

# CRS Report for Congress

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## Iran: Arms and Technology Acquisitions

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### Summary

The Clinton Administration and Congress are pressing to persuade Iran's major arms and technology suppliers, primarily Russia and China, to sever their military relations with Iran. The Administration's need to engage supplier countries on a wide range of issues often has complicated U.S. efforts to end their dealings with Iran, and has led some in Congress to demand that the Administration do more to compel supplier countries to end transfers to Iran. Both the House and the Senate have passed a bill (H.R. 2709), by overwhelming margins, imposing sanctions on foreign entities that contribute to Iran's efforts to develop ballistic missiles. The Clinton Administration has said a veto is likely; it has until June 23 to do so. This report will be updated in response to legislative and policy developments.

### Introduction

Whatever Iran's intentions, arms and technology transfers have given that country additional capabilities with which to threaten the Persian Gulf monarchies and U.S. forces in the Gulf. Possibly in an effort to compensate for its continuing conventional military weaknesses relative to U.S. forces, Iran is attempting to obtain weapons of mass destruction (WMD) technology.

### Russia<sup>1</sup>

Russia has largely completed delivery of arms ordered by Iran in 1989. It has already delivered about 40 MiG-29 and Su-24 combat aircraft, about 150 T-72 tanks, SA-5 and SA-6 surface-to-air missile systems, and three Kilo-class diesel submarines, the last of which arrived January 18, 1996. In response to Administration pressure and U.S. sanctions legislation, Russia formally pledged in June 1995 not to enter any new arms

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<sup>1</sup>See CRS Report 94-138, *Iran: Conventional Arms Acquisitions*; and CRS Report 98-299, *Russian Missile and Nuclear Reactor Transfers to Iran*.

contracts with Iran, although prior arms contracts could be implemented. The Administration considers deliveries to Iran after that time as part of these contracts.

**Ballistic Missiles.** Until 1997, Russia had not been identified publicly as a major supplier of ballistic missile technology to Iran. However, on February 12, 1997, during a visit to Washington by Russian Prime Minister Chernomyrdin, the United States protested a Russian transfer to Iran of technology that can be used to produce a missile with a range and payload (300 km range, 500kg payload) covered by the Missile Technology Control Regime (MTCR). Russia has been a formal member of the MTCR since August 8, 1995. The Iranian missile programs receiving Russian assistance have been cited by press reports as the Shahab (Meteor)-3 (800-930 mile range, 1,650 lb payload) and the Shahab-4 (1,240 mile range, 2,200 lb payload).<sup>2</sup> There is concern in the United States and the Middle East that the Russian assistance could help Iran become self-sufficient in missile production, and press reports say Iran could be within a year or two of fielding the Shahab-3.<sup>3</sup>

Since August 1997, an Administration envoy, Frank Wisner (succeeded in March by Robert Galluci), has been discussing with Russia U.S. evidence that Russian institutes and scientists are continuing to help Iran develop a self-sufficient long range missile capability. On a visit to Moscow in September 1997, Vice President Gore said that a U.S.-Russian inquiry had uncovered a vigorous Iranian effort to obtain nuclear and ballistic missile technology from Russia. The United States praised a January 22 decree by Chernomyrdin adopting tighter controls on exports of technology such as that useful to Iran's missile or other WMD programs, as well as a May 14 directive establishing export control units in Russian entities working in the missile and nuclear fields.

The Administration has asserted that the Russian directives and pledges of further cooperation merit a veto of the Iran Missile Proliferation Sanctions Act of 1997 (H.R. 2709), which passed the House on November 12, 1997 by voice vote and the Senate, on May 22, by a vote of 90-4. The House passed the bill, as amended, on June 9, by a 392-22 vote. The bill would require sanctions, including suspension of U.S. government assistance, on foreign entities (including governmental entities operating as businesses) that assist Iran's ballistic missile programs. Supporters of the bill maintain that assistance to Iran by 18-20 Russian entities is continuing and that greater U.S. pressure is needed if Russia is to vigorously enforce its new directives. In an attempt to respond to this view, the Administration said April 16 it would give "extra scrutiny" to Russian entities before approving U.S. aid to them. In addition, a provision of a FY1998 emergency supplemental appropriation (P.L. 105-174) provides \$179 million for systems to counter the Iranian missile threat.

