

**Unclassified Report to Congress
on the Acquisition of Technology
Relating to Weapons of Mass Destruction
and Advanced Conventional Munitions,
1 January to 31 December 2006**

The Deputy Director of National Intelligence for Analysis hereby submits this report in response to a congressionally directed action in Section 721 of the FY 1997 Intelligence Authorization Act, which states:

“(a) Reports

The Director of Central Intelligence shall submit to Congress an annual report on -

- (1) the acquisition by foreign countries during the preceding 6 months of dual-use and other technology useful for the development or production of weapons of mass destruction (including nuclear weapons, chemical weapons, and biological weapons) and advanced conventional munitions; and
- (2) trends in the acquisition of such technology by such countries.”

(b) Submittal dates

(1) The report required by subsection (a) of this section shall be submitted each year to the congressional intelligence committees and the congressional leadership on an annual basis on the dates provided in section 415b of this title.

(2) In this subsection:

(A) The term “congressional intelligence committees has the meaning given that term in section 401a of this title.

(B) The term “congressional leadership” means the Speaker and the minority leader of the House of Representative and the majority leader and the minority leader of the Senate.

(c) Form of reports

Each report submitted under subsection (a) of this section shall be submitted in unclassified form, but may include a classified annex.”

CIA’s Weapons Intelligence, Nonproliferation, and Arms Control Center (WINPAC) drafted this report and coordinated it within the Intelligence Community (IC). The

National Intelligence Council assisted with the review and coordination. As directed by Section 721, subsection (c) of the Act, this report is unclassified. It does not present the details of the IC's assessments of weapons of mass destruction and advanced conventional munitions programs that are available in other classified reports and briefings for the Congress.

Acquisition by Country

As required by Section 721 of the FY 1997 Intelligence Authorization Act, the following are country summaries of acquisition activities (solicitations, negotiations, contracts, and deliveries) related to weapons of mass destruction (WMD) and advanced conventional weapons (ACW) that occurred from 1 January through 31 December 2006. This section of the report focuses on key countries of concern that we assess are seeking WMD capabilities.

Iran

Nuclear. Iran resumed enrichment-related activities at Natanz in January 2006. It introduced uranium hexafluoride feed material into a single P-1 centrifuge in February and into a 164-centrifuge cascade in late March. Iran announced in mid-April that it had achieved a uranium enrichment level of 3.6 percent. In November, Iran announced that it planned to install 3,000 centrifuges by the end of the current Iranian year on March 20, 2007, as the first step toward a total of about 50,000 centrifuges needed for its nuclear energy requirements.

In response, the International Atomic Energy Agency (IAEA) issued a series of reports to the United Nations assessing Iran's nuclear progress. The April 2006 IAEA Director General's report to the Board of Governors noted that Iran had a complete 164 centrifuge cascade and two additional cascades of the same size under construction at its plant in Natanz. Samples were taken by IAEA inspectors at Natanz earlier in the month that tended to confirm the 3.6 percent enrichment level declared earlier by Iran. In November, the IAEA reported that work was progressing at the Pilot Fuel Enrichment Plant at Natanz. The report did not detail how much uranium was produced, but said enrichment levels seemed to be five percent.

- Construction of the 1,000 megawatt Russian-built nuclear power reactor at Bushehr was progressing, but was still not complete by the end of 2006.
- Iran continued construction of a fuel manufacturing plant in Esfahan, which Iran declared to the IAEA would provide fuel for the Bushehr reactor as well as the 40-megawatt heavy-water research reactor under construction at Arak.
- The Arak reactor, once operational, would provide spent fuel from which Iran might seem to reprocess weapons-grade plutonium.

Ballistic Missile. Iran continues to pursue development, production, and deployment of an array of ballistic missiles with foreign assistance and has proliferated some of the missile-related technologies it has already mastered. Iran's ballistic missile inventory

ranks among the largest in the Middle East. Iran is fielding increased numbers of short- and medium-range ballistic missiles (MRBMs). Iranian press reporting also suggests that Iran is developing longer-range ballistic missiles capable of striking portions of Europe.

