existence of a residual operational missile force in Iraq UNSCOM believed that it could not account for two SCUD missiles, nor verify the destruction of all stocks of SCUD propellant. Neither is any attempt made to resolve UN uncertainty as to whether Iraq has been able to produce new operational SCUD engines using a mix of indigenous and imported components. UNSCOM had been unable to establish whether prohibited SCUD engineering work had continued; although engineering activity at the Sadiq Factory is mentioned, the Declaration does not appear to address the issue. UNSCOM was also unable to ascertain whether Iraq purchased parts after the Gulf War to assemble MAZ-547 vehicles suitable for use as Transporter-Erector-Launchers, including for missiles larger than Iraq's previous extended range SCUD designs. There is no apparent reference to MAZ-547 in the Declaration.
- 12. The Declaration does not address the issues raised in the UK Dossier such as propellant, chemical and dual-use procurement. There is not even a repetition of the earlier post Dossier rebuttal of the description of the new engine test stand constructed at Al Rafah; the only references to the site concern activity prior to 1998.
- 13. The Declaration contains a technical paper in Arabic produced in December 2001 covering structural modelling of three missile designs:

The "short" Al Samoud (7.9m long x 0.5m diameter)

The "long" Al Samoud (8.6m long x 0.5m diameter)

The "Al Samoud 2" (7.1m long x 0.76m diameter). AKA "Mudhher" and "Al Samoud Concept" $\,$

- 14. The "Al Samoud 2" is significantly different to the other two designs in terms of both diameter and internal arrangement, and, as such, it appears to represent a different missile concept. However, a separate, undated, set of specifications for the same system reveals that it uses the same VOLGA (SA-2 sustainer) engine as Al Samoud. We assess that both the "long" Al Samoud and "Al Samoud 2" would have a maximum range in excess of 150km, although the specifications for the latter in the Declaration claim a maximum range of only 150km. The Declaration does not appear to contain any reference to post-1991 hardware development relating to these two designs. The "long" Al Samoud is close to our perception of an extended range Al Samoud, for which there is some intelligence indicating possible production and testing.
- 15. The Declaration includes specifications for unguided and guided versions of Ababil-100 (referred to as Al Fateh), which are consistent with our assessment. It notes also work on a spin-motor to improve its accuracy, including claimed results of a few flight tests using this. No text on Ababil-100 production or deployment has yet been identified. We understand that Iraq has informed UNMOVIC of work on a 600mm Ababil system, but this does not appear in the text. Iraq originally conceived Ababil-100 as a 600mm diameter system, but UNSCOM blocked its development on the grounds that it would exceed the 150km range limit.
- 16. Details are included of pre-1991 UDMH procurement, and attempts to acquire a manufacturing capacity, but there appear to be no references to more recent procurement. Arabic entries in the nuclear section mention laboratory work on propellants including Dimethyl Hydrazine, but neither is it explained, nor is it on a scale which would account for known procurement. The Declaration includes pre-Gulf War work on BADR-2000 longer range solid propellant programme, but there is no mention of renewed activity on anything larger than standard Ababil-100.
- 17. Overall, while Iraq has provided some new detail on its ballistic missile programmes, the Declaration does not represent an accurate description of the Iraqi programme, which we assess includes work both to extend the range of Iraq 's current SRBMs, and longer range systems. The missile section does not include details on the status of Iraq's missile related facilities; however, some relevant information is included in other sections.

Aerodynamic Programmes

- 18. No mention is made of the proposal in 2001 from Yugoslav arms dealers covering the development of the CM-1500, a 1500km cruise missile design concept.. Iraq's connection to the Yugoslavs involved, and the existence of the CM-1500 design, has been public knowledge since the Yugoimport scandal broke in Belgrade after seizure of the cargo of the BOKA STAR, and receipt of the design information should have been declared.
- 19. The Declaration includes a reference to programme to convert the HY-2 anti-ship missile into a land-attack weapon by adding GPS to the missile. This system was supposedly tested in 2001, with the Iraqis considering the overall result to be "negative", and the programme reportedly finished without further testing in 2001. As development reportedly began in 2000, no UN documents are available for comparison. The HY-2 conversion, with its 500 kg warhead is potentially an attractive WMD delivery system, given that Iraq is capable of integrating GPS into

the existing autopilot. In theory, this would allow delivery of a weapon to within the standard GPS accuracy of tens of metres over a range of 95km.

