

Annex I Suspected WMD-Related Dual-Use Goods and Procurement Transactions

The following is a list of procurement transactions, contracts, attempted transactions, or contract tenders of products of suspected dual-use goods. The section below lists terms used by ISG throughout the report and this particular annex, as well as summarizes specific UNSCR affecting member states' obligations in exporting dual-use and military goods to Iraq.

- **Permitted Goods:** UNSCR 661 limited exports to Iraq to medical supplies, foodstuffs, and other items relating to humanitarian needs, but the UN nonetheless required that all dual-use goods requested by Iraq be reviewed and approved by the UN Sanctions Committee prior to the exportation of such humanitarian goods. Regarding the importation of foodstuffs and medicines, the Iraqis notified the Sanctions Committee.
- **Dual-Use Goods were subject to UN approval:** From 1990 through 1996, UN member states were allowed a free hand in interpreting what goods they considered to be suitable for export to Iraq. In 1996, UNSCR 1051 (1996) established an import/export monitoring system for Iraq. Under UNSCR 1051, Iraq and countries exporting to Iraq were obliged to notify the UN of any "dual-use" items as described by the 1051 List. This list of dual-use goods was subsequently modified by UNSCR 1409 (passed in 2002) that became the basis of the Good's Review List (GRL). From 30 May 02, the date of UNSCR 1409, member states were permitted to sell dual-use goods not included on the GRL with the approval of the Sanctions Committee, while exports of goods described by the GRL had to be submitted to the UN for their consideration and approval.
- **Prohibited Military Goods:** UNSCR 661 and 687 prohibited UN member states from exporting military goods to Iraq. Therefore, any goods "specially designed" or "modified" for military use were banned for export to Iraq (prohibited). "Goods"

included equipment, component parts, technology, and software (including software used for the development and production of military goods).

The goods described below appear to be dual-use as specified by the 1051 or the GRL, and consequently could have been of use to Iraq for the development, production or use of WMD. *However, without full technical specifications of the items or knowledge of whether UN approval was granted for these exports, ISG cannot determine whether UN sanctions were actually breached with the procurement transactions summarized below. Investigating possible breaches of sanctions relating to the export of dual-use goods is outside the scope of ISG.*

Chemical Dual-Use Related Procurement

Possible Violations of UN Sanctions by French Companies

2002—French Company Carbone Lorraine Supplied the MIC with Chemical Warfare Raw Materials

As of August 2002 the former Iraqi Regime and the French company Carbone Lorraine had been cooperating for many years in the procurement of high-tech industrial equipment, some of which had WMD applications.

2001—Attempt To Procure Mobile Laboratory Trucks

A French firm known for violating UN sanctions submitted a request for bids to a South Korean and a German company for 20 mobile laboratory trucks in August 2001. The end-user for the trucks was pur-

ported to be the Iraqi General Company for Water and Sewage.

- Its stated research areas were the breeding of animals such as cows and sheep and certain types of crops.

Possible Violations of UN Sanctions by Indian Companies

1999—NEC Company Assists Iraq in the Purchase of Chemical Equipment and Precursors

Reportedly, the Indian company NEC and the Iraqi company Al-Basha'ir combined resources in 1999 to set up a front company called Technology Trading S.A. (TTSA). TTSA appeared to conduct research on herbicides, pesticides and other agriculture-related issues. Baghdad could have directed TTSA to research and development of chemical dual-use programs for the Iraqi government.

- Iraq used TTSA and NEC to purchase chemical laboratory equipment and precursors from India.
- These items were shipped by land via the Syrian and Jordanian borders using false cargo manifests and bribes to preclude customs inspections.

Biological Dual-Use Related Procurement

Sales of Biomedical Equipment Technology and Services by Swiss Companies

1995—Purchase of Reagents by an Iraqi Front Company

Reportedly, an Iraqi front company called Al-Eman purchased a kit of reagents worth \$5,000 from the Swiss firm Elisa on behalf of an organization named El Ibaa in 1995. El Ibaa was a special unit in the Iraqi MoA.

- El Ibaa was directly connected with Saddam, had a special research facility, and was granted an “unlimited” budget.

Possible Breaches of UN Sanctions by Austrian Companies

2001—Negotiations To Procure Autoclaves

AGMEST and the Al Rafad Scientific Bureau for Promoting Drugs and Medical Appliances, both located in Baghdad, negotiated a contract for the Iraqi Ministry of Health for autoclaves from an Austrian firm in early 2001.

- Two of the autoclaves were reportedly intended for the Vaccine and Serum Institute in Baghdad, a probable reference to the Amiriyah Serum and Vaccine Institute (ASVI).
- In July 2002, Sabah N.M. Ali of AGMEST in Baghdad, Iraq, Firas Kadhum of the Iraqi Al Rafah Scientific Bureau for Promoting Drugs and Medical Appliances, and an official from a Jordanian firm negotiated a contract for autoclaves, sterilizers, and vacuum pumps from the Austrian company with the end user being SDI.

Possible Breaches of UN Sanctions by German Companies

2001—Attempts To Acquire Biotechnology and Biological Weapons-Related Technology and Expertise

The Amman, Jordan office of the Iraqi front company Winter International forwarded offers for dual-use laboratory equipment from a German firm to the Winter International office in Baghdad, in March 2001. The end-user of this equipment was purported to be the Iraqi MoI. The equipment offered included:

- An electrophoresis system including a special atomizer with rubber bellows for producing reagent mists. This system can be used for recombinant DNA process-cloning and many other molecular biology applications.
- A refrigerated ultracentrifuge, a microcentrifuge, a low temperature freezer (between -30 and -80 degrees Celsius), and an automatic DNA-analysis system with mono-laser. This equipment is on the UN dual-use monitoring lists and would have required verification.
- A moisture purging vacuum pump and electroporator. This equipment is used for plasmid cloning.

2002—Attempts To Procure a DNA Synthesizer

From August 2002 through February 2003 representatives from a Jordanian trading company with links to Iraq attempted to purchase a DNA synthesizer from a German based company. This equipment was restricted under the UN GRL.

- An official claiming to be the managing director of the Jordanian firm Al Theker forwarded the information to Iraq. The report stated that it appeared that the Jordanian firm's official was forwarding information back to the Baghdad-based Wateera Company.

Possible Breaches of UN Sanctions by Danish Companies

2001—Procurement of Precise Atomizer Nozzles

Although Iraq was able to indigenously produce most of what it required for its biological agent programs, they were not able to create or fabricate all of the necessary equipment for CW and BW weapons programs. It was also important for Iraq to procure the appropriate spray dryers in order to obtain *Bacillus Anthracis* spores in a dried form. It is well known that the persistency of the spores in this form is much longer and more stable than in the liquid form.

- It was known for certain that Iraq was able to make most of the mechanical components for spray

dryers. What was in question was their ability to manufacture the very precise atomizer nozzles required to produce particles in the optimum size range.

- It is believed that Iraq obtained two very capable spray dryers from the Danish company, Niro Atomizer Inc. One of these Niro spray dryers was installed in Al Hakam in the *Bacillus Thuringiensis* (BT) production line and was used in the production of BT in the 1-3 micron size range.
- It is believed that this spray dryer was destroyed with the rest of Al Hakam; however, it cannot be confirmed that the critical atomizer nozzle was also destroyed.
- If the atomizer nozzle from Al-Hakam was retained, Iraq may have been able to reverse engineer it, although the precision required would have been a challenge for the Iraqis.

Possible Breaches of UN Sanctions by Italian Companies

2002—Attempt To Procure Biotechnology and Bio Weapons Related Technology and Expertise

In January 2002, the Al-Mazd Group for Medical and Engineering Systems and Technology (AGMEST) in Baghdad requested a quotation for 10 freeze dryers through the Iraqi Ministry of Health from an Italian firm.

2002—Attempt To Procure Dual-Use Autoclaves

In March 2002 the Iraqi firm Al Mutasem Engineering used a Jordanian intermediary company, to contact an Italian firm and receive a price quote for dual-use autoclaves.

- Autoclaves are commonly used in laboratories to sterilize equipment. They are not a vital part of a BW program as there are other means to sterilize equipment.

Possible Breaches of UN Sanctions by Turkish Companies

2002—Procurement of CBW Protective Equipment

A Turkish firm sold and transferred atropine auto-injectors to the Iraqi government starting in August 2002. The company also provided coordination in response to Iraqi requests for chemical protective equipment, unspecified laboratory chemicals and biological growth media.

- In December 2002, the same firm continued to work with the Iraqi government on a new order for atropine autoinjectors and was also working to fill Iraqi orders for additional CBW protective equipment; specifically 600 microbial decontamination systems, 600 CBW protective kits including protective masks and garments, and 10 sterilizers.

Possible Breaches of UN Sanctions by Indian Companies

2002—Attempt To Procure Biotechnology Equipment

According to reports, an Indian export company provided a quotation for a dry powder injection-filling project at the Al-Anaam Pharmaceutical Company packaging plant in Baghdad.

2002—Attempt To Procure Biotechnology technology

According to reporting, in late 2002, Iraq's State Company for Vegetable Oil issued tender no. 649/2002 to several different Iraqi trading firms in an attempt to procure detergent production facilities that included high-capacity spray drying equipment and cyclone filters. An Indian firm was the only supplier to present Iraq's State Company for Vegetable Oil with an offer.

2003—Attempt To Procure Dual-Use Drugs

In January 2003, an Indian firm offered to deliver 10

metric tons of bulk Ciprofloxacin to the Iraqi State Company for Manufacturing of Drugs and Medical Appliances, Kimadia's Samarra Drug Industries.

- Ciprofloxacin is a widely used antibiotic that could also be used to treat Anthrax infection. It was specifically added to the UN Goods Review List (GRL), pursuant to UNSCR 1454.
- Iraq's procurement and stockpiling of Ciprofloxacin would have facilitated the country's employment of BW against coalition forces, Iraq's neighbors, and/or its own citizens.
- There is insufficient data available to confirm the completion of this deal.

2003—Transfer of Hormone Tablet Production Manufacturing Technology

An Indian firm working through representatives of the Syrian Group Company (SGC) Baghdad offices, provided an offer for a hormone tablet facility to Iraq in late January 2003. The client for the facility was identified as "M/S Al-Amin" which is very likely the Al-Anaam Pharmaceutical Company.

Nuclear Dual-Use Related Procurement

Possible Breaches of UN Sanctions by Belarusian Companies

2001—Contract for Ferrite Materials Including Magnets

The MIC company Al-Tahadi had a contract with the Belarusian company, Balmorals Ventures, for ferrite materials, including permanent ferrite magnets.

- Some of the equipment was received from this contract, to include, a press machine and a mixer.

- The MIC initiated direct contact with the Belarusian company and therefore neither Al-Sirat nor Al-Najah were involved in this procurement attempt.

Possible Breaches of UN Sanctions by Romanian Companies

2000—Production Lines of Anisotropic and Isotropic Cast AlNiCo Magnets

The MIC company Al-Tahadi had two contracts for production lines for magnets. The first contract was signed in approximately 2000 with a Romanian company, Uzinimportexport, for production lines of both anisotropic and isotropic cast AlNiCo magnets.

- The contract was worked through the private front company Al-Sirat.
- Al-Tahadi received other offers for this production line. For example, an Indian company, NEC bid on the contract through the front company Al-Najah, but the Romanian company had a better price.
- Al-Tahadi did not receive equipment or materials from this contract.
- The contract included an output capacity of one ton of magnets per year, raw materials for two years, training for two years, and equipment. The equipment included a 25kg induction furnace, electric furnaces for heat-treating, facilities for producing

molds, facilities for measurements and magnetization, and magnetic annealing furnaces.

Al-Tahadi did not have a plan for acquiring the raw materials after the two year contract expired because these materials were readily available. The AlNiCo production lines did not include the sintering process. The magnets specified in the contract were ring magnets, cubicle magnets and cylindrical magnets with a mass of 0.5 to 500 grams.

Delivery Systems Procurement

For a listing of Iraq's illicit procurement of missile delivery systems commodities, see the Delivery Systems Procurement Chapter.

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Annex J The Procurement of Conventional Military Goods in Breach of UN Sanctions

Before the 1991 Gulf war, Iraq indigenously produced ammunition, small arms, gun barrels, and other basic military items. The war, however, destroyed Iraq's military industrial base leaving Saddam's Regime with critical shortages of military spare parts, ammunition, and other materiel. United Nations Security Council Resolution (UNSCR) 661 frustrated Saddam's attempts to reconstitute his military capacity following Desert Storm, because UNSCR 661 prohibited UN members from exporting conventional military goods and related technologies to Iraq.

Many individuals, foreign companies, and some countries knowingly violated UN sanctions. In some cases, governments failed to comply with or enforce sanctions out of recalcitrance of international norms or inability or negligence to monitor the commercial activities of certain individuals and firms willing to conduct illicit business with Saddam's Regime. Governments not only included UN members, but also permanent members of the UNSC.

Iraqi efforts to obtain military goods and related technologies in the mid-1990s until OIF in March 2003 can be divided into several categories: raw materials; consumables; and military goods. Iraq sought materials such as steel, aluminum and titanium to supply its military manufacturing industry. Under Saddam, Iraq constantly needed spare parts for manufacturing and for military equipment. As with any military organization, the Iraqi military always required consumables such as batteries, tires, and ammunition. **We judge that Iraq's most pressing requirement, however, was for military equipment.**

- For potential suppliers, the sale of military equipment offered the strongest profit margins.
- Since the beginning of sanctions in 1990, Saddam successfully acquired a wide range of military goods or their component parts for SAM systems, main battle tanks, anti-tank guided missiles (ATGM), combat aircraft, GPS jammers, and night-vision equipment.

The United Nations Sanctions on Iraq

The UNSC passed numerous resolutions from 1990 to 2003 prohibiting member states to export, military goods and technology to Saddam's Regime, placing financial constraints on UN members conducting business with Iraq, establishing WMD and military restrictions on Iraq, and the formulation and implementation of the UN OFF program. UNSC passed two UNSCR, 661 (1990) and 687 (1991) that specifically prohibited the export of military goods to Iraq by UN members. Paragraph 24 of UNSCR 687 reads:

In accordance with UNSCR 661 and subsequent related resolutions and until a further decision is taken by the Security Council, all States shall continue to prevent the sale or supply or promotion or facilitation of such sale or supply, to Iraq by their nationals or from their territories or using their flag vessel or aircraft, of; arms and related material of all types, specifically including the sale or transfer through other means of all forms of conventional military equipment including paramilitary forces and spare parts and components and their means of production for such equipment.

These restrictions included prohibitions on the licensing of military technology and other transfer arrangements used in the production, utilization, or stockpiling of military items. These UNSCR also prohibited the use of personnel or materials for training or technical support services relating to the design, development, manufacture, use, maintenance, or support of military goods.

- Throughout this investigation, ISG has exploited information from captured documents from various Iraqi ministries and agencies and debriefings of both detainees and willing sources from the former Iraqi Regime. Examples found by ISG, provided below, represent only a small cross section of the total illicit dealings with Iraq. However, a full investigation of all violations of UNSCR vis-à-vis Iraq is outside the scope of ISG's investigation.

Possible Breaches of UN Sanctions by Ukrainian Companies

Summary of Ukrainian involvement 1995-2003:

Documents obtained by ISG indicate that Iraqi delegations visited Ukraine in 1995, and Ukrainian groups visited Iraq between 1998 and 2003. During these visits, both parties discussed missile deals. Another source indicates that in 2001 and 2002 Ukrainian delegates provided Unmanned Aerial Vehicle (UAV) components to Iraq. In addition, ISG recovered papers that indicate Ukrainian companies had offered to supply other military equipment to Iraq.

1995-2003: Ukrainian and Iraqi Delegation Visits

Information supplied by an Iraqi scientist, indicates that Iraqis visited Ukraine in 1995 and that the Al-Karamah State Establishment hosted many visits from Ukrainian suppliers who were negotiating for contracts from 1998 to 2003.

