

UNITED NATIONS



NATIONS UNIES

UNITED NATIONS MONITORING, VERIFICATION AND INSPECTION COMMISSION  
(UNMOVIC)

# **Compendium**

## **Iraq's Procurement Activities**

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**IRAQ'S PROCUREMENT ACTIVITIES<sup>1</sup>**

**The Scope and Role of Procurement Pre-Sanctions - from the Early 1970s to 1990**

The programme to modernise Iraq's industrial infrastructure and to upgrade its armed forces dates from the early 1970s. As with most countries, Iraq created a military-industrial complex, which incrementally incorporated the weapons programmes, which were in the main, heavily dependant on the import of foreign technology, arms, equipment, tools, parts and materials.

Forms of foreign assistance varied from the supply of individual items to the sale of licensed technology for the construction of turnkey facilities. With its total control over Iraq's oil resources and rapidly developing petrochemical industry, its foreign suppliers perceived the Government of Iraq as a solid business partner with a very good line of credit.

With respect to Iraq's weapons and programmes within UNMOVIC's mandate, it was established in the course of verification that during the period from the mid-1970s to 1990, over 200 foreign suppliers had provided major critical technology, equipment, items and materials that were directly used by Iraq for its chemical weapons (CW), biological weapons (BW) and missile programmes. The suppliers included government agencies and organisations, private companies, together with individuals who acted as brokers and middlemen. In the region of 80 branches of foreign banks outside of Iraq were involved in acquisition transactions. In addition, dozens of trans-shipment companies were involved in the delivery of items and materials to Iraq. While there were cases when suppliers were aware of the final use of the equipment and materials delivered to Iraq, there were also many cases when the providers were unaware of the intended end-use of the items they sold to Iraq.

In the 1970s and early 1980s, there were no international trade controls on the export of dual-use chemical and biological items, or missile technology. During this period, Iraqi establishments involved in weapons programmes procured technology, equipment, items and materials either directly from foreign suppliers, if they were authorised to do so, or

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<sup>1</sup> The information supplied in this chapter has been limited to what is relevant to UNMOVIC's mandate on chemical and biological weapons and missile systems with a range greater than 150 kilometres. Any other information possessed by UNMOVIC concerning acquisitions made by Iraq's military industries and its armed forces has been deliberately excluded, as have the names of supplier countries, companies and individuals.

The chapter is written from information contained in Iraq's CAFCD (2002).

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through their respective supervising agencies. Iraq's CW programme was permitted to procure items directly.

The mechanics of the procurement were relatively simple at that time. They involved the creation of operational accounts in Iraqi banks (chiefly the Central Bank of Iraq and the Rafidain Bank), corresponding accounts in foreign banks, direct interactions with prospective suppliers and the preparation and execution of contracts. Normally, the shipping of goods to the port of entry in Iraq was the responsibility of suppliers.

### **The Advent of Trade Controls**

In 1984, in response to the findings of the United Nations Special Investigatory Mission that chemical weapons had been used in the Iran-Iraq war, a number of governments introduced systems of licensing to govern the export of particular chemicals that could be used for the production of chemical weapons. In 1985, a group of countries that came to be known as the "Australia Group" collaborated on developing and implementing such measures as an informal mechanism to harmonise the measures taken individually. This allowed exporting or trans-shipping countries to minimise the risk of unknowingly assisting chemical weapons proliferation. Additional measures involving the licensing of the export of dual-use chemical and biological manufacturing facilities and equipment and related technology were introduced by members of the Australia Group later in the 1980s.

The Missile Technology Control Regime (MTCR) was established by seven states in 1987 as an informal and voluntary association of countries that decided to coordinate national export licensing efforts aimed at preventing proliferation. The aim of the MTCR was to restrict the proliferation of missiles, complete rocket systems, unmanned aerial vehicles, and related technology for those systems capable of carrying a 500 kilogramme payload at least 300 kilometres, as well as systems intended for the delivery of weapons of mass destruction.

Measures undertaken by members of the Australia Group, MTCR and other individual states significantly affected the development of Iraq's chemical, biological and missile programmes in the late 1980s. Iraq's CW programme started to experience shortages in precursor chemicals and equipment for the production of CW agents, largely due to newly introduced export controls in its preferred supplier countries. Its BW programme was unsuccessful in its attempts to procure large fermentation equipment for a dedicated BW production facility. The MTCR guidelines impacted the implementation of Iraq's project to develop a two stage missile jointly with a foreign country and slowed down progress in the development of other missile projects, including a space launch vehicle.