**Russia-Iran Nuclear Plant Deal.** The Clinton Administration has expended significant effort to end Russian-Iranian nuclear cooperation on the grounds that technology and skills transferred to Iran would enable Iran to further a nuclear weapons program. Observers also fear that Iran might try to exploit contacts within Russia's cash-

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<sup>2</sup>Gertz, Bill. Russia, China Aid Iran's Missile Program. *Washington Times*, September 10, 1997. P.1.

<sup>3</sup> Lippman, Thomas. U.S. Keeps After Russia To Halt Flow of Missile Technology to Iran. *Washington Post*, January 18, 1998. P.A9.

strapped Ministry of Atomic Energy (MINATOM) to obtain, illegitimately, controlled or prohibited materials or technology. Russia maintains that these fears are unfounded because Iran is a party to the Nuclear Nonproliferation Treaty and accepts International Atomic Energy Agency (IAEA) visits to declared nuclear facilities. Russia's program of nuclear cooperation with Iran centers on a contract, signed January 8, 1995, to complete the 1,000 Megawatt number one reactor at Bushehr within five years, at a cost to Iran of about \$800 million. The reactor was begun by German firms in 1974, but work stopped after the 1979 Islamic revolution and the plant was damaged by Iraq during the Iran-Iraq war.

President Clinton, during a May 1995 summit with President Yeltsin, obtained a pledge that Russia would not supply Iran with uranium enrichment equipment or a research reactor. Russia has said publicly that it, not Iran, will reprocess the spent reactor fuel. Nonetheless, the initial phase of the Bushehr nuclear plant project is proceeding. Russian and Iranian officials have said the plant should be operational by 2001, although technical problems might further postpone completion. In addition, in February and March 1998, Iran and Russia agreed that Russia will take over from Iran construction of support facilities at the Bushehr site and will build two additional 640 megawatt nuclear reactors at Bushehr. The project suffered a setback on March 6, when visiting Secretary of State Albright initialed an agreement with Ukraine under which it pledged to drop the sale of the turbines for the reactor. However, the head of Iran's Atomic Energy Agency visited Russia in mid-May to discuss increased cooperation, including possible acquisition of a nuclear reactor. The visit reportedly included a Russian demonstration of uranium enrichment technology.

The Bushehr reactor project has attracted continuing congressional concern. Within three months of the deal, President Clinton signed into law a defense supplemental appropriation (P.L. 104-6) that contained a provision precluding U.S. cooperation with Russia on civilian nuclear projects if it went ahead with the Bushehr deal. The Administration has refused to renew some civilian nuclear cooperation agreements with Moscow. However, the Administration formally waived provisions of FY 1996 and FY1997 foreign aid appropriations laws (P.L. 104-107 and P.L. 104-208, respectively) that made U.S. aid to Russia contingent on termination of the deal with Iran, on the grounds that it is more crucial to support reform in Russia. The FY1998 foreign aid appropriations law (P.L. 105-118) cuts 50% of U.S. aid to the Russian government unless it ends nuclear or ballistic missile cooperation with Iran.

## **China**

Over the past few years, China has replaced Russia as Iran's leading source of conventional arms, according to Administration officials. Some of China's possible motives for arming Iran include: a desire to divert U.S. forces to the Persian Gulf and away from areas near Taiwan; to retaliate for U.S. arms sales to Taiwan; to improve China's ability to obtain Iranian oil exports or investment projects; and to earn hard currency. China, a key conventional weapons supplier to Iran during the Iran-Iraq war (1980-88), has helped Iran rearm from that war by supplying a wide array of equipment, including about 100 artillery pieces, several hundred tanks, 45 of the Chinese version of the SA-2 surface-to-air missile, and about 25 F-7 combat aircraft.