During 2006, the Iranian Revolutionary Guard Corps (IRGC) held large scale military exercises intended to demonstrate Iran's capabilities in the face of ongoing international pressure over its nuclear program. The "Great Prophet II" exercises conducted in late 2006 involved a series of ballistic missile tests, which included the operational firing of a medium-range missile—the Shahab-3. The commander of the IRGC at the time of the exercise claimed that Iran's missiles could hit targets within a range of 2000 km. Such a system would be more than capable to reach Israel. A spokesman for the IRGC commander claimed that Iran was working on cluster munitions and firing missiles simultaneously, a tactic that would make missiles "difficult to trace by radar or anti-missile missiles."

North Korea and Iran have a longstanding relationship with respect to the purchase and development of ballistic missile technology.

Chemical and Biological. We judge that Iran maintains a Chemical Warfare (CW) research and development program which began in response to Iraqi use of CW during the Iran-Iraq War during the 1980s. While Iran is a party to the Chemical Weapons Convention (CWC), it continues to seek production technology, training, and expertise from foreign entities that could advance a CW program. We judge that Iran maintains a small, covert CW stockpile. Our assessment of Iran's biotechnology infrastructure indicates that Iran probably has the capability to produce large-quantities of some Biological Warfare (BW) agents for offensive purposes, if it made the decision to do so. Iran continues to seek dual-use biotechnology materials, equipment, and expertise consistent with its growing legitimate biotechnology industry but these components could also advance Tehran's BW capability.

Libya

Nuclear. No significant United States (US)-United Kingdom (UK) nuclear verification activities took place during the reporting period. We judge that Libya terminated its nuclear program. Libya continues its civilian nuclear activities and has expressed interest in nuclear power for energy and desalination purposes.

Ballistic Missile. Libya has agreed to forgo development of Missile Technology Control Regime (MTCR) Category I ballistic missiles. Libya maintains a program for developing missiles that fall below the MTCR Category I threshold of delivering a 500-kilogram payload to a range of 300 kilometers.

Chemical and Biological. In addition to approval of its conversion request for Rabta in

2005, Tripoli requested and the Organization for the Prohibition of Chemical Weapons approved two extensions of CWC mandated interim destruction deadlines—which had already passed—for 1, 20, and 45 percent of its CW agent stockpile. The US agreed to assist with the destruction of Libya's declared mustard stockpile through the State Department-administered Nonproliferation Disarmament Fund, and the US and Libya signed a government-to-government contract on CW destruction in December 2006, following which the US designated a contractor to build the incinerator and complete the destruction work in Libya. Libyan officials are optimistic that Tripoli will be able to meet the newly approved December 2010 deadline for destruction of its entire CW agent stockpile. As of the end of 2006, the Libyans had not begun destruction of any Category 1 chemical agents.

Libya is a State Party to the BWC, and submitted Confidence Building Measures declarations to the UN for both 2005 and 2006. Libya and the US have greatly expanded their cooperative projects in both science and medicine over the past year. The Navy Medical Research Unit Number 3 (NAMRU-3) has supported training for Libyan scientists both within Libya and in Cairo, and scientists at the facility continue to look for outreach opportunities with their Libyan counterparts. In August 2006, Libya finalized a grant application for \$1 million of US assistance in public health issues, focusing on influenza preparedness. This request was made in conjunction with other ongoing assistance from NAMRU-3.

North Korea

Nuclear. North Korea's nuclear test, conducted in October 2006, produced an estimated yield of less than one kiloton—well below the yield of other states' first nuclear test. Analysis of the test is ongoing to determine its implications for Korea's nuclear program. We believe North Korea has an active plutonium production program. We assess with high confidence it has pursued efforts to achieve a uranium enrichment capability, and judge with at least moderate confidence that this effort continues today. The degree of progress towards producing enriched uranium remains unknown, however.