- 20. Iraq continues to declare the L-29 UAV as a target drone, the same claim that was made to UNSCOM. The Declaration states that the programme remains active, and has achieved a maximum control range of 30 km, out of the 80 km desired from the programme. Eight L-29 UAV airframes are declared, with the claim that only three have been fully converted to UAVs, plus one manned test aircraft. Only four test flights are claimed to have taken place between 1997 and 2000. Two of these resulted in crashes, and the total destruction of the airframes. This would leave one L-29 UAV and the test aircraft. We assess that seven operational airframes remain in the programme, and note that Iraq has failed to disclose two significant tests in 1998. The significance of these tests is that they revealed the potential of the L 29 to fly autonomously to a maximum range of 640km. Our overall assessment remains that the L 29 programme has demonstrated a capability for ground-controlled flight up to 150km, beyond which guidance is subject to the autopilot.
- 21. Iraq states that early UAV programmes, including a Modified MiG-21 were not associated with CBW agent delivery. This is contrary to statements made to UNSCOM inspectors.
- 22. Information regarding nine UAV programmes dating before1994 is provided under the biological weapons section, but the proviso that they are not associated with biological weapons The Declaration includes limited details in the missile section of two new UAVs, named the Almusayara-20, and the Almusayara-30. The 20 and 30 designations are likely related to the claimed payload capability of the UAVs stated as 20 and 30 kg respectively. Both UAV are claimed as dual role target drone and reconnaissance UAVs. Disclosures regarding Iraq's primary UAV development company Ibn Firnas, suggest also that a helicopter UAV is also in development, but no further programme information is provided. Since the Almusayara programmes began after 1998 there are no earlier UN declarations; however, Iraq claims that the UN has been informed of both programmes, through the November 2002 semi-annual declaration.
- 23. Verification of Iraq's UAV capabilities is required, as UAVs with the configurations reported typically embody much greater performance than Iraq has declared. The combination of small range figures, modularity of payloads, and the ability to navigate autonomously is a serious concern. We assess that Iraq possesses UAVs with maximum ranges of approximately 500-700 km.

\mathbf{BW}

- 24. The Declaration is essentially the same information as provided to UNSCOM previously, which failed to account for the BW programme. The Declaration does not address any of the issues raised by either the UK Dossier, or UNSCOM.
- 25. Although the amount of data provided on BW appears impressive, it comprises the material provided in the 1997 Full Final and Complete Disclosure (FFCD), complete with the original typographical errors; this in turn was repetition of information provided in 1996. The information provided in 1996/97 has been subject to a number of international reviews, all of

which concluded that Iraq had failed to provide a technically coherent account of its BW programme. Also, names included in earlier FFCDs have been systematically removed, with the comment that these will be provided, on request, to UNMOVIC.

- 26. The only new material is a list of 40 sites referred to as "additional sites for biological activity including activities that have no connections to proscribed programmes". The account is superficial, and does not include sites we know from UNSCOM and intelligence to be capable of manufacturing dual use equipment, weapons or components for the growth of microorganisms. Many of the dual-use sites monitored previously by UNSCOM have not been included.
- 27. There is no acknowledgement of any proscribed activity post 1991, although neither is there a denial of such activity. Iraq has failed to account for areas of UNSCOM concern including growth media; has neither detailed all sites known to be associated with the programme, nor acknowledged the acquisition of some BW agents as part of the BW programme; has failed to provide full, documented, accounts of the production of agents and weapons, and has not acknowledged the military dimension of the Biological programme. There is no evidence that the programme has been terminated; indeed, we continue to judge that Iraq retains seed stocks of biological warfare agents, and the means to produce them on an industrial scale.