- An Iraqi scientist stated that Ukrainian suppliers were the most frequent visitor to Iraq assisting Iraq with its missile program. The Ukrainians visited many times led by a Mr. Orshansky. Orshansky usually brought 50 to 60 people from multiple Ukrainian companies dealing with a range of issues including civil power projects as well as missile and other military technologies. The Ukrainians wanted to sign a contract to supply theory, design, and equipment, but the deal was never completed due to the defection of Husayn Kamil from Iraq in 1995.

2001-2002: Ukrainian Company May Have Supplied Military Goods to Iraq

A source indicates that a Ukrainian company supplied components for UAV.

- In 2001 and 2002, the Ukrainian company, Orlliss, provided UAV components, such as engines and gyroscopes, to the Iraqi Government. The individual from Orlliss who handled these transactions was Olga Vladimirovna, Director of the Orlliss Company. Vladimirovna provided her business card to several individuals at the Ibn Firnas Company.

2003: Papers Indicate Ukraine Company Supplied Military Goods

Recovered papers indicate that a Ukrainian company was offering to supply military equipment in early 2003.

- Recovered documents indicate that the Al-Karamah State Establishment purchased equipment through ARMOS Trading Company in Baghdad from the Mont Elect Company, Ukraine before January 2003. Two payments were made of \$405,000.00 for the equipment. Signatures on the document included representatives from: ARMOS; Al-Karamah State Establishment; Sa'ad General Company; Al-Karamah; Dr. Sergei Semonov, for the Montelect Establishment, and the Trade Office of the MIC.

Possible Breaches of UN Sanctions by Cypriot Companies

1997: Cypriot Company Offered T-72 Tanks, Anti-Aircraft Missile Systems, and Sniper Rifles

Recovered documents refer to a Cypriot company's offer of military goods; including tanks, anti-tank weapons, and anti-aircraft weapons systems.

- A letter dated 23 August 1997 from a Cypriot company F and F Dawn, Ltd. (located in Limassol, with offices also in Paris) shows that the General Manager, Ahmad Fayiz Al Mirabi, offered military goods to the Al-Basha'ir Company and Mr. Munir Mamduh.
- A second letter, marked 'Top Secret', from the Office of Army Chief of Staff Major Colonel Aziz Ahmad Husayn to the GMID, dated 21 September 1997, refers to an offer to sell Baghdad "tanks (142 T-72 with a possible total of 300), bombers, missiles (Tow-2 /anti-tank), anti-aircraft missiles system (Stinger) and Barrett USA semi-auto sniper rifles."

Possible Breaches of UN Sanctions by French Companies

Summary of French involvement 1998-2003: Some French businessmen sought business with Iraq during this period. In one instance, a French businessman brought a tank carrier to a weapons convention in Baghdad, and in another instance, a French electronic warfare expert visited Iraq. In addition, the MIC attempted to acquire components for the French-manufactured Roland missile system.

1998-1999: Tank Carrier Imported to Iraq

A letter from Aqra General Trade Company Baghdad dated 18 November 1998 requests an entry visa and reads, “Find attached herein a copy of the passport of Jean Claude, a French citizen and the manager of the French company Lura. Mr. Claude will bring a tank carrier model to the MOD that will be supplied to Baghdad by the end of this month. Kindly facilitate the procedures to issue him an entry visa to Iraq, considering that our company will bear his stay expenses in Baghdad.”

- A second letter from Aqra General Trade Company Baghdad dated 8 December 1998 reads, “Reference to our letter we would like to inform you that the vehicle (Tank Carrier) arrived at Abi Gharib [most likely Abu Ghurayb] Customs Department, kindly notify the competent authorities to give Mr. Jean Claude an entry visa to Iraq ASAP.”
- A letter to the Electrical and Mechanical Engineering Directorate from the MoD Armament and Equipping Directorate dated 12 September 1999 reads, “kindly acknowledge that Mr. Jean Claude, Manager of the French Company, Lura visited the country on Saturday, 11/09 to operate the Rescue and Armor Transport Vehicle stored at Modern Vehicles storehouse. Kindly appoint an officer to escort the afore-mentioned with the technicians for three or four days.”
- Another letter to the Armament and Equipping Directorate dated 18 September 1999 from the Manager of the Aqra Company, states, “During the visit Mr. Jean Claude, Commercial Manager of the French company, made to Baghdad, it was

agreed, in the presence of the committee formed by the ministry to take over and inspect the vehicle, to send a technical expert to train some specialists how to operate the vehicle. Kindly take the necessary actions to issue entry visas for Jean Claude, the Commercial manager and Philippe Robert, the Technical Expert.”

1999-2000: Deputy General Manager of French Company Visits Iraq

Recovered documents include letters dated December 1999 and January 2000 that show that the Deputy General Manager of a French company called SOFEMA planned to visit Iraq on 15 January 2000 on behalf of a number of French Military Companies. Mr. Dominique Salini’s 29 December 1999 introduction letter from the al-Hadar Company is included in the textbox below. A subsequent letter to the GMID M6 Section from the head of Air Defense Security dated 3 January 2000 requests an opinion on holding a meeting with a representative from the IIS and Salini.

2002: Documents Indicate French Experts Visited Iraq and Agreed to Military Technology Transfer

A recovered document indicates that a French electronic warfare/radar expert met with representatives of the Al Kindi Research Facility in November 2002. The purpose of the meetings was to facilitate military-related microwave, direction finding, and passive radar technology transfer. The translated documents include military-related technology transfers and Iraqi contractual agreements with foreign manufacturers. ISG also acquired two meeting logs among the documents.

- The subject meeting log indicated that on 3 November 2002 an individual identified as a French expert and referred to as Mr. Cloud (possibly Mr. Claude from the prior paragraphs), visited the Al Kindi Electronic Warfare/Radar Research, Development, Test and Evaluation Center. The Log states that the office of Mohammad Fadil financed Mr. Cloud’s visits to Iraq. Fadil brought Cloud to Iraq on 2 previous occasions.

Letters Dealing With a Planned Visit of Mr. Salini of the French SOFEMA Company to Iraq in Early 2000

*In the name of God, the Most Merciful, the Most Compassionate
Republic of Iraq
Presidency of the Republic
General Directorate of Military Intelligence
Air Defense Security System*

*Serial No. /Sect 2/Div 5/
Date /1/2000*

*To/General Directorate of Military Intelligence/M4/Sect 6
Subject/Requesting for your opinion*

- 1. Al Hadar Company "Al Hadhar Company" Letter, numbered 271, dated 29/12/1999, which has been sent by your directorate.*
- 2. Please give us your opinion on holding a meeting between Mr. Dominique Salini, Deputy General Manger Commercial of the French Company SOFEMA, and our representatives.*

Please review and inform us...with our best regards.

*Intelligence Major General Head of Air defense Security System
3/1/2000*

Call the company representative in Iraq (TC: Handwritten note).

Waiting for the company to respond to the new appointment 17/1. (TC: Handwritten note).

Letterhead.Al-Hadhar.jpg

In the Name of God, Most Merciful, Most Compassionate

Serial No.: 271

Date: 29/12/1999

Sect 6

Mr.: NR993 gentlemen (TC: There is a big scratch over the "NR993" and "Sect 6" is written in place of it)

*Letters Dealing With a Planned Visit of Mr. Salini of the French SOFEMA Company to Iraq in Early 2000
(continued)*

Our Greeting,

*Mr. Dominique Salini is visiting Iraq. He is the **Deputy General Manager Commercial** of French Company SOFEMA, which is considered marketing company representing a lot of French military companies. We kindly request a meeting to discuss your needs with him. He will visit Iraq between the period 15/1/2000 to 19/1/2000. Attached is the company catalog for reviewing.*

With all our respect.

***Attachment:** Company catalog.*

Deputy Manager

'Isam Al 'Aqidi

Copy for the branch

29/12

Bulgaria - Svishtov 5250 – St. T. Milanovich No.10 A – Telefax: 00359631-25577

Iraq – Baghdad – Al-Masbah Tel: 7172829- Fax: 7172738 – Telex: 213175 ISAM –

P.O. Box: 4245, Sabe Abkar - Baghdad

- At the 3 November 2002 meeting, Cloud was brought in due to his expertise and experience in obtaining equipment in support of the Dawa II. Fadil, Cloud, and Saeed discussed technical issues indicating he could provide solutions through Fadil's office.
- Fadil, Cloud, and Saeed also discussed the technical specifications of Radioson equipment, direction finding equipment, and a land-based station that was tabled in a previous meeting.
- Saeed, Fadil, and Cloud discussed the possibility of obtaining or constructing a base to manufacture microwave parts, passive and active sensors, signal enhancers, and low distortion components. Cloud promised to provide Saeed and Fadil with information regarding these electronic warfare products.
- A second document identified as a technical cooperation memorandum outlines Saeed's meeting with Cloud. The memorandum was presented to the General Manager of the Al Kindi Electronic Warfare/Radar Research Center. The document confirms that a meeting took place as scheduled with Saeed, Fadil, and Cloud.
- Fadil, Saeed, and Cloud agreed to cooperate so Cloud could facilitate the transfer of high frequency (HF), microwave, and passive radar military-related technology to Iraq. A memorandum of "4 November" (probably 2002) requests permission to proceed with the technological transfer process.

2002-2003: Iraq's MIC May Have Attempted To Procure French Roland Missile Parts

A source related that Iraq attempted to acquire battlefield and air defense technology 25 days before the onset of OIF.

- Beginning in late December 2002, the Iraqi MIC initiated efforts to acquire replacement parts for the Roland II surface to air missile system, valves for Iraq's air defense system, and various other high technology items with military and battlefield applications. These efforts were underway up until 23 days before the onset of hostilities. The MIC

Commercial Section corresponded with Majda Khasem Al-Khalil (a Lebanese female) who in turn met directly with the French Thompson Company regarding the acquisition of the missile parts.

Al-Khalil later provided samples of night vision goggles and protective Kevlar devices to the MIC. The paragraphs below describe the development of this effort as portrayed from the Iraqi side.

- On 25 December 2002, a high level MIC official requested permission to acquire 'hard cables' for Iraq's air defense headquarters. The MIC official supplied Al-Khalil, Sour Debbar, and Dr. Awad Al-Souri as points of contact capable of supplying these materials. Al-Khalil was described as "the Lebanese."
- On 22 February 2003, Ra'ed Ismail Jamil, General Manager of the Salahadin General Company, and a Brigadier General Hassem discussed the purchase of parts for the Roland II system with Al-Khalil. A communication sent the same day by Jamil and Hassem notified the MIC Deputy Minister that, based on his orders, they invited Al-Khalil to reach "clear and final agreements" regarding subjects already discussed and that they had arranged for her safe passage with border control.
- During a meeting with Jamil and Brigadier Hassem, Al-Khalil mentioned that she met with French experts regarding to rehabilitating Iraqi Roland II parts. Al-Khalil had learned from those experts that it was not possible to rehabilitate those parts due to their deteriorated state, but it was possible to provide 50 new parts at the same price to repair the old ones. The 50 new parts met the same technical specifications the Iraqi MIC stated for the old parts. Al-Khalil informed Jamil and Hassem that she provided the French experts with technical questions and designs. The aforementioned experts addressed the questions and designs "thoroughly, clearly, and completely."
- On the evening of 22 February 2003, Al-Khalil promised to have the new components within ready 30 days of the ministry's acceptance of the contract. Al-Khalil further agreed to ship the old Iraqi parts

back to Baghdad without repair. The MIC assumed responsibility for the transportation and movement of the parts through Iraqi customs. The Ministry believed that they could use internal components from the old parts as spare parts in the future.

- Al-Khalil further stated she was ready to import “set valves from either types, 12 sets of each at \$250,000” as requested by the MIC Deputy Minister. Al-Khalil agreed to deliver these items within 10 days of signing of an agreement. She further mentioned that “the French side” was ready to implement this agreement and take care of the documentation process regarding shipping and warranty certification, but that she would need some money to cover this process. Al-Khalil stated she was ready to provide a bond accepted from the Iraqi side towards a down payment and she provided complete specifications for both sets of valves.

Possible Breaches of UN Sanctions by North Korean Companies

Summary of North Korean involvement 1999-

2003: Starting in 1999, North Koreans visited Iraq to hold talks relating to rocket engines. By 2003, North Korea and Iraq had negotiated and signed contracts for missile components, ammunition, and other goods. North Korea later reciprocated by inviting the Iraqi leadership to Korea. According to documentation, in May 2001 a delegation from North Korea, including specialists in defense, were due to visit Iraq.

1999-2001: Planning for Military Procurement Delegation Visits

Recovered documents indicate that Iraq and North Korea government officials proposed numerous delegation visits in letters written between 1999 and 2000.

- A letter dated 11 August 1999 marked ‘Top Secret and Personal’ from the Presidential Secretary and addressed to the Minister of Military Industries, refers to an invitation and a letter on 2 August 1999. The letter indicates that permission for the MIC and the MoD had been granted to allow a verbal invita-

tion to the North Korean Defense Minister or his deputy to visit Iraq.

- A letter dated 28 February 2000, shows that the North Korean Defense Industry Department of Korean Workers Party officially invited an Iraqi military delegation to visit North Korea. The visit was arranged to show North Korea’s willingness to supply Iraq with military equipment and to allow for discussions between military experts. The letter later states that the North Koreans believed the proposed visit would open good relations between the militaries “against the common enemies.”
- A letter from the Defense Industry Department of Korean Workers Party, dated 30 July 2000, gave compliments to the Iraqi Minister of Military Industries and indicated an appreciation for the invitation of the Korean delegation to Iraq. “On our belief, in the present situation of international circumstance, it will be most preferable that your delegation visit our country first to open the wonderful relationship and to continue the reliable and extensive cooperation in the field of military industries between two ministries. In this great chance together with, we would like to emphasize that our last invitation of your delegation to our country remains still valid and effective.”
- A letter from the Defense Industry Department of Korean Workers Party to the Minister of Military Industries in Iraq (probably the MIC), dated 23 September 2000, accepted Iraq’s invitation and acknowledged that the North Korean side would send a high-ranking delegation, headed by the Deputy Minister, for seven to 10 days starting on about 8 October 2000. The letter indicated that the North Koreans hoped this visit would be a “turning point” for establishing new relations in military fields between the two ministries against “our common enemies.”
- A record of a telephone call dated 5 October 2000 between the Secretary General and Brigadier General Hadi Tarish, from the MIC, with the Staff Brigadier General A’adel Hameed, specified the proposed subjects to be discussed during the North Korean delegation’s visit on 10 October 2000.

11 August 1999 Handwritten Document From the Director of the IIS marked Secret/Personal

1. This organization is preparing for cooperation with Iraq in the fields of furnishing weapons and military equipment, to pass special technology for its manufacture and upgrade as follows:

- a. Jamming systems against enemy aircraft radars, the communication amongst the aircraft, and their communication with ground bases.*
- b. Upgrade of radar systems, command systems, and Russian early warning (radars) used in Iraq, among them (P-14, P-18, P-19, K66, H.FINDER).*
- c. Development of air defense systems, types (Volga and SAM 2).*
- d. Development of automatic firing systems against aircraft launchers.*
- e. Development of special radars for missiles, linking it with systems to disrupt enemy missile targeting.*
- f. Pass on technology for surface-to-surface missiles with a range of 1300 kilometers and land-to-sea missiles with a range of 300 kilometers.***
- g. Long-range launcher tubes, caliber 230mm and 122mm, capacity (22) launchers.*
- h. Pass on technology to build a mini-submarine.*
- i) Repair and maintenance of Eastern made equipment and weapons according to what the Iraqi side has determined.*

2. The Korean side is prepared to send a technical delegation to discuss preliminary measures with Iraqi specialists in order to obtain an agreement on the proposals. After that, the Iraqi side is sending a technical delegation to visit Korea to complete discussions and (conduct) a field survey on the specialized factories.

3. Currently, there is a desire from the Iraqi side to cooperate with the Korean side to arrange and prepare a secret visit for the Korean Minister of Defense or his deputy to Iraq for high-level discussions in this area.

4. The Korean side has conveyed through the source that Iraq is not allowed to associate itself with long-range missiles as specified, but it can deal with missile technology as long as it doesn't exceed the range of 150 kilometers, as decreed by Security Council decisions. Whereas, they exhibit their readiness for cooperation in the fields specified by Iraq.