Ballistic Missile. North Korea continues to pursue the development, production, and deployment of ballistic missiles with increasing range and sophistication. It is nearly self-sufficient in developing and producing ballistic missiles, yet continues to procure needed raw materials and components from various foreign sources. In July 2006 North Korea launched six theater ballistic missiles and the Taepo Dong 2,—breaking a self-imposed missile test moratorium that began in 1999.

North Korea's willingness to provide complete missile systems and related technologies continues to be an important and attractive selling point for potential and existing customers. United Nations Security Council Resolutions 1695 and 1718, passed in

response to missile tests conducted in July 2006 and the October 2006 nuclear test, have served as disincentives to buying Pyongyang's missiles, however.

Chemical and Biological. We assess that North Korea has had a longstanding CW program. North Korea's chemical warfare capabilities probably included the ability to produce bulk quantities of nerve, blister, choking, and blood agents. We assess Pyongyang possesses a sizeable stockpile of agents. North Korea has yet to accede to the CWC.

North Korea acceded to the BWC in 1987 and claims to be in full compliance. North Korea has a rudimentary biotechnology infrastructure that could support the production of various biological warfare agents. We judge that North Korea possesses a conventional munitions production infrastructure that could be used to weaponize BW agents.

Syria

Nuclear. Syria—a Nuclear Nonproliferation Treaty (NPT) signatory with full-scope IAEA safeguards—has nuclear research facilities at Dayr Al Hajar and Dubaya. In 2006, Syria continued to develop its civilian nuclear infrastructure and research capabilities. We continue to monitor Syrian nuclear intentions with concern.

Ballistic Missile. Syria's ballistic missile program is a key component to its strategy to deter external threats and is a priority in defense planning and spending. Syria possesses one of the largest ballistic missile forces in the Middle East—composed of Scud-class liquid propellant short-range ballistic missiles (SRBMs), including Soviet—and North Korean—origin Scud missiles. Additionally, Syria fields the SS-21 Mod 2 SRBM.

We judge that Syria's operational missile force can employ chemical as well as conventional warheads. Syria is developing a version of its Scud-D missile with greater accuracy and that is more difficult to intercept.

Chemical and Biological. Syria continued to seek dual-use technology from foreign sources during the reporting period. Syria has had a chemical weapons program for many years and already has a stockpile of the nerve agent sarin, which can be delivered by aircraft or ballistic missile. In addition, Syria is developing the more toxic and persistent nerve agent VX. We assess that Syria remains dependent on foreign sources for key elements of its CW program, including precursor chemicals.

Syria's biotechnical infrastructure is capable of supporting limited biological agent development. We do not assess the Syrians have achieved a capability to put biological agents into effective weapons, however.

Chemical, Biological, Radiological, and Nuclear Terrorism

Many of the 33 US Department of State-designated foreign terrorist organizations worldwide have expressed interest in chemical, biological, radiological, or nuclear (CBRN) capabilities. Several terrorist groups, particularly al-Qa'ida, remain interested in chemical, biological, and radiological materials and weapons, and some groups have shown interest in nuclear weapons as well.

Some terrorist groups see employing CBRN materials as low-cost, high-impact options for achieving their goals. Al-Qa'ida and other terrorist groups show continuing interest in developing chemical and biological capabilities for use in attacks against Western targets, especially in Iraq and Afghanistan. We also judge that al-Qa'ida and other terrorist groups have the capability and intent to develop and employ a crude radiological dispersal device.

Our highest concern is al-Qa'ida's stated readiness to attempt unconventional attacks against the United States. A case in point is the September 2006 statement made by al-Qa'ida in Iraq calling on scientists to join the struggle in Iraq and produce unconventional weapons against American forces in that country. This message regarding unconventional warfare probably demonstrates al-Qa'ida's continued interest in obtaining and using CBRN weapons in its fight against the United States. At this time, we do not believe that al-Qa'ida has a nuclear weapon capability, although acquisition remains a goal. Al-Qa'ida's key obstacle to an improvised nuclear capability remains acquiring sufficient weapons-usable nuclear material.

Key Suppliers

For revenue and diplomatic influence, North Korea and entities in Russia and China continue to sell technologies in the Middle East or South Asia that could support WMD and missile programs.