### **Iraq's Response**

This range of trade restriction measures, however, did not completely stop the flow of dual-use equipment and materials to Iraq for the following reasons:

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- a. Iraq had established and now expanded greatly a sophisticated procurement network consisting of a complex chain of brokers, intermediaries, bank accounts and transportation companies that enabled it, if necessary, to procure items using false end-user certificates issued for third parties;
- b. After experiencing increasing problems in importing technology and raw materials from states that had implemented appropriate licensing systems, Iraq largely switched its procurement efforts to companies or subsidiaries that operated in countries where such measures had not yet been developed, introduced or fully implemented;
- c. Mindful of the difficulties it had experienced in the acquisition of dual-use equipment and materials, and the likelihood that such difficulties would increase in the future, Iraq attempted to procure some items in excessive quantities in order to secure and meet possible needs in the future.
- d. To circumvent technology transfer controls, Iraq attempted to purchase relevant companies (and their technical assets) and so gain access to the dual-use technology it needed.

Consequently, in order to maintain the acquisition of dual-use goods, Iraq tried to adjust its procurement network to meet the emerging international trade norms. These changes involved the use of legitimate commercial organisations in Iraq, such as the State Organisation for Oil Refineries and Gas Industry (SORGI), and government trading agencies and companies, such as Technical and Scientific Materiel Importation Division (TSMID), as front companies for the procurement of dual-use items and materials. SORGI handled contracts for Iraq's CW programme under the cover of the oil industry and TSMID was an acquisition unit to support activities within the Technical Research Centre (TRC) which included the BW programme.

Depending on the nature of the goods procured, acquisitions were also made through other agencies to further justify the acquisition. Thus, some laboratory equipment and materials used by the BW programme were procured through the Ministry of Agriculture, Ministry of Oil and Ministry of Health and machines and tools for missile projects through the Ministry of Industry.

Further adjustments included the use of networks of brokers and middlemen, with offices registered in third countries. Contracts and End-user certificates could thus be issued to Iraq's front importation companies and foreign trading companies, instead of directly to Iraq. Foreign trading companies then, acting on behalf of brokers and middlemen, would procure the required goods from manufacturers and distributors. To further cover the final destination of goods, if required, brokers and middlemen would arrange for multiple trans-shipments by freight handlers. The goods would not be delivered to Iraq but to a neighbouring country in the region, where they would be transported to Iraq by an Iraqi shipping company acting on behalf of the end-users or their agencies.

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The length of the “procurement chain” depended on the geographic location of the manufacturers, the sensitivity of the item and existing trade regulations in their countries. Accordingly, the creation of additional bank accounts in multiple foreign banks was required to support such a sophisticated procurement mechanism at each phase and location of its functioning. This resulted in proportionally increased costs for the items and materials procured in this manner. Iraq procured over one thousand metric tonnes of precursor chemicals for the production of CW agents using this mechanism. In one known case, Iraq procured several hundred tonnes of a key precursor from a foreign supplier using a false end-user certificate.

To alleviate extensive procurement procedures, Iraq often entered into cash transactions with foreign brokers and individuals, when these were accepted. The cash was delivered to Iraq’s governmental institutions abroad and disbursed by Iraqi officials, mainly those affiliated with the Iraqi Intelligence Service.

The successful procurement of dual-use foreign technology, equipment, items and materials was crucial for Iraq’s development of all of its proscribed weapons programmes:

- a. In the area of chemical weapons, foreign contractors designed most of the production plants and units constructed and used by Iraq to manufacture CW agents. The vast majority of the chemical processing equipment came from foreign suppliers, and about 95 percent of all precursor chemicals used for the production of CW agents was procured outside Iraq;
- b. In the missile area, Iraq relied on imported components for its foreign made missile systems that were subject to experimentation and modification. Iraq also imported machinery, tools and raw materials in an attempt to indigenously produce some missile systems and components;
- c. In the area of biological weapons, equipment used for BW research and development and most equipment used in the production of BW agents, as well as bacterial isolates and other items such as bacterial growth media, were also procured from foreign suppliers. In contrast to the chemical weapons area, where specific equipment was procured for the purpose of CW production, the equipment used for the production of BW agents was largely taken from other biological facilities in Iraq that had earlier acquired the equipment for legitimate purposes.