5. In light of what was presented, we propose cooperation with the Korean proposal, in pursuance of the aforementioned plans, especially and forming a working team from MIC, Air Force Command, Air Defense Command and the Intelligence Service to deal with the proposals and negotiate inside and outside of Iraq. The results have been submitted to the President to receive approval of a visit by the Korean Minister of Defense or his deputy.

Note: This note was directed to a North Korean organization called the "Chang Kwang Group"

The topics included: the upgrade of communications systems, especially HF, the modernization of anti-tank missiles, the possibility of purchasing an assembly line to produce 30mm artillery, the development of SAMs, and air defense systems. The air defense topics described were the modernization of

SAMs, including, "early warning systems, SAM/2 T, and SAM/2 A."

- A captured telephone contact note dated 10 October 2000 confirmed that the first meeting with the North Korean delegation was planned for 11 October 2000 with the MIC Director in attendance. The note

specified that the Iraqi attendees would include staff from the Director, Armament and Accommodations, Staff Brigadier General A'del Hameed, concerned representatives from the Air Force Command-Air Defense Command, Communications Administration, a Navy Representative and a SSM Command Representative.

2000: Contracts Negotiated for Iraqi Defense Programs

Information from a former high ranking official who worked in the MIC, corroborated by captured documents, indicates that Iraq and North Korea had negotiated contracts worth \$10 million to support the Iraqi military programs by mid-2001. These contracts included a Volga air-defense missile homing head, ammunition, small machines, and spare parts.

- Between the end of 2000 and the beginning of 2001, North Korea and Iraq reportedly began discussing contracts supporting the Iraqi missile program, particularly for guidance and control systems. While the head of the MIC, Abd Al-Tawab Mullah Huwaysh, handled the negotiations with the North Koreans, orders for the negotiations were passed directly from Saddam via the Technology Transfer Office of the IIS.
- A five-person North Korean delegation, headed by the deputy Minister of Defense, visited Iraq at the end of 2000. A 7-person Iraqi delegation to North Korea reciprocated this visit, lead by the deputy Minister of the MIC, General Muzahim Sa'b Hasan al-Nasiri. Another North Korean delegation traveled to Iraq in the third quarter of 2002.
- The Harith Company and Al-Karamah State Establishment signed the first contract at the end of 2001 for the development of a Volga homing head by adding infrared sensor. Another 3 to 4 Hutteen Company contracts followed for small ammunition, small machines, and spare parts. The total value of these contracts was \$10 million.
- Iraq also proposed that North Korea supply and install guidance and control kits in 50 of Iraq's Al Samud and Al Fat'h missiles. Each kit would

consist of 2 gyros, 3 accelerometers, and an on-board computer. The first installment was for 10 kits. North Korea, however, rejected the proposal in the near term, but agreed to study it further.

- The Syrian companies Lama and SES allegedly facilitated the Iraq-North Korea contracts, charging an additional 10-15 percent commission on the contract value. (See also the Front Company discussion.)

Recovered documents from 2001 corroborate the information given by this source. These documents show that a North Korean company signed four contracts and discussed others with Iraq. This included the supply of missile components, a deal to modify radars and the Volga missile system, the supply of engineers, an agreement for ammunition manufacturing equipment, and the supply of components for ammunition. These contracts were between the Iraqi companies Al-Karamah, Hutteen, and Al Harith and the North Korean Hesong Trading Corporation, based in Pyongyang. The goods were to be shipped to Syria and then onto Baghdad.

- The first contract was for the procurement of components for short-range missiles, associated test equipment, installation in Iraq, and for the training of Iraqi engineers.
- The second contract was for the modification of ABARONA, P-15 radars, and modifications to the Volga System (S-75), including technology transfer and the supply of 20 North Korean engineers.
- The third contract was for an automatic copying machine for the manufacture of 122mm guns, a screw filling machine, and TNT for munitions.
- The fourth contract was for fuses for 57mm anti-aircraft gun ammunition, RPG-7 projectiles, and delay mechanisms for the RPG-7.
- Minutes of a meeting dated 06 September 2001 refer to another contract that has the *names of high ranking official "His Excellency Pak Gyong Chol the 1st Deputy Minister of D.I"* and Muzahim S Hasan, the MIC Deputy Minister. The minutes refer

to an earlier *meeting held in Pyongyang 11 June 2001 and to a visit by a delegation to Baghdad Iraq from 2 to 7 September 2001*. They refer to 6 contracts in total and to future long-term cooperation. Supplied goods included: ammunition, communication equipment, short-range S-S missiles, artillery and night vision systems, powder for ammunition, and light naval boats.

- A 31 December 2001 letter from SES International (a Syrian Company) to Tosong Technology Trading Corporation indicates that the North Korean company received a cash payment from Iraq's State Oil Marketing Organization (SOMO). SES took a 10 percent commission for their efforts, according to their agreement with the Al-Basha'ir Company, the MIC's chief procurement front company.
- By 2 March 2002, a letter from Al-Basha'ir Company to Tosong Technology Trading stated that contracts were signed and will be financed according to the Iraqi-Syrian Protocol. The letter also stipulated that Tosong must nominate a Syrian company for this purpose.
- In a 4 April 2002 letter, a Mr. J.B.K from the Tosong Technology Corp's Damascus office suggested to Mr. Muzahim Hassan, the MIC Deputy Minister, that a more suitable transportation method for the contracted goods should be found. He recommended that the goods in question should be moved to Syria by aircraft rather than using ship transportation.

2001: North Korean Delegations Plan To Visit Iraqi Intelligence Organizations

A recovered letter dated 16 May 2001 from the authorized manager of the Al Maimana General Trading Company to, intelligence agent nr993 of the Directorate of General Military Intelligence, reads, "For the sake of improving the job that our company, is doing with your department, a delegation from North Korea including a large number of the specialized companies in the field of defense will visit the country for the period from 29 May 2001 to 03 June 2001."

2001: North Korean Delegations Visited Iraq

Evidence supplied by an Iraqi with direct access indicates that the Al-Karamah State Establishment had many foreign suppliers and, in 2001, hosted visitors from North Korea.

- Representatives from a North Korean company reportedly visited Iraq for three days in April or May 2001. The North Korean delegates attended meetings covering a range of subjects, including one meeting focused on rocket engines.
- The North Koreans were interested in technical aspects surrounding Iraq's indigenously produced rocket engines and how Iraqi engineers welded their combustion chambers and nozzle assemblies.
- Iraq's main interest during the discussions was to obtain parts and solutions to missile-related engineering problems.

Possible Breaches of UN Sanctions by Russian Companies

Summary of the Russian involvement 1999-2003:

Russian engineers visited Baghdad providing technical assistance for the al Samud missile program. Russian companies prepared equipment for air defense, offered missile launchers, signed a contract for missile gyros, and invited Iraqis to visit Moscow factories. Russians offered to supply military technology for Iraqi rockets and missiles. Meetings were also held in the Iraqi Embassy in Moscow where Russian companies offered to provide technical expertise to improve and to build weapons systems, including tanks.

1999: Russian Missile Technical Support Visit

A source indicates that seven Russian engineers provided technical assistance to the al-Samud missile program in 1999. The Russians also reportedly supplied machines and parts to Iraq. The MIC arranged and funded the contract that the Iraq Intelligence Service (IIS) oversaw.

- In April 1999, seven Russian engineers spent three months in Baghdad providing technical assistance to Iraq's al-Samud liquid-propellant missile program. The group of engineers included a Russian expert in engines, two experts in guidance and control, an expert in airframes, one who worked on test benches, a lab tester, and one expert in the supply of machines and parts. Each Russian had an individual contract for an unknown amount of money for their technical expertise.
- The visit also included a \$10 million contract for parts and machines such as a flow forming machine, a milling machine, a furnace, and raw materials. These machines and equipment were housed at the Al-Karamah State Establishment.
- The MIC arranged and funded the contract with the Russians. The IIS directorate within the MIC, however, oversaw the contract. IIS officers occasionally attended meetings between the Russians and the Iraqi representatives from the Al-Karamah State Establishment.
- From January to February 2003, a Russian technical team reportedly visited Iraq to train Iraqi technicians on upgrading an air defense system. The Russians conducted the training in Baghdad.
- A second letter dated 16 November 2000 to intelligence agent nr993 of the GMID reads "*Since we have connections with many Russian and French companies that showed its readiness to deal with us in the field of importing equipment of air defense and its spare material*, our company, Al Maymana General Trading Company, Ltd., is happy to present its services to you in the field of importing the materials and the equipment that you need to serve our great Iraq and from a Russian and European origins."
- A third letter dated 3 March 2001, to Intelligence Agent nr993 states, "Our Company, Al Maymana General Trading Company Ltd has done great efforts to provide the armed forces to serve our great Iraq and its leader Saddam Hussein (may God keep him safe). *Through our job, a credible side has proposed the possibility of a Russian Air Defense system, type S-300 PMU (four launching sites with 36-70 missiles) and entering it to the country.*"

2000-2001: Russian Establishment Offered Military Goods

According to captured documents, a Russian company offered to prepare military air defense equipment and a written proposal to supply a defense system called the S-300.

- A letter dated 4 September 2000 from the authorized Manager of the Al Maimana General Trading Co. Ltd., to Intelligent Agent nr993 of the GMID reads, "we are enclosing you the offer of the Russian Lemz Establishment which includes the possibility of preparing equipment of air defense (radars, communications equipment, land services equipment etc)."
- Document exploitation has revealed that Firas Tlas, the son of former Syrian Defense Minister Lieutenant Mustafa Tlas, visited Iraq in July 2001 and discussed a variety of missile systems and components he could supply through Russia. Firas offered to sell Iraq the S-300 SAM and the 270km range SS-26/Iskander-E short-range ballistic missile, or to provide assistance to help Iraq produce the Iskander. Firas claimed that he had previously met with Izakoff, the former Defense Minister of the Soviet Union, who told him that his [Izakoff's] friend owned documents for "TEMPS" missiles called "Sterlite" in the West. Reportedly, Izakoff said the missiles had a range of 1,500 km and were very accurate. Tlas said Izakoff claimed that the missiles were destroyed by Mikhail Gorbachev, but that Izakoff could supply the documents so that Iraq could produce them.

- Huwaysh claimed that Iraq had contacted both Syrian and Russian entities to discuss Iraq acquiring the Iskander missile in 2002. Russia would not export any military hardware without an end-user certificate signed by the issuing government agency, which is the capacity in which Syria would have served.

2001: A Russian Company Offers to Supply Services and Missiles

Documents recovered indicate that a Russian company in which the Russian Government was a principle shareholder (51 percent) offered missile launchers and expertise for the production of military equipment.

- GMID letters mention a Russian Company called Motovilikha Plants Corporation and the Manager, Nikolay Dimitstico. A 13 June 2001 letter informed the Iraqi MoD that the Motovilikha Plants Corporation can export through the Russian Ross Iron Export Organization and that the MoD will receive a bid for the BM-21 missile launcher from them.
- Correspondence between the GMID and MIC also mentions that the delegation from Motovilikha Plants Corporation informed MoD that they could assist Iraq with their expertise in the production of military equipment.
- Correspondence between the GMID and the Military Attaché instruct the GMID to export only through the Ross Iron Export Organization. The Attaché also received a bid on missile launchers (BM 21).
- Captured correspondence reveals that the GMID directed the Military Attaché to contact the Motovilikha Plant Corporation to ascertain if the corporation has a delegation from the Russian Government to handle export of the weapons. The GMID also asked if Motovilikha is prepared to submit a bid for the weapons.
- *The Iraqi Military Delegation, headed by the Assistant of the Army Chief of Staff, transmitted the Gun Directorate requirements to the Motovilikha Delegation.*

- *A GMID investigation of Motovilikha Plants Corporation revealed that the Russian Government owned 51 percent of the shares of this company.* The Military Industry Organization controlled 21 percent of the shares, specializing in the production of missiles. The company employees owned the remaining shares.

- On 21 April 2000, the factory sent specialists to Iraq to submit price offers for upgrades of the BM-21 missile launchers. A letter from the company lists the following goods as “available for supply:”

—The 152mm gun system;

—The towed 120mm gun with an automatic guidance system;

—The 240mm gun with automatic guidance system; and

—Missiles with high explosive warheads.

The company also informed the Iraqi MoD and IIS that they are upgrading the BM-21 launcher system extending the range from 20 km to 40 km. After upgrading the BM-21, it will become the BM 9A52-2.

2001: Supply of Components for Al-Samud Missiles

Captured documents indicate a proposed Iraqi visit to Moscow to submit a list of required missile components, such as accelerometers, gyros, and control electronics, to Russian companies.

- General Major Muzhair Sadiq Saba signed a 9 March 2002 letter on the subject of Russian companies. The letter refers to the contents of a secret letter dated 19 June 2001, concerning the *import of substances for the Al-Samud missile*. Saba described an individual named Iyad abd al-Qahhar abd al-Salam as “a distinguished industrialist.”
- According to the letter, Abd-Al-Salam was assigned to control unfilled missile requirements, such as acceleration sensors (accelerometers), valves, and controlling electronics. Saba further requests that a list of essential required items be provided, so al-Salam can obtain them during his visit to Moscow.

- The letter also indicates that al-Salam carried out the first stage of manufacturing a digital computer for Al-Karamah and that he received an invitation from a Russian company to visit factories in Moscow to obtain detailed knowledge of other products. The letter is from the Al-Karamah State Establishment and is directed to the deputy of the Minister's Council President and the MIC Minister.

2002: Russian and Belarusian Companies Supply Missile Test Equipment

Recovered documents refer to the procurement of missile test equipment from Russia and Belarus.

- A contract from the Al Kindi General Company dated 18 June 2002 is addressed to, "The agreement of the Deputy Prime Minister- the Minister of MIC...to buy the following subjects: checking system of gyroscope with two axes, thermal rooms, and checking vehicles system."
- This signed contract between the Russian System-nikh Company and Al-Karamah State Establishment does not indicate preparation of a checking system of the gyroscope with 3-axis because of the limited investment available from the Al-Karamah and Al-Milad companies. However, the information recorded reads, "it should be known that we have a possibility to get 3 axes information by using 2 axes with adding specified programming with coordinating with Belarus side."

2001-2003: Proposed Procurement of Missile Tracking and Test Equipment

Captured documents describe the proposed procurement of military technology from Russia for the manufacture of missiles and the design and manufacture technology for missile telemetry equipment (tracking equipment).

- Iraqi correspondence from Dr. Zabun, the former head of MIC R&D and of the MIC Special Office, to the Deputy Prime Minister and to the MIC Minister proposed the procurement of Russian missile technology and equipment on 28 November 2001.
- One technology description refers to a Russian special "military standard specification." The special offer from a Russian military expert named

"Yosbov" included a study of the development, manufacture, assembly, and use of missiles, with a total cost of \$100,000 for Russian and English languages copies and \$70,000 for Russian language only. The documentation states that, this technology would particularly "contribute in developing [Iraq's] space and missile programs."

- Another desired technology includes a telemetering system which was described as, "**urgently needed for missile program especially Al-Samud and Al-Fat'h missiles.**" Dr. Zabun described this telemetering system as having a frequency range of between 2.1 to 2.4 GHz with 500 usable channels and an output microwave power of 15 watts. Also, Dr. Zabun listed a requirement for a smaller size unit to fit into the missiles. The radio frequency transmission range for the missile package was specified at 200 km.
- There was also an arrangement for supplying 20 "loaded parts," for 20 experiments. These ground parts were to be placed in three data receiving points transmitted to the missile-monitoring center to allow for analysis and missile tracking. This contract included spare parts, accessories, and a transfer of technology allowing for the design and manufacture of the telemetering equipment in Iraq.
- The telemetering system offered three receiving and transmitting stations with accessories in addition to an operating room equipped with computers and programs for displaying and analyzing data. The offer also included a training course conducted by five Russian experts in Iraq for five Iraqi engineers.
- Dr. Zabun anticipated that the Iraqi cadre training would be conducted in two stages, the first in Moscow, for six specialists and for 600 hours, and the second in Iraq for one month under Russian specialist supervision.
- ARMOS, a MIC-run Iraqi-Russian front company, served as liaison between the MIC and the Russian suppliers. The Iraq military attaché in Moscow provided the contracts and related documents to the Russians for signature.
- The contract was hidden behind the guise of the "nuclear disaster victims fund Al-Karamah." *The*

contract reads “as for the second party (the Russian Nuclear Disaster Victims Fund Institution)—the Russians blockade imposed on Iraq will not be considered ‘a forceful circumstance’.”