CW

- 28. As with BW, although the Declaration appears impressive, it essentially repeats information provided either in FFCDs, or in response to specific questions raised by UNSCOM. Some of the information has not previously been seen by the UK; and potentially interesting information on chemical activity is included. [...] No attempt has been made to address the issues raised in the UK Dossier.
- 29. Iraq has not addressed the issue of the agents, precursors and munitions for which UNSCOM was unable to account. In particular, Iraq has failed to provide a key document detailing the consumption of special munitions in the 1980s, which was removed from the UNSCOM Chief Inspector; this is despite earlier demands for its return by the Security Council. Without this document, serious concerns regarding Iraq's declarations of chemical weapons remain. Iraq has failed to provide any new information on the 550 mustard shells Baghdad claimed were lost after the Gulf War; neither has any attempt been made to resolve the issue of the outstanding issue of the number of R-400 bombs produced by Iraq. On VX, the Declaration includes no new information to substantiate earlier denials that attempts at production and weaponisation have been made.
- 30. The Declaration appears to reflect an attempt by the Iraqis to carry-out a new material balance estimate, which they claim is based on two documents found in 1995. This may be a reference to the Haidar Farm Documents (named after a chicken farm where they were located), which were released by Iraq immediately after the defection of Lt General Hussein Kamil in 1995. [...] Containing about 2 million documents papers, videos, faxes, microfiche, photographs, etc, they were catalogued by UNSCOM and analysed. Iraq is only partly aware of their contents, which provide both an insight into the WMD programme, and the extent of Iraqi transparency. Iraq had hoped that the documents would satisfy UNSCOM and IAEA, and that their outstanding concerns would be resolved. In practice more issues were raised and continue

to be problematic. The documents appear not to have been included in the Declaration, and our preliminary analysis suggests the Declaration has confused, rather than clarified the issue.

- 31. Information is provided on some 30 sites of concern for the period 1991 to 2002, including Fallujah II. Sites at which chemical activity reportedly takes place appear in other parts of the Declaration also. Not all the relevant information has yet been translated, but the information on production processes at Ibn Sina suggests a previously unknown civil chemical capability, which could support a CW programme. Details are provided also of reconstruction activity at the Fallujah II site over the last ten years, which is broadly in line with our own assessment. Overall, while Iraq has failed to provide a full list of where 'chemical' activities take place there is the possibility that information of potential significance remains to be translated.
- 32. The Declaration does not admit to any offensive CW activity since 1991, nor is there any admission that Iraq possesses stocks of agents, equipment and weapons other than those declared previously to UNSCOM. We continue to judge that Iraq has an offensive CW programme.

Nuclear

- 33. The Declaration includes materials essentially identical to the FFCD issued to the IAEA in 1998, and a new extended summary of activity prior to 1991. A new volume in Arabic, which has yet to be translated fully, summarises activities at the former nuclear sites and other key supporting sites from 1991-2002. The Declaration fails to address any of the issues raised in the UK Dossier. Of note, some activity possibly relevant to primarily the missile and biological programmes is reported only in the nuclear section.
- 34. The Declaration provides a largely accurate description of the pre-1991 nuclear weapon programme, but maintains that no weapon-related work has been undertaken since the inspectors left in 1998. However, by concentrating on the pre-1991 programme, and on the current activities and related materiel acquisitions at known sites, the Declaration does not address the issues of expertise, documentation and post 1998 procurement activity which underpinned the assessments in the UK Dossier. The procurement activity included in the Dossier indicated the revitalisation of a gas centrifuge uranium enrichment programme; e.g. Iraq had tried to procure anodised high-strength aluminium tubes, with possible centrifuge applications. [...] the Declaration claims that Nassr had not acquired any such "dual use" items.
- 35. The Declaration is consistent with the assessment of Iraqi nuclear-related activities, as they were understood when the IAEA inspectors left in 1998. Issues of concern in 1998, such as the formal closure of the programme and particular details of the centrifuge and weaponisation programmes, remain unresolved.
- 36. The description of the pre-1991 programme contained in the Declaration is corroborated by intelligence. The Declaration, not surprisingly, fails however to address the restaffing of the programme in 1998 [...]. Imagery indicates that some of the sites included have been altered since 1998, but the Declaration does not include any references to such activity.
- 37. It is assessed as unlikely that Iraq will attempt to maintain the nuclear programme, and [...]. However, the Declaration provides useful material for the IAEA inspectors to check in the field.