### **Munitions**

Iraq's CW programme relied on the adaptation of conventional munitions for the dispersion of CW agents. Some of these munitions were later used by Iraq also for BW agents. Thus, the acquisition of foreign conventional munitions, their parts and components and means to manufacture them was another part of the procurement efforts in support of Iraq’s proscribed weapons programmes.

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In the early 1980s, Iraq contracted a foreign company to perform a number of static field tests, outside Iraq, of conventional artillery shells and rocket warheads filled with materials to simulate chemical weapons. The performance characteristics such as the nature and extent of dispersion of the liquid payload were evaluated, as were the optimal parameters such as the burster tube length and charge strength. After the tests had confirmed the suitability of such shells and warheads, Iraq procured assemblies for 50,000 artillery projectiles and 25,000 rockets from this company for its CW programme.

Another company supplied Iraq with an additional 35,000 pieces of similar artillery projectiles. A different foreign company supplied Iraq's CW programme with 22,000 122mm rockets with several different versions of warheads, some designed to hold a payload with physical characteristics that matched particular CW agents Iraq had produced. The same company also supplied Iraq some 6,500 rockets with warheads specifically designed to hold the CW agent sarin.

While continuing to import munitions that were suitable for its CW programme, Iraq also tried to achieve a higher degree of self-reliance in munitions production. Iraq was able to indigenously produce artillery and bomb casings and assemble a variety of aerial bombs using manufacturing equipment and components that had been procured and imported for the production of conventional munitions.

### **Procurement Data**

Given the critical role that dual-use technology, equipment, and materials acquired from foreign suppliers played in Iraq's development of its WMD programmes, the evaluation of procurement data proved to be one of the major tools for the verification of Iraq's declarations concerning such programmes.

Procurement data is a combination of the information, documents and records relating to specific actions undertaken by Iraq for the acquisition of items and materials. This includes communications and negotiations with prospective suppliers, tenders describing services required and items and relevant specifications, offers made by suppliers, the preparation and implementation of contracts, including insurance documents, bills of lading, trans-shipment information, customs documentation, and final delivery certifications of contract implementation by end users. Documentation will also include a number of financial statements such as the opening of operational accounts in corresponding banks, issuing letters of credit and a variety of money transfers from the accounts of end users in Iraq to the Iraqi banks involved in the transactions.

The experience of UN verification in Iraq shows that despite Iraq's extensive concealment policy and practices, it was still possible to find evidence (an audit trail) of its procurement activity. The nature and scope of the procurement process was such that multiple "fingerprints" of past acquisitions existed not only at various organisations in Iraq, including ministries and agencies, establishments and banks, but also outside Iraq, in countries of suppliers and third countries through which goods were trans-shipped.

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UN inspectors to obtain such data used the following verification methods and techniques:

- a. Procurement data provided by the governments of former suppliers to Iraq was the major source of information at the beginning of the verification process. It provided an important insight into Iraq's acquisitions in connection with its proscribed weapons programmes and helped determine the completeness of Iraq's declarations. However, the degree of cooperation by member states in providing such information varied, and several important aspects of Iraq's procurement activities could not be clarified with former suppliers and the respective member states. The demonstrated ability of the UN verification body to maintain confidentiality of information provided by member states was an important prerequisite for member states to maintain the supply of such information. Member states provided their most sensitive procurement information only after they had been satisfied that the UN verification body was successfully "securing" such information;
- b. Direct contacts with former suppliers (legal entities and individuals) established with the support of member states and independently by the UN, provided first-hand information on Iraq's requirements with regard to specific items and materials, their types and quantities, as well as on the performance of contracts Iraq had concluded;
- c. Another important source of information was data collected by individual member states and shared with the UN inspectors. This included very specific information on contacts between various Iraqi agencies, facilities and individuals with foreign brokers, middlemen and suppliers outside Iraq;
- d. The evaluation and analysis of the procurement data Iraq provided in its declarations was another important source of information. While Iraq was aware that the UN inspectors had obtained information from some of its foreign suppliers; and other sources, it was not aware of the exact nature or scope of the information provided. As a result, in many cases Iraq provided new information and identified suppliers that had not been known to the inspectors;
- e. Through on-site inspection activities, inspectors were able to identify the origin of the items and materials and the manufacturers and supplying organisations from brands, serial/model numbers, labels, packaging and shipping markings on crates that often contained the code identification of the end-users. These included chemical processing and biological equipment, precursor chemicals, bacterial growth media and munitions acquired from foreign suppliers;
- f. Document searches at various facilities in Iraq, including offices of ministries, agencies, companies, facilities that were involved in different stages of the procurement process, from the preparation of tenders and relevant specifications to the acquisition of goods and their shipment to Iraq;