- The telemetering package total cost was \$500,000. The Iraqis planned to deposit the funding for the contract in the Ahli Bank in Amman, Jordan. A memo from the manager of ARMOS, dated 29 January 2002, states that the chairman of the Russian Nuclear Disaster Victims Fund requested that ARMOS deposit the amount for the 2 contracts into these accounts.

ISG judges that this telemetering equipment would have provided Iraq with ground-based transmitting and receiving stations and the associated modules for fitting into missiles. The ground-based stations would have utilized monitoring equipment for the tracking of missiles during flight tests. This telemetering equipment would have had a working operational transmission range of 200 km, despite the UN imposed 150 km range limit for Iraq’s indigenously produced missiles.

2002—Russian Company’s Sales Contract for Military Helicopter Equipment

ISG recovered a contract between Al-Basha’ir Company of Iraq and Notr Inc of Russia that negotiated the sale of Russian MI-8MT helicopter equipment. Please see Figure 38 and overleaf for a copy of this contract.

2003: Iraqi MIC Delegation Visits Russia

Information from a former high-level Iraqi official indicates that an Iraqi joint delegation met with representatives from four or five private Russian companies to discuss how the companies could provide technical expertise to the Iraqi military.

- In January 2003, members of an Iraqi delegation held meetings with representatives from 4 or 5 Russian companies in the trade section office of the Iraqi embassy in Moscow. Dagher Muhamad Mahmud, the MIC Deputy Director, Sulayman Al-Huraymis, Director of the IIS M-23 Directorate, and Dr. Suham, Director of the ARMOS Company participated in the meetings.

- Several Russian company representatives met with Iraqi delegates and discussed providing technical expertise to the MIC. Dagher and Russian representatives discussed using their company’s expertise to improve and build weapons such as artillery and tanks. Dagher also discussed financial matters involving the MIC’s debt to Russian companies.

2003: Russian Team Visits Iraq To Train Air Defense Technicians

According to an official from the Iraqi Al Kindi Company, a Russian technical team visited Iraq in January or February 2003 to train technicians on an upgrade to an air defense system. The training was conducted in Baghdad.

Possible Breaches of UN Sanctions by Bulgarian Companies

Summary of Bulgarian Involvement 1999-2002:

Bulgarian companies contracted to upgrade Iraqi tanks and invited Iraqis to visit Bulgaria to view military equipment including a fighter jet engine workshop.

1999-2002: Bulgarian Company Supplies Iraq With Military Goods

Recovered documents indicate that a Bulgarian Company offered to supply Iraq with night vision goggles and parts for Iraqi T-55 tanks and aircraft from 1999 to 2002.

- Letters from the General Manager of SARA-M, Sofia, dated 1999-2002, offered the Brigadier General of GMID various military goods.
- A letter refers to previous meetings, in which the Iraqi side requested tanks and night vision goggles. In this letter, SARA-M attached a factory catalogue translated into Arabic and stated that they hope “that it satisfies, through which they can serve our heroic Army to break down the embargo implemented upon our struggling nation.” The SARA-M Company General Manager also stated that he is ready to discuss means of supply, quantity, and price with the GMID.

- In another letter, SARA-M referred to an Iraqi request to supply radiators and tanks air pressures devices, stating that SARA-M can provide 100 radiators and “T- 55 tanks air pressures devices” to stores in Baghdad.
- The SARA-M representative also offered a quotation for Russian-origin aircraft wheels. The wheels were apparently stored in special warehouses in Bulgaria and were ready for deliver to Baghdad.
- In another letter, SARA-M offered to supply Iraq with night vision goggles. It states that the goggles were “for the infantry, chopper pilots, and tank drivers. An offer is made to send Iraq samples to be checked.”

2001: Offer To Supply Military Goods

Recovered documents show that a Bulgarian company signed contracts to upgrade Iraqi tanks and missiles in 2001, including supplying spare parts and a technology transfer.

- The MIC invited a delegation from the JEFF Bulgarian Company to Iraq to negotiate technical offers on updating tanks and missiles, (several types including Perchora—SA-3) providing spare parts, fighter/helicopter engines, and various other military equipment. In addition, they discussed the transfer of technology related to a number of “important and sensitive projects.” *The negotiations ended with signing a number of contracts to the amount of \$50 million.*
- The MIC requested that the JEFF Bulgarian Company submit a formal invitation to visit the helicopter and engine maintenance factories specified in the final contract.
- The JEFF Bulgarian, Co., invited four people to visit Bulgaria to view equipment and jet fighter engine workshops.
- The MIC proposed that Mr. Majid Ibrahim Salman (also called Majid Mohammed Ismail) serve as the Iraqi representative for the technology transfer, negotiating with the company, maintaining an ongoing relationship with experts, and controlling

the operations. The JEFF Bulgarian, Co., agreed to bear all expenses for Salman’s accommodations and hospitality. The IIS financed a two-day visit in Syria for Salman. The IIS Deputy Minister signed the instructions on 3 September 2001.

Federal Republic of Yugoslavia (now called Serbia and Montenegro) Possible Breaches of UN Sanctions Summary of Yugoslav involvement 1999-2002:

Representatives from several Yugoslavian companies reportedly visited Iraq in 1999 and 2001 to discuss missile components and related support sales. In 2001, a Yugoslavian company also offered to provide Iraq with parts for 125mm tank main guns.

1999: Federal Republic of Yugoslavian (FRY) Delegations Visit Iraq

Information supplied by an Iraqi Scientist indicates that the Al-Karamah State Establishment hosted FRY delegations in 1999.

- During the summer of 1999, FRY companies visited Iraq twice. Although their visits were mostly about missile engine parts, they discussed “all aspects of supplying the Al-Karamah State Establishment.”
- The Yugoslavian delegation included the former Ambassador to Iraq and expert named Georgi Bladagovich of the Infinity Company. Bladagovich had been in Iraq before the start of Desert Storm.

2001: Iraqi Delegation Visits FRY To Discuss Missile Technology

According to a high-ranking Al-Kindi official, senior Iraqi military officials and businessmen visited FRY in mid-2001 to discuss Iraq’s air defense and missile testing capability.

- The Iraqi Minister of Defense, General Sultan Hashim Ahmad Al-Ta’i, reportedly led the delegation to Serbia. The delegation also included the Director of the Al- Kindi Company in Mosul, Dr Sa’ad Dawould Al Shamma’, and several high rank-

ing Iraqi air defense officials.

- The primary purpose of the trip was to discuss Serbian air defense artillery systems used in the war with NATO. Al-Ta'i wanted to acquire thermal tracking capabilities for their Bijoura Radar System. Iraq also reviewed Serbian proposals for purchasing missile testing wind tunnels. During the discussions, the Serbians reportedly committed to provide Iraq with spare parts for existing radar systems in the Iraqi inventory.
- As part of the visit, the Iraqi delegation met with a soldier who was allegedly responsible for shooting down a US F-18 aircraft with the Bijoura system. The Bijoura Project engineer participated in this discussion, noting that a "classical version" of the system downed the aircraft. Afterward, several Iraqi delegates doubted the accuracy of the story.

2001: Offer To Supply 125mm Tank Main Gun Components

Recovered documents demonstrate a Yugoslav company's offer to supply parts for a 125mm gun. The gun was part of an Iraqi tank called 'Saddam The Lion.'

- A letter dated 8 June 2001, from Col Krsta Grujovic of Yugoimport was sent to the General Manager of the Saddam General Company and reads as follows: "referring to preparation of the parts of 125 mm gun, we would like to point out the following; although we know the availability of technical schemes with you, the producing company intends sending a copy of these schemes for signature from both sides. In order to be approved for delivery purpose and to make sure that there are no mistakes in documents, we will submit these schemes in two weeks. There are some parts available for the producing company and mechanical operations were done until semi-final stage. The producing company intends to provide these parts to gain time and not charging you price difference. The schemes of these parts will be submitted in two weeks."

- A handwritten internal memo, dated 5 July 2001 was attached to the Yugoimport letter. This memo, addressed to the projects department, was signed by Ra'id Sabah, the Manager of Saddam General Company. The memo's heading indicates that the gun parts and technology (schemes and drawings) mentioned are designed for a tank gun, "for the product Saddam the Lion."

2002: A FRY Company Offered Technical Cooperation With Iraq

Captured documents indicate that a Yugoslavian company offered Iraq missile system maintenance services, air-to-air missiles, and other related military technologies.

- The letter, marked 'Secret,' refers to a Yugoslav company called Cofes and reads, "referring to your letter # Cofes 1096, dated 25 05 2002, concerning the cooperation aspects with the Yugoslav company Cofes and according to the special catalogue attached with your letter mentioned above. We would like to inform you our need to cooperate in the following aspects listed below and would look forward to meet with Cofes company's specialists to discuss with them the aspects listed below and specify the methods of cooperation. Please review and inform us with regards."
- The letter subsequently lists the following equipment:
 - "Missile system maintenance
 - Homing AA missiles
 - Programmable missile targets
 - Navigation
 - Modification of charging the missile with fuel and oxidants facilities for the missile maintaining."

Possible Belarusian Breaches of UN Sanctions

Summary of Belarusian Involvement 2000-2003:

Iraqi delegations visited Belarus to negotiate the purchase of air defense systems and electronic warfare technology. Belarusian experts visited Iraqi air defense systems. Belarusian firms agreed to multiple contracts to import missile guidance and control equipment to Baghdad.

2000-2001: Two MIC Delegations Visit Belarus

In 2000 and 2001, two MIC delegations visited Belarus, according to an official from the Al-Kindi Company. The purpose of the visit was to upgrade Iraqis air defense and electronic warfare capability.

- Both Iraqi delegations were headed by Abd al-Tawab Mullah Huwaysh, the former MIC Director, Dr. Sa'ad Dawould Al Shamma, the former Director of Al-Kindi, and Brigadier General Hussein, the former Director of the El Milad Company. The delegations also included several high-ranking Air Defense Force officials.
- While in Belarus, the delegations reportedly focused on air defense cooperation, specifically involving the acquisition of an upgraded version of the Russian made P-18 radar, which used digital electronics and sophisticated anti-jamming capabilities. As a result of this trip, Belarus allegedly supplied Iraq with a new model of the P-18 and spare parts. According to the source, Iraq had an older metric version of the radar in their inventory.
- In addition, the MIC delegation sought to acquire two or three Russian made S-300 air defense systems. Once acquired, Iraq planned to create the infrastructure to build an Iraqi version of the system. Part of the plan for infrastructure included sending Iraqi technicians to Belarus for training. At the first delegation meetings, a contract was signed to train Iraqi technicians on the S-300 system.
- The MIC delegation subsequently discussed the acquisition of the Strela Air Defense System, a new system with a 7-11 km range. They reportedly

also discussed acquisition of GPS jamming and Airborne Warning and Control Systems (AWACS) technology. Specific upgrades focused on the El Bijoura air defense radar system and acquisition of new missile guidance systems to increase missile engagement ranges.

2002: Contracts To Supply Gyros and Guidance Equipment

Recovered documents show that a Belarusian company representative was contracted to procure missile guidance and control equipment for Iraq in 2002.

- Notes of a meeting state that representatives of a Belarusian entity called EGC conducted technical discussions with Iraq from 10 to 17 February 2002. These negotiations ended with signing an agreement no. 209/2002 totaling \$5,053,971. EGC acknowledged through this agreement that they would supply control and guidance missile system (CGMS) equipment needed by the Al-Karamah State Establishment.
- Additional notes from the 10 to 17 February 2002 meeting refer to another contract with EGC worth \$20,771,700. This agreement was for the supply of laboratory and experimental equipment necessary to “implement scientific research for CGMS and improve quality and production.”
- A letter dated 28 February 2002, addressed to the MIC refers to orders to import strategic material and equipment for the Al-Karamah State Establishment. In the letter, Dr. Hadi Tarish Zabun arranged to “*discuss with Alexander Dekteryoff to supply gyroscope and other accessories.*” Dekteryoff was the Belarusian representative for the deal. The letter also mentions two contracts for items delivered through Syria totaling \$5,261,507. The letter specifies the following payment procedures:
 - Payment of “15 percent of the total amount of both contracts” (\$789,226) to the Belarusian Infobank.
 - The remaining amount “shall be paid in cash within ten days after receiving the shipment,” according to both contracts.

—The company shall issue a credit letter for 3 percent, to us, through Infobank “good for the duration of the contract, as a good business performance.”

- The same letter also requested that MIC approve and appropriate the amount of \$5,261,507 in cash through the “Iraqi-Syrian agreement” (presumably the Iraq-Syria trade Protocol). After approval, the Syrian agent would pay the Belarusian side in cash in Amman or at another place of their choosing.
- Another letter to the Vice Premier of MIC dated 20 March 2002 refers to additional contracts with Belarusian companies and an Alexander Dekteryoff, PhD.
- Approval was granted for the Al-Karamah State Establishment to carry out a contract with Dekteryoff to import CGMS, according to two agreements. The first agreement was for \$5,053,791. The second agreement was for 207,716 Euro, which was modified in accordance with letter from Dekteryoff’s representative to \$182,137.
- This agreement was considered to be a high priority, expedited contract. According to the letter, “Your Excellency has previously approved to finance the two agreements through the Iraqi-Syria Accord. Due to the important nature of the imported material, it is necessary to expedite the contract, in order for Al-Karamah State Establishment to carry out the programs assigned in an exact and advanced manner (which is considered scientific and technological priority). And making the first payment would expedite the shipment of the goods, as promised by Mr. Dekteryoff.”
- The March 2002 letter also specified payment via the Syrian trade Protocol, “Your Excellency, would you please, approve the payment of 15 percent that’s equal \$785389.24 in cash, from our account in Amman, and appropriate the rest of the remaining amount for the two contracts through the Iraqi-Syrian accord. Furthermore, we will ask the Syrian side to be apprehensive about the contract in order for them to get their share of the deal ASAP.” A

note in the margins of this letter instructs “immediately make payment of 15 percent and the rest of amount according to the Syrian agreement.”

- The letter is signed by Raja’ a Hassan Ali, Director General of the Trade Bureau, Dr. Muthher Sadiq Saba’, Director General of Al-Karamah, and Dr. Hadi Tarish Zabun, Director of the Minister’s office.

2002-2003: Belarusian Experts Assist in the Maintenance and Repair of Iraqi Missile Batteries With Russian Cooperation

Captured documents show that Belarusian experts visited Iraq and assisted with the maintenance and repair of missile batteries. The work was complete in February 2003.

- Correspondence from the GMID dated 30 December 2002 refers to *a number of Belarusian experts who visited Pigura Missile Batteries* of the 145th Missile Brigade. The experts engaged in maintenance and repair operations with the following units in the Iraqi 145th Brigade: 166th Battery, 30th Battery, 31st Battery, and 35th Battery.
- Captured documents reveal a letter, dated after 17 February 2003, from the Iraqi Air Force Command to the Military Attaché in Moscow. The letter directed their Military Attaché in Moscow to inform the Russian IroKlub Company that six of 10 amplifiers they had supplied to Iraq had malfunctioned. ISG judges that these malfunctions may have been the Russian missile equipment that the Belarusians were repairing.
- A letter sent to GMID from the Air Defense Security System *stated that the Belarusian experts left Iraq by land to Syria on 24 February 2003 in accordance to the orders of the Russian Ambassador to leave Iraq before 26 February 2003.*
- Another report refers to the visit of 18 Belarusian experts working at Al-Harith Establishment / MIC. The report stated that the experts formed a repair and maintenance workgroup for artillery batteries.