China

China continues to market a variety of SRBMs that fall below the 300-km range/500 kilogram threshold for MTCR Category I systems. China remained a primary supplier of advanced conventional weapons to Pakistan and Iran. Although Pakistan still represents China's most important regional partner in military technology cooperation, Iran has been gaining ground in this area and was producing the Chinese-origin C802 antiship missile.

The proliferation activities of Chinese entities remain of concern. Over the past several

years, China has implemented new export control legislation that is in line with the MTCR Guidelines and Annex and has improved its nonproliferation posture. Enforcement of the legislation needs significant improvement, however, to prevent the continuing flow of ballistic missile-related material and technology from Chinese entities to programs of concern.

North Korea

North Korea remains committed to selling missiles and related technologies to foreign customers. North Korea has demonstrated a willingness to sell complete ballistic missile systems and components that have enabled other states to acquire longer-range capabilities earlier than would otherwise have been possible and to acquire the basis for domestic development efforts. Although sales have declined to most customers due to North Korea's increasing international isolation, its relationships with Iran and Syria remain strong and of principal concern. We remain concerned about North Korea's potential for exporting nuclear materials or technology.

Russia

Russian entities continue to support missile programs and civil nuclear and biotechnology projects in other countries that can have weapons applications.

Russia remains a key supplier of nuclear technology to a number of countries, much of which is for civilian nuclear programs. Most recipients pose little proliferation threat, but some pose greater concern because the Russian assistance either could be used in the recipient's nuclear weapons program—as in the case of China—or risks diversion to nuclear weapons programs. Russia remains a key supplier for the civilian nuclear programs in Iran, primarily focused on completing the construction of the Bushehr Nuclear Power Plant. Russian officials have publicly expressed support for involvement in future construction of a second reactor at Bushehr, and have insisted that all Iranian programs in the nuclear field be placed under IAEA safeguards.

Russia has been India's greatest foreign provider of nuclear assistance and supplies India with material for its civilian nuclear programs. Russia continues to construct two 1,000-megawatt light water nuclear reactors at Kudankulam.

China remains Russia's largest purchaser of nuclear-related equipment. The Russian nuclear industry this year completed construction of two nuclear power reactors worth over \$3 billion at China's Tianwan nuclear power plant, and is still constructing an experimental fast reactor outside of Beijing.

Russian entities have supplied a variety of ballistic missile-related goods and technical know-how to China, Iran, India, and North Korea. Iran's earlier success in gaining technology and materials from Russian entities and continuing assistance by such

entities, probably supports Iranian efforts to develop new longer-range missiles and increases Tehran's self-sufficiency in missile production.

Russian entities also remained a source of dual-use biotechnology equipment and related expertise. Such entities have been a source of dual-use biotechnology, chemicals, production technology, and equipment for Iran.

Proliferation of Advanced Conventional Weapons

Some cruise missiles and unmanned aerial vehicles (UAVs) can be used for the delivery of nuclear, biological, and chemical weapons. Cruise missiles can be less expensive and more accurate than ballistic missiles, and may be more difficult to defend against than manned aircraft because of their low flight profiles and smaller radar cross-sections. Other widely available potential delivery means include artillery, large unguided rockets, multiple rocket launchers and mortars. Aircraft, helicopters, transport planes, and converted UAVs also are potential delivery vehicles and aerial sprayers such as those used in agriculture can be adapted for use with many types of helicopters, UAVs, and aircraft.

For this period we specifically note:

Iran continues to seek and acquire conventional weapons and production technologies, primarily from Russia and China. We assess Iran continues to be interested in developing a land-attack cruise missile and a precision strike UAV.

Iran has a history of supplying arms to Hizballah. Iran reportedly has supplied Hizballah with well over 40 types of missiles and rockets since 1992. It has been reported that since Israel's withdrawal from southern Lebanon in May 2000, there has been a dramatic increase in Iranian weapon and weapon system shipments through Syria, with transfers continuing even after the outbreak of hostilities with Israel in July 2006.