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g. Inspections of bank branches in Iraq and the evaluation of the accounts of organisations and establishments was another source of information. To be more productive, this process required preliminary knowledge and understanding of the organisational structure of Iraq's proscribed programmes, their affiliation, budget and finance. Codes of bank accounts, contracts and letters of credit contained distinctive identifiers of budgeting organisations that financed the procurement;

h. Interviews with Iraqi personnel at all levels involved in procurement, from senior managers to truck drivers who transported the procured goods, also proved to be an effective tool to obtain relevant information.

In several instances, procurement information was absolutely critical and enabled UN inspectors to make dramatic progress in the verification of Iraq's past proscribed programmes:

a. In the missile area, information provided by a former foreign supplier on the acquisition by Iraq of operational missiles, including the quantity and serial numbers, was critical in the efforts to establish the material balance of these missiles;

b. In the chemical area, very specific procurement data provided by suppliers helped inspectors identify dozens of items of undeclared chemical processing equipment that had been procured for Iraq's CW programme;

c. In the biological area, information provided by a former supplier who had been identified through the evaluation of the original packaging of materials found in Iraq included data on the specific types and quantities of bacterial growth media Iraq had procured from it. This information was used by the UN inspectors in pressing Iraq to finally disclose elements of its offensive BW programme, which Iraq did in 1995.

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### **Sanctions and Procurement**

The pattern of procurement changed and evolved during the period 1991 to 2003 as a consequence of changing internal and external factors.

#### **Period from 1991 to 1995**

Following the invasion of Kuwait by Iraq in 1990, the UN Security Council, in its Resolution 661 (1990), decided that member states should prevent the sale or supply to Iraq of any commodities or products, including weapons or any other type of military equipment. Security Council Resolution 687 (1991) further detailed these sanctions and decided that member states should continue to prevent the sale or supply to Iraq of arms and related materials, including conventional military equipment, spare parts and their means of production as well as chemical and biological weapons and all related subsystems and components, ballistic missiles with a range greater than 150 kilometres and related major parts and nuclear-weapons-usable materials or any subsystems or components.

The Plan for On-Going Monitoring and Verification (OMV), developed under Security Council Resolution 715 (1991) contained specific provisions for the monitoring and verification of any eventual imports by Iraq, including lists of prohibited items as well as dual-use items. In this resolution, the Security Council requested the Committee established under Resolution 661 (1990), UNSCOM and the IAEA develop a mechanism for monitoring any eventual sales or supplies to Iraq of items relevant to the implementation of provisions of resolution 687 (1991).

It became apparent that even under the sanctions established under resolution 661 (1995), certain dual-use items, such as vaccines, were being legitimately exported to Iraq. Therefore, the monitoring mechanism had to be introduced and operational before the sanctions could be reduced or lifted.

Meanwhile, all sales and supplies to Iraq of any prohibited commodities, including military equipment and dual-use items and materials were to be stopped by the sanctions regime. It is known, however, that during this period Iraq tried to negotiate with foreign companies for the possible procurement of a variety of military and dual-use items. Apart from instances concerning the supply of missile parts, there is no evidence that any of the items and materials sought by Iraq were actually intended for use in proscribed weapons programmes.

During the period 1993 to 1995, a foreign individual, acting under contract with several of Iraq's missile establishments and in close collaboration with the Iraqi Security and Intelligence Service, visited three countries in order to obtain parts and components of missile guidance and control systems. In one country, he was able to find sources of these goods, to establish an office, to open multiple bank accounts, to procure and ship to a third country various missile parts and components through a chain of private companies and intermediaries. The authorities of the third country intercepted one of the

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shipments enroute to Iraq. After this, Iraq handed over to the UN inspectors the missile parts and components from previous deliveries.