Possible Syrian Breaches of UN Sanctions

Summary of Syrian involvement 2001-2003: With the assistance of Firas Tlas, the son of the former Syrian Defense Minister, Damascus offered Iraq missile technology and fuels. Firas Tlas and the MAS Economic Group offered Iraq the services of South African engineer, Chinese, and Syrian Engineers in 2002. Firas Tlas made several additional visits to Iraq and signed several military contracts. Syria also offered the services of a French expert who expressed his wish to visit Iraq to provide details about documents. Syria also planned to supply Iraq with spare parts for a 155mm weapon system in March 2003.

2001: Correspondence and Meetings Referring to Supplying Military Goods

Documents recovered indicate that Firas Tlas met with former Russian senior officials who offered to supply Iraq with military equipment and technology, including production technology relating to surface-to-surface missiles with a range of 700 km. ISG believes that in this particular case Firas Tlas was acting as a facilitator attempting to supply Iraq with goods of Russian origin, goods from Yemen, and experts from China, South Africa, and Syria.

- A recovered letter, dated 12 May 2001, was sent to the Iraqi MOD from the Chairman of the Board of the MAS Economic Group offering cooperation in supplying military goods through bids and tenders.
- Sources and documents suggest that Iraq was actively seeking to obtain the SS-26/Iskander missile from Russia.
- Document exploitation has revealed that Firas Tlas, the son of former Syrian Defense Minister Lieutenant Mustafa Tlas, visited Iraq in July 2001 and discussed a variety of missile systems and components he could supply through Russia. Firas offered to sell Iraq the S-300 SAM and the 270km range SS-26/Iskander-E short-range ballistic missile, or to provide assistance to help Iraq produce the Iskander. Firas claimed that he had previously met with Izakoff, the former Defense Minister of the Soviet Union, who told him that his [Izakoff's] friend owned documents for "TEMPS" missiles called "Sterlite" in the West. Reportedly, Izakoff said the missiles had a range of 1500km and were very accurate. Tlas said Izakoff claimed that missiles were destroyed by Mikhail Gorbachev, but that Izakoff could supply the documents so that Iraq could produce them.
- Huwaysh claimed that Iraq had contacted both Syrian and Russian entities to discuss Iraq acquiring the Iskander missile in 2002. Russia would not export any military hardware without an end-user certificate signed by the issuing government agency, which is the capacity in which Syria would have served.
- Tlas also mentioned that he met with a Yemeni tradesman called "Shahir 'Abd-al-Haq." During this meeting, the tradesman said the *Iraqi Minister of Defense* sent him to see Tlas to *help import Yemeni spare military parts into Iraq*. These Yemeni contracts included *parts for MiG-21, a PMP pontoon bridge, and Ilyushin 76 military transport aircraft*.
- Tlas clarified that Shahir accompanied him on the plane when he arrived in Iraq on 29 Jun 2001. Tlas was surprised when Shahir was not allowed access to Iraq *and that he met with Tariq 'Aziz, the Deputy Prime Minister, at the airport*. Later Aziz told Tlas that Shahir was not allowed to enter Iraq because he "co-operates with the Israeli intelligence."
- In an internal memo from Major Quays Mahdi of the GMID, referred to his attendance at a 1 August 2001 meeting. with a four-person Russian delegation, Mr. Tlas, and representatives of the Iraqi Air Defense, Air Force, and Army Aviation commands. According to this memo, the meeting took place in the Commanding Officer's Club. The Iraqi Directorates represented were: Armaments, Electrical Mechanical Engineering, and Missiles. Staff Chief Marshall Sa'ad of the MoD directed the meeting.
- The Russian delegation at this meeting in August 2001 included Paris Ivanovich, a specialist in the fields of the Volga and Bichora systems, as well as being a representative of a military factory that spe-

cializes in air defense; Georgi Sergeevich Pitrov an specialist in air to air missiles and the Deputy Head of the Ukrainian Government Office called “Log;” Oleg Georgovich Orlov a Czech-based businessman specializing in weapons; and Vadim Borisovich Kaziulin.

- The Russian delegation agreed with the requests to supply equipment to Iraq as specified. Both parties agreed to send six experts to Iraq. The group was to review and decide what the Iraqis required in regard to the maintenance and production workshops associated with tanks, armor and infantry. This group was scheduled to arrive in Iraq 15 days after the meeting. Staff General Khaldun Khattab Umar, the Secretariat of the MoD, was the group’s contact.

2002: MAS Economic Group Requests Iraqi Entry Visas for Military Technicians

A letter from the MAS Economic Group dated 30 January 2002, requested the urgent issue of Iraqi entry visas for 3 Chinese and 2 Syrians who were to work for the MoD. In July 2002, another letter from the MAS Group referred to 3 South African engineers residing in Damascus who were awaiting visas from Baghdad. A letter from Iraqi Staff Major General Talib 'Uwayn Juma'h, the Army Chief of Staff, approved the extension of the Iraqi visas for the three South African experts on 10 August 2002.

2002: Procurement of Military Goods and Services for Iraq

Documents recovered show that ARMOS requested a bid for for rocket fuel from the Syrian MAS Economic Group in 2002. The company Director of MAS was Firas Tlas, the son of former Syrian Defense Minister. Firas was also involved in a Chinese offer in 2002 to help with the Iraqi Air Defense System.

- A letter from Dr. Siham Al Din Khayri Al Ali, the Deputy Director of ARMOS Trading, dated 15 October 2002, requested a bid from the MAS Economic Group for *rocket fuel*. One of the types of fuel listed included one entry for 15 tons of hydrazine at 97-percent purity.

- A recovered letter from Firas Tlas, dated 21 October 2002, *states, “Technicians from the Syria have been dispatched to China to deal with some quite influential companies (companies that have a great influence upon the Chinese government) and that these companies have expressed their desire to co-operate with Iraq for a modernization of the air defense systems.”* The letter further states that the meeting should take place, “in either Damascus or in Peking and that they held no objection to the idea of sending a delegation to visit Peking.”

- *Another letter from Tlas, also dated 21 October 2002, relays to “Abu Mustafa” that technicians from “our side have been sent to China in order to do business with esteemed powerful companies with the government and that they have complied positively to co-operate with you to develop the Air defense Systems.”* Also, that associate meetings should be held in Damascus or Beijing and that there was no objection to sending a delegation invitation letter to visit them. The letter gives regards and a wish to visit Mustafa soon in Baghdad.

2003: MAS Economic Group Facilitates French Military Sales Catalogue Dissemination

An internal GMID memo from Lt. Col. Imad Salih dated 13 January 2003, refers to a Syrian MAS Economic Group letter with 5 attached CDs and catalogues from a French expert named Eric Joubert. The Syrian Company was facilitating the supply of the French technology. The documents contained information and equipment lists of interest to the GMID directorate and the Iraqi intelligence service. Joubert expressed his wish to visit Iraq to give more details about the CDs and catalogues.

2003: Contract for Supply of Spare Parts for 155mm Weapon Systems

Recovered documents indicate that a Syrian company agreed to supply Iraq with Syrian Defense establishment components of 155 mm weapon systems.

- A recovered contract dated 20 February 2003 names the legal representatives from the Iraqi Al Sumud and Al-Basha'ir General Companies and a name of the legal representative for the Syrian, SES International . The contract designates that SES will supply the MIC with 100 parts for the 155 mm weapon system. These parts, produced by the Syrian Defense Plants Establishment, cost \$2,574,000.
- The contract specified a guarantee deposit letter from the Al Mawarid Bank, Beirut, Lebanon for \$514,000 as a down payment on the deal. The deposit letter was to be directed to a "Jasim Ahmad Hasan and a Hashim Karim 'Abbas" in regards to the sponsoring of a representative of the SES International Corporation.

Possible Breaches of UN Sanctions by Jordanian Companies

2001: Jordanian Company Offers To Supply an Ammunition Production Line

- A letter dated 28 January 2001 from the Al-Basha'ir for Trading Investment Company of Amman, Jordan (Jordanian branch of the Iraqi Al-Basha'ir Company) to the ARMOS Trading Company Baghdad refers to a presentation given by Al Bash'air for the proposed installation of an assembly line, portions of which were manufactured in Yugoslavia (tender no. 2000/56/70).
- Specifications indicate that this proposed technical transfer was for the production of .22 caliber ammunition. The proposal included: a block diagram, "know how" documents, installation, supervision over equipment installation, trial run and performance tests on equipment, and technical assistance. Annual production capacity amounts were estimated as 25 million rounds. This production line cost \$ 9,466,015.

Possible Yemeni Breaches of UN Sanctions

2001: Government of Yemen Offers to supply Military Goods to Iraq

Recovered documents refer to the Yemen Ambassador meeting with the Iraqi military to discuss a list of guaranteed military materials. According to the documents, the President of Yemen gave his blessing to support the effort to supply military goods to Iraq.

- *A letter from the Iraqi Defense Minister Sultan Hashem Ahmed dated 23 March 2001 speaks of a meeting with the Republic of Yemen's Ambassador, Mr. Abid Al-Malek Saeed.* The letter states that Yemen had been helping the Iraqi Armed forces through a Yemeni business-man named Mr. Shaher Abid Al Haqq.
- Reference is given to a meeting held 19 February 2001, where the Yemeni side was ready to export military materials from Yemen and Ethiopia to Iraq. *The letter indicates the President of Yemen, Ali Abid Allah Salah, gave his blessing to the deal and that the Iraqis were given guarantees for the spare parts.* These parts were specifically drawn from the stocks of the Yemeni armed forces, air force, army aviation and included armor, trucks, and weapons.
- A follow-up meeting was held on 22 March 2001, which included the Yemeni Ambassador and Mr. Al-Haqq. Al-Haqq and the Ambassador provided the Iraqi military with a list of guaranteed available military materials and prices. Al-Haqq also revealed that he had met with the President Salah who had given his blessing for these efforts and support. The letter indicates that the President Salah, "believes that the support of Iraq with the proposed exports is necessary" and he had made calls to his brother, an Air Force Commander, asking him to present everything possible to Iraq, even if he has to take supplies from the Yemeni Air Force and ask Russia and others for replacement material.

Possible Breaches of UN Sanctions by Chinese Companies

Summary of Chinese involvement 2001-2003:

According to multiple sources, Chinese companies provided Iraq with limited rocket guidance software, missile gyros, and accelerometers. Chinese companies also attempted to sell the former Regime jamming equipment.

2001: Chinese Company Attempts To sell Military Goods to Iraq

According to a former Iraqi government official, Chinese administrators attempted to sell a camera and a jamming system that could be used against infra-red missiles. The deal failed because of both the price and undetermined Iraqi requirements.

- A member of the Chinese High Committee for Electronic Warfare (EW), Professor Xu Govan (phonetic), negotiated with the Iraqi MIC for the sale of 1 CCD Camera and 1 Jamming System for infra-red missiles. Xu was an expert in electro-optics and wanted to sign a memorandum of understanding with MIC specialists to provide EW equipment. A large Chinese company, the CIEC Company, accompanied Xu to the negotiations with the MIC.
- The MIC determined that the jammer failed to meet Iraqi requirements and was too expensive. Xu loaned the CCD Camera to the MIC to test.
- According to the source, Xu was an IIS agent, recruited on 17 May 2001. At recruitment, Xu signed a commitment to work for the IIS, received a \$7,500 recruitment bonus, and began drawing a \$500 per month stipend. The IIS filmed Xu's recruitment. The IIS tasked Xu to collect information on laser tracking systems, laser guidance systems, and information on the cooperation between Iran and China.

2001: Iraqi Embassy Officer Coordinates the Procurement of Gyros and Accelerometers

A former high ranking official in the MIC with direct access to the information supplied information on

Abdul Al-Wahab, an Iraqi IIS officer stationed at the Iraqi Embassy in China who managed the Iraqi-Chinese technology procurement relationship. Al-Wahab reportedly arranged the procurement of gyros and accelerometers from China for Iraq in 2001.

2002: IIS and IAEC Import Chinese Missile Software

According to reporting, Iraq imported rocket guidance software from China, which was labeled as children's software. Directorate M16 of the IIS and the Iraqi Atomic Energy Commission imported the software.

- From 2002, until the beginning of hostilities in 2003, Iraq imported rocket guidance software from China disguised as children's computer software. The software was used to guide the missiles Iraq fired at US Forces in Kuwait during initial hostilities in 2003. Iraq paid for the software with hard currency or oil.

Possible Breaches of UN Sanctions by Czech Companies

2001: Offer To Supply GPS Jamming Equipment

Recovered documents indicate that a Czech Republic Company called Metropol Limited offered portable GPS Jamming Equipment and other military goods to Iraq.

- A Metropol letter dated 24 October 2001 indicates that the company was "in a position to offer the supply of equipment against enemy's cruise missiles and aircraft." The letter offers to supply portable jamming equipment that might be used "against GPS which are used for navigational purposes (and in equipment, such as cruise missiles)."
- In additional captured letters dated 21, 24, and 29 October 2001, Metropol offers Iraq aircraft engines, helicopter engines, and night vision goggles for helicopters. The company also offered to supply Iraq with 82 mm and 120 mm mortars, new and overhauled tank engines (T-72 and T-55), Krasnopol 152/155 mm guided artillery weapons, Iгла

9k38 portable air defense systems (1000 missiles with launching containers), and Kornet E anti-tank systems (1000 missiles and 50 launchers). The Metropol offer also included missile aggregates for Volga air defense systems including batteries, hydraulic systems, servos and engines, spare parts for B-755 engines, parts for the S-75 Volga Launcher, and spare parts for the P-14 Oborona.

Possible Breaches of UN Sanctions by Indian Companies

2002: Indian Individual Coordinated the Purchase of Missile-Related Materials for Iraq

According to recovered documents, an Indian and Iraqi national negotiated for the procurement of conventional military goods for Iraq.

- Between November and December 2002, an individual from India and an Iraqi, negotiated the procurement of goods, including turbojet engines for Mig-23 and Mig-29 aircraft, diesel engines for tanks, a radar system, and ammunition.
- The Baghdad office of the Arabic Scientific Bureau and Inaya Trading were also involved in the attempted procurement of dual-use chemicals associated with missile propellant uses. However, the documents do not indicate if contracts were signed or if shipments took place.

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Annex K Suspected Intermediary and Front Companies Associated With Iraq

The companies listed in this annex have been reported in the Intelligence Community as front companies involved with the former Iraqi Regime. Because there are different interpretations as to what makes a company a front as opposed to a trade intermediary or manufacturer, this list can be seen as an example

of companies that were involved in supplying the Iraqi government with prohibited conventional weapons and dual-use materials. At least two of the MIC domestic manufacturing companies, Al-Nida and Al-Rashid, have been mistaken for front companies in prior reporting. However, these companies still used known front companies such as the MIC's Al-Basha'ir and Syria's SES as middlemen when procuring materials for production. Other companies that were manufacturers or trading companies may also have been mistaken as front companies.