### **Period from 1996 to 1998**

In 1995, the Security Council through resolution 986 (1995) authorised member states to import petroleum and petroleum products originating in Iraq in exchange for humanitarian goods and oil industry spare parts. This became known as the Oil-for-Food programme.

The provisions for the mechanism for export/import monitoring were jointly prepared by the Committee established under resolution 661 (1990), UNSCOM and the IAEA and submitted to the Security Council in 1995. These provisions were approved by the Security Council in its resolution 1051 (1996). The mechanism for export/import, which included lists of items and materials subject to notifications, became an integral part of the OMV system. The mechanism was not a regime for international licensing, but rather for the timely provision of information in advance of shipment both by Iraq and the governments of suppliers of any items identified in the Plan for OMV.

Under the mechanism for export/import, UNSCOM and the IAEA received notifications of the export to Iraq of listed dual-use items and materials and arranged for their monitoring and verification in Iraq. The export/import dual-use lists under the mechanism detailed further the more generic lists developed under the Plan for OMV by describing specific parameters and characteristics of dual-use items and materials subject to notifications. While the lists under the Plan for OMV were last revised in 1995, the latest revision of export/import lists took place in 2001.

The mechanism for export/import significantly enhanced the UN monitoring and verification capabilities. Inspections of items and materials subject to notifications at points of entry in Iraq, verification of storage and distribution facilities and companies as well as end users of goods provided a sufficient degree of confidence that they were not used for proscribed purposes. In addition, export/import notifications could be compared with information Iraq provided in its semi-annual declarations under the Plan for OMV and thus enable real-time verification.

During the period from 1996, when the implementation of the mechanism had begun, until the withdrawal of the UN inspectors from Iraq in 1998, there was no evidence that Iraq had attempted to use any of its declared imports of procured goods for proscribed programmes. However, the inspectors noticed several instances of the procurement by various Iraqi facilities of declarable dual-use items and materials outside the scope of the mechanism. Iraq explained that these foreign goods had been obtained from local private trading companies, which it described as procuring from the “local market”. The so called local market was a sign of the development of new procurement patterns in Iraq involving private entrepreneurs and their interconnected networks, rather than governmental institutions and trading companies hitherto seen. This procurement pattern was further developed as money flowed and became widespread throughout the whole of

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Iraq's trading economy. It dominated Iraq's acquisitions after the departure of inspectors from its territory in December 1998.

### **Period from 1999 to 2002**

By its resolution 1409 (2002), the Security Council adopted the Goods Review List (GRL) and authorised member states to permit the sale or supply of any commodities or products to Iraq other than military commodities and products referred to by resolutions 661 (1990) and 687 (1991) as well as military-related commodities or products covered by the GRL. The GRL included all WMD-related dual-use items and materials from the mechanism for export/import developed under Security Council resolution 1051 (1996) as well as other categories of items relating to advanced technology and manufacturing of conventional weapons.

Under the mechanism associated with the GRL, relevant applications for the sale or supply of any commodities to Iraq were subject to review and evaluation by UNMOVIC and the IAEA. If no items in the contract were listed in the GRL or prohibited to Iraq by Security Council resolutions 661 (1990) and 687 (1991) were identified in applications, then they would be given immediate approval, subject to the contractual details being in order, by the Office of the Iraq Programme established under Security Council resolution 986 (1995). Those applications containing GRL items were forwarded to the Committee established under resolution 661 (1990) for evaluation and final decision.

During the absence of the UN inspectors in Iraq from 1999 to November 2002, the governments of suppliers continued to provide notification of exports to Iraq. However, Iraq did not provide its corresponding notifications during this period. Nevertheless, prior to the resumption of monitoring and verification activities in November of 2002, Iraq provided aggregated data for this period on the procurement of items and materials subject to notifications in a set of its semi-annual declarations. Iraq also provided actual notifications that had been continuously prepared by it from 1999 to 2002, but had not been sent to the UN.

A review of the semi-annual monitoring declarations, procurement information obtained during inspections, interviews and data retrieved through the forensic computer exploitation indicates that, during the period from 1999 to 2002, Iraq had rebuilt and further developed its procurement network for the acquisition of foreign materials, equipment and technology. The network consisted of state owned trading companies, established and controlled by the Military Industrialisation Commission (MIC), with branches in foreign countries, Iraqi private sector and foreign trading companies operating in Iraq and abroad, multiple intermediaries, chains of foreign suppliers of items and materials, bank accounts and transportation companies. In several instances, the Iraqi state owned trading companies had shares in foreign trading companies or were closely affiliated with local private trading companies.

From 1999 to 2002, Iraq procured materials, equipment and components for use in its missile programmes. In several instances, the items procured were used by Iraq for the

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production of Al Samoud-2 missiles that were determined by UNMOVIC in February 2003 to be proscribed. At least 380 SA-2 missile engines were imported for Iraq's prime missile establishment by an Iraqi state owned trading company controlled by MIC through a local Iraqi trading company and a foreign trading company.

The same Iraqi governmental trading company was involved, through a contract with two foreign private companies, in procuring components and equipment for the manufacture and testing of missile guidance and control systems, including inertial navigation systems with fibre-optic and laser ring gyroscopes and Global Positioning System (GPS) equipment, accelerometers, ancillary items and a variety of production and testing equipment. One Iraqi trading company was also involved in the procurement, through private trading companies, of different pieces of missile-related production equipment and technology. Several foreign private subcontractors were responsible for the implementation of specific parts of the general contract.

From 1999 to 2002, Iraq also procured a variety of dual-use biological and chemical items and materials, including chemicals, equipment and spare parts. However, there was no evidence that these were used for proscribed chemical or biological weapon purposes. Although some of the goods were acquired by Iraq outside the framework of the mechanisms established under Security Council resolutions, most of them were later declared by Iraq to UNMOVIC in its semi-annual monitoring declarations.

### **Period after 2003**

In Resolution 1483 (2003), the Security Council decided that all prohibitions related to trade with Iraq and the provision of financial or economic resources to Iraq established by resolution 661 (1990) and subsequent relevant resolutions should no longer apply except for the prohibitions related to the sale or supply to Iraq of arms and related materiel. The Security Council also decided to terminate the Committee established pursuant to resolution 661 (1990) and the ongoing operations of the Oil-for-Food Programme. Consequently, the GRL mechanism was abandoned.

In resolution 1546 (2004), the Security Council further decided that the prohibitions related to the sale or supply to Iraq of arms and related materiel under previous resolutions would not apply to arms or related materiel required also by the Government of Iraq to serve the purposes of the resolution.

In its resolution 1483 (2003), the Security Council, however, reaffirmed that Iraq must meet its disarmament obligations. This meant that provisions relating to the mechanism for export/import under resolution 1051 (1996) remained in force until further decision by the Council, as well as the arms embargo as amended by resolutions 1483 (2003) and 1546 (2004).

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### **Importance of Procurement Verification**

The history of Iraq's development of its chemical and biological weapons and ballistic missile with a range greater than 150 kilometres shows that the acquisition of foreign technology, equipment and materials was critical for these programmes. The forms of foreign assistance to Iraq varied from supplies of individual items and sales of licensed technology to the construction of turn-key facilities in Iraq by foreign contractors.

The experience of international verification in Iraq exemplifies the importance of procurement verification as a tool to achieve full disclosure of proscribed weapons programmes. It shows that despite Iraq's extensive concealment policy and practices, it was still possible to find evidence of its procurement activity.

Although the introduction of export licensing by individual states significantly slowed down and limited Iraq's procurement efforts prior to 1991, it did not stop them completely. The provisions involving licensing of the exports on the grounds of only end-user certificates without on-site verification were not able to fully solve the problem of possible trans-shipments of dual-use items and materials to Iraq.

Iraq's demonstrated ability to make adjustments and modifications to its procurement techniques to overcome trade restrictions, and to a certain degree even under sanctions, shows that only a combination of national measures to control the export of dual-use items and materials with a universal international mechanism for export/import notifications and on-site verifications can provide a sufficient degree of confidence that these goods are not used for proscribed purposes.

The mechanism for export/import monitoring under Security Council Resolution 1051 (1996) is an example of the efficient functioning of trade regulations. It displays, however, that when one of its complimentary elements, on-site inspections, was not in force due to the absence of the inspectors in Iraq from 1999 to 2002, its effectiveness was diminished.