Company Name	Location
Across Continents Trading Agency	Baghdad, Iraq
Adel Commercial Bureau	Baghdad, Iraq
Al-Abidin Investment Company	UAE
Al-Ahliyah for Trading Agencies and Exports, Ltd.	Baghdad, Iraq
Al-Ali Trading Co.	
Al-Amia (AKA Global) Company	
Al-Anmar Company	Amman, Jordan
Al-Basha'ir Company	Baghdad, Iraq
Al-Bir Company for International Trade	Amman Jordan
Al-Dahma International Trading Establishment	Baghdad, Iraq
Al-Dellah Travel and Tourism Company	
Al-Doha Trading Company	Baghdad, Iraq
Al-Eman	Amman, Jordan
Al-Enbuah	
Al-Faris State Company, Ministry of Industry and Minerals	Baghdad, Iraq
Al-Fattah Corporation	Amman, Jordan
Al-Fitra Trading Company	Baghdad, Iraq
Al-Furat Rent-A-Car	UAE
Al-Ghery International Company	Baghdad, Iraq
Al-Hamra Company	UAE
Al-Handal General Trading Company	Dubai, UAE
Al-Hashimy Trading Company	Baghdad
Al-Hikma Company	Baghdad, Iraq
Al-Huda Export and Import EST	Jordan

Al-Husan	Baghdad, Iraq
Al-Hussaini Company for Trading Agency	Baghdad, Iraq
Al-Jawhara Al-Khaleejeya	
Al-Karamah State Establishment	
Al-Karradah	
Al-Kawther Company	Baghdad, Iraq
Al-Kibba Trading Agencies, Ltd.	Baghdad, Iraq
Al-Maymana Trade Group	UAE
Al-Maeny Engineering Bureau	Baghdad, Iraq
Al-Mersal Commercial Agencies	Baghdad, Iraq
Al-Mihrab Company	Amman, Jordan
Al-Mufakher	Baghdad, Iraq
Al-Naizak Trading Establishment	UAE
Al-Najah Company	Baghdad, Iraq
Al-Noras	Syria
Al-Rafed Bureau	Baghdad, Iraq
Al-Rawa'a Trading Company	Iraq
Al-Riat	
Al-Riaya Trading Company	UAE
Al-Sabah International	Bangkok, Thailand
Al-Sadera	
Al-Safoh Office General Trading	Baghdad, Iraq
Al-Said Group for Industry and International Trade	Baghdad, Iraq
Al-Saiham Company	Baghdad, Iraq
Al-Salam General Company	
Al-Salman Trading Company	Iraq
Al-Savivem Company	Baghdad, Iraq
Al-Sidra Trading Co.	Baghdad, Iraq
Al-Tuhfa Co. for General Trading, Ltd.	Baghdad, Iraq
Al-Wadhah Co for General Trade, Ltd.	
Al-Yisr Trading Company	UAE
Al-Zaghal Industrial Company	Amman, Jordan
Arabic Computer Systems Company	UAE
Arabic Scientific Bureau	Baghdad, Iraq.
ARMOS Trading Company	Baghdad, Iraq

Atera Manufacturing	Baghdad, Iraq
Daei International Trading Co., Ltd.	Baghdad, Iraq
Dulaymi Company	Doha, Qatar
Elba	Jordan
Elite Scientific Co., Ltd.	Amman, Jordan
General Trading	Baghdad, Iraq
Ghadar Engineering and Contracting Co.	Amman, Jordan
Global Trade and Investment	Lebanon
Haraq General Trading	Mosul, Iraq
Hayar Trading Company	UAE
Hidhab Al-Reef Company for General Trading	Baghdad, Iraq
Hutten General Co.	Baghdad, Iraq
IBT Trading	Baghdad, Iraq
Inaya Company for Trade Agencies, Ltd.	Baghdad, Iraq
International Company for Cleaners Production	Amman, Jordan
International Industrial Development (IID)	Baghdad, Iraq
Irak International Trading Company	UAE
Ishtar Trading	Baghdad, Iraq
Kadhun M. Al-Wakil & Shamsh Co., Ltd.	Baghdad, Iraq
Khaled el-Wer of the Trading and Agriculture General Company (TAGCO)	Amman, Jordan
Khalid Al-Delaimi Co.	Baghdad, Iraq
Khalifa Bin Jassim Trading Co.	Dubai, UAE
LAMA	Syria
Limo Investments, Ltd	Baghdad, Iraq
Lootah General Trading Company	
Mamad Al-Azawi Engineering	Baghdad, Iraq
Mayamin Trading	Baghdad, Iraq
MEGA	Lebanon
Mesopotamia Trade Co., Ltd	Baghdad
Middle East Trading	Jordan
Millennium	Moscow, Russia
Murgam Trading Company	UAE
Nibal Electronics	
Nile Air Conditioning Company	UAE

Nurallah Company	Damascus, Syria
Orkid General Trading Co.	Baghdad, Iraq
Phoenix International Trading Company Of Lebanon	Beirut, Lebanon
Retired Officers Bureau (ROB)	
Sabah Al Faisal and Partners Co.	Amman, Jordan
Sajaya General Trade Company, Ltd.	Baghdad, Iraq
Samid Land and Maritime Shipping and Transportation Company	UAE
Sawfiya Brothers Company	UAE
SES International Corporation	Damascus, Syria
SIAM Premium Products	China
Tariq Al-Samlama	Baghdad, Iraq
The Abdulla Group	
The Hams Company for Business Engineering Services	Amman, Jordan
The Mesopotamia Company, Ltd.	Baghdad, Iraq
Tigres Trading Company	Baghdad, Iraq
Toros International Trading Co.	Baghdad, Iraq
Trans Dubai Company	Dubai, UAE
Ur Company	UAE
Upper Euphrates Company	UAE
Waliya Opel Indigas Company	UAE
Yasin & Middle East Scientific Group	Jordan
SFOR	Stabilization Forces

Annex L
Procurement Acronyms

Acronym	Meaning
ABS	Scientific Bureau for Drug Information and Medical Appliances
AEST	Albostangy Equipment Services and Trade
AP	ammonium perchlorate
ARADET	Arab Company for Detergent Chemicals
ARC	Arabian Russian Company of Jordan
ARI	acute respiratory infections
ASB	Arabic Scientific Bureau
ATGM	anti-tank guided missile
AWACS	airborne warning and control systems
AZ-11	a type of liquid rocket propellant, composed of 2 components (DETA and UDMH), according to captured documents
bb/d	barrels per day
BCP	Border Control Checkpoints
BME	Belmetalenergo
BOP	Balance of Payments
BW	Biological Weapons
CA	Commercial Attaché
CAEC	Abrasive Import and Export Corporation
CBI	Central Bank of Iraq
CBJ	Central Bank of Jordan
CBS	Central Bank of Syria
CBW	Chemical and biological weapons
CCD	Charge coupled device
CGMS	Control and Guidance Missile System
CIA	Central Intelligence Agency
CNC	Computer numeric controlled machines or devices
CoM	Council of Ministers
CoS	Chief of Staff
CPA	Coalition Provision Authority
CPMIEC	China Precision Machinery Import and Export Corporation
CPU	Central Processing Unit

CW	Chemical weapons
DETA	diethylenetriamine: one of the two components of AZ-11, a type of liquid rocket propellant
DGMI	Directorate of General Military Intelligence
DGS	Directorate of General Security
DIA	Defense Intelligence Agency
Diwan	The Presidential Office
DMI	Directorate of Military Intelligence
DOCEX	Document Exploitation
DPRK	Democratic People's Republic of Korea
EAC	Economic Affairs Committee
ECCM	Electronic Counter-Countermeasure
ECM	Electro-chemical machining
EGC	Electric-Gaz-Com
EMIS	Electromagnetic Isotope Separation
EP	Entry Points
ETGC	External Technology General Corporation
EUC	end-user certificates
EW	Electronic Warfare
FAO	Food and Agriculture Organization
FCDC	Foreign Currency Disbursement Committee
FEAL	Food Examination and Analysis Lab
FRY	Former Federal Republic of Yugoslavia
GDP	Gross Domestic Product
GID	General Intelligence Directorate (Jordan)
GPS	Global Positioning System
GRL	Goods Review List
HDI	Human Development Index
HE	high explosive
HF	High Frequency
HSBC	Hong Kong Shanghai Banking Corporation
HUMINT	Human Intelligence
HVD	High-Value Detainee
IAEA	International Atomic Energy Agency
IAEC	Iraqi Atomic Energy Commission

IAF	Iraqi Armed Forces
ID	Iraqi Dinar
IFAT	A Swiss-based, Consen subsidiary established in August 1983
IID	International Industrial Development
IIS	Iraqi Intelligence Service
IIS M19	The primary IIS body handling procurement of specialized items. Redesignated as M4/8 in recent years, and also was known as the Technical Consultation Company or the Trade Office
IIS M23	MIC Security Directorate
IIS M4	Foreign Clandestine Operations branch of the Iraqi Intelligence Service or Directorate of Secret Service
IIS M4/8	Formerly the IIS M19, organized into three different sections, the internal section, the foreign section, and the trading section
IIS Section One	The internal section primarily responsible for creating front companies inside Iraq and facilitating trade with these companies to import/export oil, batteries, copper and food products
ILTC	Iraqi Land Transportation Company
IMF	International Monetary Fund
INOC	Iraq National Oil Company
ISG	Iraq Survey Group
ITU	International Telecommunication Union
JD	Joint Delegation
KGB	Komitet Gosudarstvennoy Bezopasnosti
KOMID	North Korea's Korea Mining Development Corporation. Previously known as the External Technology General Corporation (ETGC)
LU	Launcher units
IIS M-5	The IIS Directorate of Counterintelligence or Counterespionage Directorate
MABOT	Mina al Bakr Offshore Terminal
MANPADS	Man portable Air Defense Systems
MFA	Ministry of Foreign Affairs
MHESR	Ministry of Higher Education and Scientific Research
MIC	Military Industrialization Commission
MoA	Ministry of Agriculture
MoD	Ministry of Defense
MoF	Ministry of Finance
MoH	Ministry of Health

MoI	Ministry of Industry
MoO	Ministry of Oil
MoT	Ministry of Trade
MoTC	Ministry of Transport and Communication
MOU	Memorandum of Understanding
NORINCO	China North Industries Corporation
NSC	National Security Council
NVD	Night Vision Devices
NVG	Night Vision Goggles
OFF	United Nations Oil-for-Food program
OIF	Operation Iraqi Freedom
OIP	Office of the Iraq Program
OMI	Organization of Military Industrialization, synonymous with the MIC, the preferred usage
R&D	Research & Development
RCC	Revolutionary Command Council
RG	Republican Guard
RNA	Research and News Analyzing
RPG	Rocket Propelled Grenade
SAM	Surface-to-Air Missile
SDH	Synchronous Digital Hierarchy
SDI	Samarra Drug Industries
SFOR	Stabilization Forces
SISMI	Italian Intelligence and Military Security Service
SOE	State-Owned Enterprises
SOMO	State Oil Marketing Organization
SRG	Special Republican Guard
SSM	Surface-to-Surface missiles
SSO	Special Security Organization
TAGCO	Trading and Agriculture General Company
TIS	Thermal imagery sight
TOSSCO	Technical Oilfield Services and Supply Company
TPAO	Turkish Petroleum Company

TPIC	Turkish Petroleum International Company, a TPAO subsidiary
TTC	Thermal tracking camera
UAE	United Arab Emirates
UAV	Unmanned Aerial Vehicle
UDMH	One of the two components of AZ-11, a liquid rocket propellant
UHF	Ultra -High Frequency
UN	United Nations
UNCC	United Nations Compensation Commission
UNDP	United Nations Development Program
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations International Children’s Emergency Fund
UNMOVIC	United Nations Monitoring Verification & Inspection Commission
UNOPS	United Nations Operations
UNSC	United Nations Security Council
UNSCOM	United Nations Special Commission
UNSCR	United Nations Security Council Resolution
UNSYG	UN Secretary General
UTL	United Telecommunications Limited
VHF	Very High Frequency
WFP	World Food Program
WHO	World Health Organization
WMD	Weapons of Mass Destruction

Regime Strategy and WMD Timeline Events

Serial #	Issue Area	Date Name	Short Description
1	POL	1980	Iraq invades Iran
2	POL	1981	Israeli Air Force bombs Iraq's Osirak nuclear reactor
3	CW	08-Jun-81	Code name Research Center 922 to produce chemical weapons (CW) agents Mustard, Tabun, Sarin, and VX
4	NUC	1981	Iraq Atomic Energy Commission (IAEC) pursues Laser Isotope Separation (LIS) for uranium enrichment
5	CW	06-Aug-81	CW program reorganized (Project 922) at Al Rashad
6	NUC	Early 1982	IAEC Office of Studies and Development (OSD) established for uranium enrichment R&D (later renamed Office 3000)
7	BW	1983	BW program added to Project 922 mission
8	CW	1983	First media reports of use of Iraqi CW (Mustard) against Iranian forces
9	CW	1984	Media reports of the use of CW (Tabun) against Iranian forces
10	NUC	1984	Al Qaim yellowcake plant commissioned
11	BW	1985	BW program restarted
12	POL	Mid 1985	Iranian F4 attack on Project 922 site (later Al Muthanna State Establishment - 'Al Muthanna')
13	CW	1986	Construction of Fallujah II commenced
14	POL	Oct-86	Iranian SCUDs fired at MSE
15	POL	Nov-86	Irangate scandal in the United States (the covert supplying of missiles to Iran)
16	POL	Late 1986	Iraq deploys significant portion of Roland Air Defense Systems to Al Muthanna
17	BW	1987	Proposal to scale up BW production at MSE denied; program moved to Al Salman
18	NUC	April 1987	Groups 1, 2, 3 formed under Office 3000; Group 1 leaves, becomes Engineering Design Directorate under MIC
19	NUC	April 1987	Al Husayn project formed to study requirements for weapons program
20	BW	Aug-87	Taji Single Cell Protein (SCP) assets relocated to bolster BW at Al Salman
21	POL	19-Aug-87	Lieutenant General Husayn Kamil (HK) appointed head of new Military Industrialization Commission (MIC)
22	NUC	November 1987	Al Husayn project transfers to IAEC and later becomes Group 4 under Office 3000
23	NUC	Late 1987	Iraq begins construction on Electromagnetic Isotope Separation (EMIS) facilities at Tarmiya
24	BW	1988	Initial BW trials (Feb-May)
25	POL	Feb-1988	War of the Cities begins
26	DS	February 1988	Iraq receives last of 29 deliveries of 819 SCUDs from former Soviet Union (FSU)

Regime Strategy and WMD Timeline Events (continued)			
27	POL	Mar-88	CW used against Kurdish city of Halabja
28	NUC	1988	LIS abandoned as a uranium enrichment process
29	POL	Apr-1988	War of the Cities ends
30	BW	Apr-1988	Construction of dedicated BW agent production plant (Al Hakam) begins
31	BW	May 1988	BW broadened with addition of fungal toxins
32	NUC	mid 1988	Iraq begins magnetic-bearing centrifuge program
33	NUC	August 1988	Construction begins on Al Athir nuclear weapons fabrication & assembly facility under Al Husayn project (Group 4)
34	NUC	August 1988	German engineers provide centrifuge design data
35	CW	August 1988	Al Muthanna stops CW agent production and focuses on research
36	POL	08-Aug-88	Iran and Iraq agree to ceasefire
37	NUC	November 1988	Husayn Kamil takes control of combined Iraqi nuclear weapons program
38	BW	November 1988	Al Kindi vaccine production fermentation line moved to Al Hakam
39	BW	1989	First bulk production run of Botulinum toxin at Al Hakam
40	NUC	Jan 1989	Office 3000 officially renamed Petrochemical Project 3 (PC-3) under Ja'far
41	DS	1989	Iraq cancels BADR-2000 Contract with Egypt
42	NUC	Feb-90	Iraq completes one nuclear-related fireset
43	POL	02-Apr-90	Saddam threatens to use binary CW against Israel if Israel attacks Iraq
44	CW	Apr-1990	Manufacture of Al Husayn special chemical warheads commences
45	POL	April 1990	Husayn Kamil gives orders to weaponize BW as quickly as possible
46	CW	Jun-1990	Iraq starts filling Al Husayn special warheads (CW) & R-400 bombs at Al Muthanna
47	NUC	1990	EDC acquires carbon fiber rotors from a German supplier
48	NUC	1990	Iraq arranges for a winding machine and carbon fiber (reaches Jordan July 1992)
49	PROC	17-Jul-90	Saddam accuses neighbors of threatening Iraq via low oil prices
50	PROC	18-Jul-90	Tariq 'Aziz accuses Kuwait of stealing Iraqi oil
51	CW	August 1990	Iraq deploys a range of CW around Iraq before invasion of Kuwait
52	POL	02-Aug-90	Iraq invades Kuwait
53	POL	06-Aug-90	United Nations Security Council Resolution (UNSCR) 661 establishes embargo on Iraq
54	BW	Sep-90	Al Dawrah Foot & Mouth Disease Vaccine (FMDV) plant annexed by BW for agent production and virus R&D
55	BW	Sep-90	Agricultural Water and Resources Center annexed by BW for aflatoxin production

Regime Strategy and WMD Timeline Events (continued)			
56	BW	Nov-1990	Iraq's declared start date for Mirage F-1 drop tank CW spray conversion (for BW)
57	DS	November 1990	MIG-21 Remotely Piloted Vehicle (RPV) Conversion project initiated
58	BW	Dec-1990	1st flight test of Mirage F-1 CW spray drop tank system (for BW)
59	NUC	Jan-91	Work on uranium metal casting initiated at Al Athir
60	BW	Jan-1991	R-400, 400A BW bombs sent to Airstrip 37 and Al 'Aziziyah firing range
61	NUC	Early 1991	Tarmiya EMIS equipment commissioned; Iraq testing a gas centrifuge using carbon fiber rotor
62	NUC	Early 1991	After Kuwait invasion, Iraq resumes work on a 50-machine centrifuge cascade, as part of a "crash" nuclear program
63	DS	12-Jan-91	MIG-21 RPV flight from Al Rashid Air Base
64	CBW	15-Jan-91	MIC orders evacuation to safety of all assets & dangerous materials
65	BW	15-Jan-91	Mirage F1 droptank deployed to Al 'Ubaydi with anthrax spores at airfield out-station
66	BW	15-Jan-91	Iraq deploys 25 BW warheads
67	POL	17-Jan-91	Gulf War (Desert Storm) begins
68	POL	Feb 1991	Sources warn that Iraq will use WMD if territorial integrity threatened
69	POL	28-Feb-91	Gulf War ends
70	POL	March 1991	All but two Iraqi provinces in revolt
71	POL	March 1991	Iraq uses CS and nerve agent-filled bombs on Shi'a in Najaf and Karbala (nerve bombs fail to operate)
72	DS	April 1991	MIG-21 RPV Program discontinued post Desert Storm
73	NUC	Early 1991	Qusay, Husayn Kamil order nuclear documents and equipment hidden
74	BW	01-Apr-91	Single-Cell Protein (SCP) and Bio-pesticide (BT) decided as cover for Hakam
75	POL	03-Apr-91	UNSCR 687 demands disarmament and compensation fund financed by Iraq
76	NUC	April 1991	Centrifuge development ceases after UNSCR 687
77	POL	Mid April 1991	Regime begins denial and deception program
78	POL	April 1991	Husayn Kamil orders retention of 85 SCUD missiles
79	POL	April 1991	Husayn Kamil orders elimination of evidence of offensive BW program, but BW weapons remain in situ at deployment sites
80	POL	18-Apr-91	Iraq responds to UNSCR 687 with incomplete WMD declaration
81	BW	18-Apr-91	Iraq letter to UN Secretary General (UNSG) denies BW program
82	NUC	27-Apr-91	Iraq declares safeguarded material and Al Qaim yellowcake production to UN/IAEA
83	NUC	Late May 1991	PC-3 sites ordered to hand over materials, equipment and documents to the Security Apparatus for the Protection of Military Industrialization Establishments (SAP) prior to inspections to avoid detection

Regime Strategy and WMD Timeline Events (continued)			
84	POL	June 1991	Husayn Kamil orders retention of WMD know-how documentation and small amounts of key WMD materiel
85	CW	09-Jun-91	UNSCOM starts weapons inspections; first CW inspection at MSE (U-2, CW-1)
86	POL	30-Jun-91	Iraqi High Level Committee formed to address retention of proscribed materiel
87	POL	1991	Saddam states: "Sanctions will last no more than 3 years"
88	DS	July 1991	Husayn Kamil orders retention of 2 missiles and some missile parts
89	POL	July 1991	Special Republican Guard (SRG) officers receive orders from Qusay to move/ conceal MIC materials
90	DS	06-Jul-91	Iraq completes destruction of declared SCUD-type missiles under UNSCOM supervision
91	NUC	07-Jul-91	IAEA seizure of EMIS components prompts Iraqi admission of large EMIS program
92	POL	1991	Husayn Kamil tells 'Abd Hamid Mahmoud it is unnecessary to declare BW programs and will order scientists to hide evidence at home
93	DS	July 1991	Unilateral missile destruction
94	POL	July 1991	Unexpectedly robust UN inspections lead Iraq to start unilateral destruction, as later claimed by regime
95	NUC	by 1991	Iraq receives nine flow-forming machines from Germany
96	CBW	Mid July 1991	CW and all BW munitions unilaterally destroyed, according to subsequent Iraqi claims
97	POL	Summer 1991	Committee of Special Duties forms under Husayn Kamil or Qusay to covertly obstruct UN inspections
98	BW	02-Aug-91	First UNSCOM BW inspection begins at Al Salman (U-7, BW-1)
99	POL	15-Aug-91	UNSCR 707 demands Full, Final and Complete Declaration (FFCD) as required by UNSCR 687
100	PROC	Sept 1991	Iraq-Jordan Trade Protocol renegotiated and then reviewed annually
101	POL	Sept 1991	UNSCOM begins destruction of declared CW and agent; continues until July 1994
102	NUC	Late 1991	IAEA seizure of documents leads to Iraqi admission of Al Athir existence
103	BW	Sept or Oct 1991	Destruction of bulk agents at Al Hakam (reported to UN in 1995)
104	PROC	01-Sep-91	MIC forms Al Basha'ir front company to obtain items for Ministry of Defense (MoD), IAEC
105	POL	11-Oct-91	UNSCR 715 calls for unconditional acceptance of inspectors and ongoing monitoring/verification
106	BW	November 1991	Decision to dissolve Technical Research Center (TRC): implemented over the following year
107	DS	Dec 1991	Unilateral destruction of remaining 2 missiles completed
108	POL	Feb 1992	Husayn Kamil appointed Supervising Minister, responsible for MIC, Oil, MIM, & head of Economic Committee

Regime Strategy and WMD Timeline Events (continued)			
109	DS	Feb 1992	UNSCOM-28 prevented from destroying prohibited missile equipment and facilities
110	BW	Early 1992	Iraq begins design, construction of 5 cubic meter fermentors at Hakam (2) and Tuwaitha Agricultural and Biological Research Center (TABRC) (1)
111	NUC	March 1992	PC-3 officially dissolved
112	BW	Early 1992	Al Razi Research Center and Ibn-al-Baytar Center formed
113	POL	17-Mar-92	Iraq admits to July - Dec '91 unilateral destruction of CW, missiles
114	DS	Apr 1992	UNSCOM-34 completes destruction of known prohibited missile production equipment and buildings
115	DS	Apr 1992	Creation of Ibn-al-Haytham missile R&D center
116	NUC	Mar-Apr 1992	PC-3 and EDC personnel transferred en masse to MIC and other companies to support rebuilding of Iraq
117	DS	May 1992	Iraq submits first missile FFCD
118	NUC	Apr - June 1992	Al Athir nuclear weapons fabrication & assembly facility destroyed by IAEA
119	BW	01-May-92	Iraq admits it had defensive BW program
120	CW	June 1992	Iraq provides FFCD for CW
121	CW	July 1992	UNSCOM begins destruction of CW facilities
122	OTHER/ NUC	1993	MIC initiates Rail Gun Program at the High Voltage Establishment (later renamed Al Tahadi)
123	POL	13-Jan-93	US, UK, France conduct bombing raids on southern Iraq (targeted missile sites and command and control bases)
124	POL	Feb 1993	Saddam warns strikes on Iraq will result in a precise reaction
125	POL	1993	Husayn Kamil tells WMD scientists that programs will resume and be expanded once inspectors leave
126	DS	1993	Al Samud program initiated
127	CW	20-Oct-93	Former CW facilities split from National Company for Agricultural Chemicals and Medicines
128	POL	November 1993	Iraq accepts UNSCR 715: long-term monitoring
129	BW	1994	1993-1995 Bacillus thuringiensis (dry formulated preparation) produced at Al Hakam
130	POL	Jan 1994	National Monitoring Directorate (NMD) established in response to UNSCR 715
131	PROC	Early 1994	Iraq takes drastic measures (e.g. amputation) to enforce emergency economic measures
132	DS	17-Mar-94	UNSCOM letter limits diameter of Al Samud to 600mm and restricts use of SA-2 in SSM mode
133	CW	01-Jun-94	UNSCOM completes destruction of known CW agents and production facilities

Regime Strategy and WMD Timeline Events (continued)

134	OTHER/ NUC	1994	Iraqi laser projects moved from IAEC to MIC Laser Research Center
135	NUC	Mid 1994	Iraqi nuclear scientists prohibited from traveling outside Iraq
136	POL	Late 1994	Iraq threatens to stop co-operating unless oil embargo lifted
137	POL	Late 1994	Iraq moves forces to Kuwaiti border
138	POL	13-Oct-94	Russians counsel Iraq to accept Kuwait border
139	POL	21-Oct-94	Iraq, Russia offer joint proposal to recognize Kuwait if sanctions lifted
140	POL	November 1994	Iranian missile attack on MEK facilities in Iraq
141	BW	Early 1995	UNSCOM discovers 42 tons of unaccounted-for BW growth medium; Iraq cannot explain
142	DS	March 1995	Iraq blocks destruction of SCUD engine production equipment
143	BW	07-Apr-95	UNSCOM seminar concludes Iraq has undeclared full scale BW program
144	POL	14-Apr-95	UN passes Oil for Food (OFF) Resolution 986
145	POL	Early 1995	Iraq wants deal: 'Give us a clean report on CW and missiles and we will satisfy UN resolutions on BW'
146	POL	03-May-95	UNSCOM seminar concludes Iraq has not fully disclosed past CW activities
147	DS	June 1995	SCUD engine production equipment destroyed
148	POL	June 1995	Iraqi Foreign Minister demands UNSC lift sanctions
149	OTHER/ NUC	Mid 1995	MIC cancels Rail Gun program at Al Tahadi
150	BW	01-Jul-95	Iraq admits offensive BW program but denies weaponization
151	BW	01-Jul-95	Iraq submits draft BW FFCDD based on 1 July admission of BW program
152	BW	01-Jul-95	Russia agrees to provide Iraq with 50 cubic meter fermentation plant
153	POL	17-Jul-95	Saddam demands UNSC lift sanctions
154	BW	04-Aug-95	Iraq submits BW FFCDD based on 1 July admission
155	POL	08-Aug-95	Husayn Kamil flees Iraq
156	BW	09-Aug-95	Iraq declares BW FFCDD null and void
157	POL	mid-Aug 1995	Kamal Mustafa orders Walid Tawfiq to burn docs at 'Aqarquf'
158	BW	17-Aug-95	Iraq declares more complete BW program (still does not declare ricin)
159	POL	20-Aug-95	Iraq reveals 143 boxes of documents to UNSCOM at chicken farm
160	CW	Sep 1995	Saddam orders creation of the Industrial Committee (IC) and Economic Committee (EC)
161	BW	01-Sep-95	Iraq admits more of its BW program (now includes ricin)
162	POL	Sep-Oct 95	Large number of organizational changes in MIC
163	DS	Nov 1995	Iraq submits second missile FFCDD
164	PROC	Late 1995	Saddam re-establishes the Economic Affairs Committee (EAC) to influence fiscal and monetary policy

Regime Strategy and WMD Timeline Events (continued)			
165	DS	01-Nov-95	Iraq begins the Al Bay'ah (L-29) RPV program
166	DS	10-Nov-95	UNSCOM intercepts illegal Russian SS-N-18 SLBM gyros in Jordan
167	DS	Dec 1995	Dr. Muzhir is imprisoned (until January 1998)
168	PROC		Iraqi economy bottoms out (GDP drops to 20% of 1989; inflation hits 387%)
169	PROC	1996	Annual MIC budget is \$7.8M
170	CW	1996-1997	Industrial Committee begins work, plans to coordinate indigenous chemical production
171	POL	06-Jan-96	Saddam decrees austerity measures due to inflation caused by sanctions
172	PROC	17-Jan-96	Iraq agrees to discuss UN plan for limited oil sales
173	POL	23-Feb-96	Husayn Kamil and brother are executed following their return to Iraq
174	POL		Iraq signs MOU accepting Oil for Food
175	CW	June 1996	Iraq submits 3rd chemical FFCD
176	BW	15-Jun-96	After series of draft BW FFCD's, Iraq submits first post-Husayn Kamil departure BW FFCD
177	BW	20-Jun-96	Al Hakam BW plant destroyed under UNSCOM supervision
178	DS	July 1996	Iraq submits 3rd missile FFCD
179	DS	1996	Work commences at Ibn Firnas to convert L-29 to an RPV
180	POL	1996	WMD scientists ordered to sign agreement to turn over any documentation in their homes
181	NUC	1996	Fadil Al Janabi appointed head of IAEC
182	PROC	1996	Regime procurement with Jordan leads to further sanctions erosion
183	POL	31-Aug-96	Iraqi forces attack Irbil
184	CW	Sep 1996	Twenty fourth meeting of the IC indicates committee was concerned about wasting intellectual capital
185	BW	01-Sep-96	Iraq submits new BW FFCD
186	POL	03-Sep-96	Coalition forces extend No-Fly zones
187	NUC	07-Sep-96	Iraq submits nuclear FFCD
188	OTHER/ NUC	After 1996	Air defense projects were a priority at the IAEC
189	POL	10-Dec-96	OFF is implemented
190	POL	12-Dec-96	Assassination attempt cripples 'Uday Husayn
191	NUC	Through 1990s	Two scientists - one former EMIS and one former centrifuge - retain hidden nuclear documents and components
192	PROC	18-Mar-97	Iraq grants Russia MFN trade status, awards it 20% of initial OFF contracts
193	PROC	22-Mar-97	Iraq establishes a new Iraqi/Russian oil company
194	POL	27-Mar-97	Huwaysh becomes director of MIC; preserving pre-war nuclear competence becomes less important
195	POL	Early 1997	VP Ramadan recognizes OFF activities as opportunity
196	DS	13-Apr-97	First flight of L-29 RPV

Regime Strategy and WMD Timeline Events (continued)			
197	POL	1997	Huwaysh orders MIC employees to sign statements certifying they do not have WMD documents or equipment
198	PROC	1997	Regime procurement with Jordan, South Korea, Syria leads to further sanctions erosion
199	NUC	19-Jul-97	Fireset exhumed from rubble at Al Athir and turned over to inspectors
200	POL	Sept 1997	Iranian aircraft strike MEK facilities in Iraq; Iraq asks UN to act
201	BW	Sept 1997	UN inspectors find documents from July 1995 that show Russia intended to sell Iraq dual-use fermentation equipment
202	BW	01-Sep-97	Iraq submits new BW FFCF
203	CW	Oct 1997	Chemical process equipment purchased before 1991 for CW programs destroyed by UNSCOM
204	POL	10-Oct-97	UNSCOM attempts inspection of a Presidential palace and Iraq denies access
205	POL	15-Oct-97	Iraq protests UN inspection practices
206	DS	24-Oct-97	First Al Samud launch
207	DS	Nov 1997	UNSCOM Executive Chairman Butler to Iraq Government: no SA2 components to be used on Iraqi ballistic missiles
208	PROC	Nov 1997	Saddam approves MIC plan to use IIS to assist procurement
209	POL	03-Nov-97	Iraq awards Russian company contract to develop W Qurna oil field
210	POL	13-Nov-97	UNSCOM suspends inspections in Iraq
211	DS	Nov 1997	L-29 RPV and associated control equipment deployed to Tallil airbase in southern Iraq.
212	POL	20-Nov-97	Russia brokers agreement to resume UN inspections; inspections subsequently resume
213	PROC	Nov 1997	Aziz travels to Syria to re-establish relations
214	PROC	28-Nov-97	Rabi'ah and Al Qa'im border crossings opened with Syria (no UN monitoring)
215	OTHER/ NUC	After 1997	Large laser research contract between MIC and Technology University initiated
216	NUC	By 1998	Many nuclear scientists have migrated to other high priority programs such as air defense, infrastructure repair, rebuilding industrial base
217	CW/DS	Feb 1998	Technical Evaluation Meetings (TEM) conclude Iraq has not fully disclosed CW, missile activities
218	POL	Early 1998	Inner circle views Saddam as increasingly reclusive
219	PROC	06-Feb-98	Iraq rejects UN's proposal to increase oil exports
220	PROC	20-Feb-98	UNSCR 1153 expands Iraqi oil sales to \$5.256B/year
221	POL	23-Feb-98	Memorandum of Understanding (MOU) with UN Secretary General on inspection of Presidential sites
222	BW	March/April 1998	BW Technical Evaluation Meetings conclude Iraq has not fully disclosed BW programs
223	CW	Apr 1998	VX discovered on missile warhead fragments
224	POL	28-Apr-98	UNSC decides to continue sanctions; reinstates 60 day reviews

Regime Strategy and WMD Timeline Events (continued)

225	POL	1998	Huwaysh becomes Deputy PM/Head of the Ind. Committee: new Husayn Kamil?
226	OTHER/ NUC	1998 Onward	Saddam becomes increasingly interested in the activities of the Iraq Atomic Energy Commission (IAEC) & begins holding regular meetings with IAEC representatives
227	PROC	19-Jun-98	UNSCR 1175 allows \$300M for oil spare parts
228	POL	24-Jun-98	Leak reveals VX lab results; allies condemn Iraq
229	POL	1998	Iraq disappointed when positive IAEA report does not lead to UN resolution
230	CW	Jul 1998	Mosul University accepts DCC (VX stabilizer) tasking
231	BW	July 1998	BW TEM, held in Baghdad at Iraq's request, concludes BW not fully disclosed
232	PROC	05-Jul-98	Iraq and Jordan agree to construct oil pipeline
233	PROC	1998	French refusal to pay surcharge on Iraqi oil causes relations between the countries to cool
234	PROC	1998	Regime procurement with Bulgaria, France, FRY, PRC, and South Korea leads to further sanctions erosion
235	PROC	15-Jul-98	Iraq & Syria agree to build second pipeline
236	POL	18-Jul-98	UNSCOM discovers Air Force CW document at Air Force HQ
237	POL	03-Aug-98	Aziz-Butler standoff: 'Aziz rejects proposed schedule & demands favorable report to UNSC
238	POL	05-Aug-98	Revolutionary Command Council (RCC) announces end of no-notice UN inspections
239	POL	11-Aug-98	NMD committee to sort documents is formed
240	PROC	20-Aug-98	Iraq and Syria agree to re-open pipeline (Kirkuk to Mediterranean Terminals)
241	POL	09-Sep-98	UNSCR 1194 condemns Iraq's decision to stop cooperation with UNSCOM
242	POL	27-Sep-98	Turkey restores full diplomatic relations with Iraq
243	POL	23-Oct-98	UN Expert Panel confirms VX and stabilizer DCC found in destroyed warheads, asks Iraq to explain
244	POL	31-Oct-98	UN discontinues UNSCOM Monitoring due to increased tension and Iraqi intransigence
245	POL	14-Nov-98	Under US military threat Iraq agrees to resume inspections
246	PROC	05-Dec-98	MIC establishes second front company (ARMOS) to trade with Russia
247	POL	Late 1998/ Early 1999	Saddam disappointed at Huwaysh report that only conventional missile payloads available
248	POL	16-Dec-98	UNSCOM & IAEA leave Iraq, but NMD continues site liaison and data collection
249	POL	17-Dec-98	Desert Fox
250	POL	19-Dec-98	Iraq declares that UNSCOM will never be allowed to return
251	OTHER/ NUC	1999	IAEC initiates a rail gun program at two sites: Roland Missile Factory and adjacent to Tuwaitha Nuclear Research Center (TNRC)
252	DS	Jan 1999	RPV-20/30 program starts

Regime Strategy and WMD Timeline Events (continued)			
253	PROC	04-Jan-99	Iraq & Jordan renew crude oil agreement and renegotiate annually
254	PROC	13-Jan-99	World oil production cut, Iraq plans to raise output to 3 million barrels per day
255	PROC	07-Feb-99	King Husayn of Jordan dies, his heir restricts illicit trade with Iraq
256	POL	Feb - Apr 1999	Amorim panel meets, recommends creating new inspection group
257	POL	March 1999	Iraq media calls for strikes on US targets to force change in US policy
258	POL	Apr 1999	France & Russia introduce draft resolution; Netherlands & UK counter
259	DS	June 1999	Huwaysh replaces Ra'id with Muzhir at Al Karama
260	POL	01-Jun-99	Iran fires three missiles at MEK camp in Iraq
261	OTHER/ NUC	1999	Huwaysh gets research grants for university professors to preserve scientific base
262	POL	1999	Huwaysh orders MIC not to jeopardize lifting of sanctions
263	OTHER/ NUC	1999	IAEC establishes new laser division
264	PROC	1999	Regime procurement with Bulgaria, France, FRY, India, Jordan, North Korea, Russia, and Ukraine leads to further sanctions erosion
265	POL	1999	MIC employees sign affidavits pledging to surrender documents and not to import prohibited materials
266	OTHER/ NUC	1999	Saddam personally intervenes to improve IAEC conditions; raises salaries and prevents scientists from leaving
267	POL	1999	Saddam asks Huwaysh how long it will take to build a CW production line
268	POL	17-Jul-99	Saddam speech: America has taken control of the oil wealth of Arab countries
269	PROC	Oct 1999	Iraqi Intelligence Service (IIS) Director Rafi' Daham Al Tikriti dies; replacement is close to MIC
270	POL	Dec 1999	Russians push to lift sanctions
271	POL	17-Dec-99	UNSCR 1284 creates UN Monitoring and Verification Commission (UNMOVIC) and lifts all Iraqi oil export ceilings
272	OTHER/ NUC	2000	MIC rail gun program research continuing at Al Tahadi
273	PROC	2000	Sharp rise in Iraqi educational spending: two new universities
274	PROC	Jan 2000	Turkish trade/oil sale protocol signed
275	DS	Jan 2000	Start of Al Quds UAV program with goal of 100kg payload
276	CW	Feb 2000	Yugoimport submits tender to MIC for \$53,125 of white phosphorous (WP)
277	CW	March 2000	Fallujah II complex renovates chlorine and phenol lines and restarts
278	CW	Mar 2000	Yugoimport Special Purpose Military Production firm Krusik delivers 11,150 KG of WP to Hatin, which produces WP rounds
279	POL	01-Mar-00	Blix assumes leadership of UNSCOM successor UNMOVIC
280	PROC	May 2000	Syria-Iraq Trade/Oil sale protocol established; Syrian pipeline opens
281	POL	June 2000	Saddam speech: Iraq cannot give up its weapons if neighbors do not
282	DS	June 2000	Saddam orders the design of long range missile

Regime Strategy and WMD Timeline Events (continued)			
283	POL/PROC	June 2000	French contracts under OFF total \$1.78B--second only to Russia
284	PROC	10-Jun-00	President Hafez al-Assad of Syria dies: opens diplomatic opportunities for Iraq
285	PROC	July 2000	Iraq negotiates deals with Russia worth \$20B
286	OTHER/ NUC	2000	Al Tahadi Company signs magnet production line contract with Romanian company
287	PROC	2000	Regime procurement with Belarus, FRY, India, Jordan, North Korea, PRC, South Korea, Syria, Russia and Ukraine leads to further sanctions erosion
288	DS	23-Aug-00	Engineering drawings for 2 and 5 clustered SA-2 engine missiles created
289	PROC	Sept 2000	10% contract value kickbacks on OFF imports officially begin; may have been occurring since 1998
290	PROC	Mid-Late 2000	Iraq initiates contacts with a Chinese firm NORINCO, and first of several contacts over the next two years
291	POL	01-Nov-00	Baghdad International Fair: 46 countries participate, a ten-year record
292	POL	07-Nov-00	Saudis open border for OFF exports
293	PROC	Dec 2000	Leadership starts \$.20-\$.35 per barrel OFF oil surcharge; by 2002 drops to \$.15 per barrel
294	NUC	March 2001	IAEC President asks Saddam to gather former IAEC scientists and researchers at Tuwaitha - Saddam says no
295	POL	April 2001	Major Iranian missile attack on Mujaheddin el-Khalq (MEK) facilities in Iraq
296	DS	Early 2001	L-29 RPV crash on final attempted unmanned flight
297	NUC	20-May-01	Iraqi embassy in Nairobi reports rejecting an opportunity to buy uranium
298	PROC	June 2001	Central Bank of Iraq (CBI) begins to get cash/gold from OFF kickbacks via courier
299	DS	June 2001	Huwaysh approves the Al Samud II program
300	POL	2001	MIC Director orders reconstruction of items destroyed by UNSCOM
301	POL	2001	Saddam asks Huwaysh if he had developed BW and is told no
302	POL	2001	Intensified Iraqi intel focus on Iranian nuclear program
303	OTHER/ NUC	2001	Al Tahadi Company signs magnet production line contract with Belarusian company
304	PROC	2001	Regime procurement with Belarus, Bulgaria, France, FRY, India, Jordan, North Korea, PRC, South Korea, Syria, Russia and Ukraine leads to further sanctions erosion
305	POL	2001	NMD deputy requests scientists to turn in any documents they may have at home
306	OTHER/ NUC	2001	IAEC establishes Technical Research Branch under Physics Department to support rail gun research
307	POL	mid 2001	Aluminum tubes destined for Iraq captured in Jordan
308	DS	24-Aug-01	First successful launch of Al Samud II
309	PROC	01-Sep-01	MIC founds a 3rd front company: Al Mufakhir Export Co
310	POL	11-Sep-01	9/11 terrorist attacks on New York and Washington

Regime Strategy and WMD Timeline Events (continued)			
311	POL	12-Sep-01	Iraq misinterprets US reaction to events of 9/11; adopts ill-conceived diplomatic position
312	OTHER/ NUC	Late 2001	IAEC Modernization Project begins and initiates purchase of CNC machines
313	POL	Oct-Nov 2001	Enduring Freedom defeats the Taliban in Afghanistan
314	DS	Dec 2001	Iraq begins serial production of the Al Samud II
315	POL	Late 2001	Around this time, Iraqi scientists tell Regime leaders they cannot produce WMD
316	OTHER/ NUC	January 2002	Saddam issues order for IAEC and MIC to implement cooperative projects in physics, machining, electronics
317	PROC	January 2002	Saddam directs the MIC to assist the IAEC with foreign procurement
318	PROC	26-28 January 2002	Tariq 'Aziz visits Moscow and Beijing to bolster international support for lifting UNSC sanctions
319	POL	29-Jan-02	Bush refers to 'Axis of Evil' in State of the Union address
320	NUC	12-Feb-02	Saddam declares "We will not return to it" with reference to nuclear weapons
321	POL	13-Feb-02	Iraq says inspectors will not be allowed to return
322	PROC	March 2002	MIC front company ARMOS authorized to trade outside of Russia
323	POL	21-Mar-02	Russia blocks UNSC attempt to tighten-up OFF, reduce violations
324	POL	March/April 2002	Iraq & UN hold new inspection talks in NY
325	DS	01-Jun-02	Jinin cruise missile project initiated (1000km range; 500kg payload)
326	DS	2002	Ibn Firnas recommends MIC cancel L-29 RPV program
327	POL	July 2002	Iraq & UN hold more inspection talks in Vienna
328	OTHER/ NUC	Mid 2002	MIC Rotating Machinery Department (RMD) formed; machine tools ordered, including a balancing machine
329	OTHER/ NUC	05-Jul-02	Copper vapor laser demonstrated to Huwaysh; put into storage
330	PROC	2002	Regime procurement with Belarus, France, FRY, India, Jordan, PRC, Russia, Syria and Ukraine leads to further sanctions erosion
331	POL/PROC	2002	Iraq and Russia negotiate \$40B oil development deal to be undertaken once sanctions are lifted
332	OTHER/ NUC	2002	MIC sponsors 3200 research projects in Iraqi universities (up from 40 in 1997)
333	OTHER/ NUC	2002	MIC builds explosive test facility capable of researching shaped charges
334	POL	Mid 2002	Iraq begins production of 81mm aluminum tubes for rockets
335	DS	Sept 2002	CAD designs for a launcher accommodating missiles up to 1m in diameter; 9m in length
336	POL	Sept 2002	Higher Committee, once controlled by Tariq 'Aziz, is reconstituted to deal with inspections, headed by Taha Ramadan
337	CW	Sep 02	Over 900,000 nerve agent antidote autoinjectors had been purchased

Regime Strategy and WMD Timeline Events (continued)

338	POL	12-Sep-02	Bush calls Iraq 'Grave and gathering danger' in UN General Assembly (UNGA) speech
339	POL	16-Sep-02	Iraq agrees to readmit inspectors
340	POL	18-Sep-02	Publication of UK Iraq WMD dossier
341	POL	Nov 2002	MIC scientists meet and are told that Iraq has no WMD, and they must not hide anything from inspectors
342	DS	Nov 2002	Jinin and other covert delivery system programs suspended due to return of inspectors
343	POL	08-Nov-02	UNSCR 1441 finds Iraq in material breach, calls for disarmament and FPCD
344	POL	08-Nov-02	Russia refuses to veto UNSCR 1441
345	POL	27-Nov-02	UNMOVIC inspections begin
346	POL	Dec 2002	Saddam tells his Generals he does not have WMD
347	POL	Dec 2002	Saddam tells military leaders/senior leaders to "cooperate completely" with inspectors
348	POL/DS	Dec 2002	UNMOVIC freezes the Al Samud II and Al Fat'h flight tests upon further analysis of system's range capability
349	OTHER/ NUC	Dec 2002	Details of IAEC dual-use CNC machine purchases provided to UN/IAEA
350	POL	End of 2002	Iraq successfully flight tests 81mm rockets with indigenously produced aluminum tubes
351	POL	Late 2002	Iraq again attempts foreign purchase of 81mm tubes
352	POL	Dec 2002	NMD publishes the Currently Accurate Full, and Complete Declaration
353	CW	Jan 2003	Two teams from IAEC and Al Majid Company develop multipurpose controllers for process plant
354	PROC	Jan 2003	MIC annual budget at \$500M
355	POL	Jan-2003	UNMOVIC finds 12 empty 122mm CW rocket warheads
356	POL	Jan 2003	Iraqi MoD conference on Iranian WMD
357	POL	20-Jan-03	Husam Amin tells military leaders to cooperate with inspectors, repeating Saddam's earlier directives
358	POL	20-Jan-03	The MIC directs all Directors General of state companies to relinquish any WMD to the NMD
359	POL	25-Jan-03	The NMD director meets with Republican Guard (RG) leaders and advises they sign documents stating no WMD in RG units
360	CW	Feb 2003	Inspection of Al Nu'man factory reveals cluster bomb that management claimed from Al Muthanna
361	POL	Feb 2003	According to senior Iraqi Minister of Foreign Affairs, Saddam has decided to use CW against US troops in the event of war
362	CW	Feb-2003	Iraq recommends excavating R-400 bomb fragments at Al 'Aziziyah
363	NUC	February 2003	DG of NMD still trying to satisfy IAEA concern over missing explosive lens mold drawings
364	POL	05-Feb-03	US SecState Powell presents evidence of Iraqi WMD programs to UNSC

Regime Strategy and WMD Timeline Events (continued)			
365	POL	14-Feb-03	Saddam issues directive banning private companies and individuals from importing WMD materials or producing WMD
366	POL	28-Feb-03	Russia threatens veto of UNSCR authorizing war on Iraq
367	CW	March 2003	New construction scheduled for MIM plant to provide indigenous multi-purpose production facility, halted due to OIF
368	PROC	Mar 2003	MIC has \$186M in contracts with Syria (SES Company)
369	DS	1-17 Mar 2003	UNMOVIC bans Samud II and supervises destruction of missiles
370	PROC	Early 2003	Regime procurement with Belarus, Bulgaria, France, India, Jordan, PRC, Russia, Syria, and Ukraine leads to further sanctions erosion
371	PROC	01-Mar-03	MIC has accumulated \$300M+ in reserves
372	PROC	Early March	Saddam forms a funds distribution committee consisting of Minister of Finance, President of the Diwan, Presidential Secretary, and Qusay Husayn
373	POL	06-Mar-03	UNMOVIC publishes report - Unresolved Disarmament Issues (Clusters)
374	POL	10-Mar-03	France threatens veto of UN resolution authorizing war; later opposes OIF
375	POL	18-Mar-03	UNMOVIC and IAEA depart Iraq
376	POL	19-Mar-03	Initiation of hostilities
377	POL	Late March 2003	Saddam implies to military leaders that he has secret weapon