**Anti-Ship Missiles.** Iran's purchases of Chinese naval equipment have caused more U.S. concern than other conventional weapons categories, because the acquisitions improve Iran's ability to strike at U.S. forces and installations or commercial shipping in the Gulf. Fifteen fast attack craft, as well as ten other French-made patrol boats, are outfitted with C-802 anti-ship cruise missile (120 km range), also supplied by China. (Iran is believed to have received over 100 C-802's.) The C-802 is not covered under the MTCR because its range and payload are under the regime's threshold. Iran tested the Chinese-supplied air-launched C-801K missile on one of its operational U.S.-made F-4 Phantom aircraft in June, prompting Secretary of Defense Cohen to assert that Iran now poses a "360 degree threat" to U.S. forces. The threat would increase if Iran acquires an over-the-horizon targeting capability for the missile. A few days prior to the October 1997 U.S.-China summit, U.S. officials said that China had pledged to Secretary of State Albright in September that it would halt further sales of anti-ship cruise missiles to Iran.

Congressional debate about the Chinese anti-ship missile transfers have centered on whether the transfers trigger U.S. sanctions under the Iran-Iraq Arms Non-Proliferation Act of 1992 (50 U.S.C. 1701). That law requires sanctions on persons or countries that provide destabilizing numbers or types of advanced conventional weapons to Iran (or Iraq).<sup>4</sup> Administration officials determined that the C-802 and C-801 transfers to Iran "are not of a destabilizing number and type" to warrant U.S. sanctions. However, no agreed definition of "destabilizing" was stipulated in the law. Some in Congress believe that, because U.S. defense officials have stated that the missiles pose a threat to U.S. forces, China should have been sanctioned for the transfers.

In advance of the October 1997 U.S.-China summit, China's Foreign Minister pledged to halt further anti-ship missile sales to Iran. Secretary of Defense Cohen said his counterparts reiterated that pledge during his January 1998 visit to China. It is not clear, however, whether any more of the missiles will be delivered to Iran under existing Iran-China contracts.

**Weapons of Mass Destruction and Delivery Means.**<sup>5</sup> China has reportedly supplied Iran with advice and technology to produce weapons of mass destruction and delivery systems. There have been no confirmed deliveries of entire M-9 or M-11 ballistic missiles to Iran, both of which are considered to have range/payload combinations that exceed MTCR guidelines. However, on June 22, 1995, the *New York Times* quoted a May 1995 Central Intelligence Agency study as concluding that China had "delivered dozens, perhaps hundreds, of missile guidance systems and computerized machine tools to Iran..." Other sources said rocket propellant ingredients were provided as well.<sup>6</sup> A November 21, 1996 *Washington Times* report quoted an October 1996 CIA report as saying China had sold Iran guidance technology and components to test ballistic

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<sup>4</sup>This law was amended by Section 1408 the FY1996 defense authorization law (P.L. 104-106) to also sanction the provision to Iran or Iraq of equipment for chemical, biological, or nuclear weapons.

<sup>5</sup>For further information, see CRS Issue Brief 92056, *Chinese Proliferation of Weapons of Mass Destruction: Current Policy Issues*, and CRS Report 96-767, *Chinese Proliferation of Weapons of Mass Destruction: Background and Analysis*, both by Shirley Kan. See also: CRS Report 96-572, *Iran: Military Relations With China*, by Kenneth Katzman.

<sup>6</sup>Chinese Shipments Violate Controls. *Jane's Defence Weekly*. July 1, 1995.

missiles, possibly for use in the Russian-assisted Shahab program. On November 22, 1996, and again on September 10, 1997, the State Department said the United States had not determined that China had violated its March 1992 commitment to adhere to the terms of the MTCR. In March 1998 the Administration reportedly offered China expanded cooperation on commercial space ventures in return for an end to all Chinese assistance to Iran's ballistic missile programs and its joining the MTCR. China has rejected formally joining that control regime.

In May 1998, China reportedly transferred to Iran 1,000 tons of specialty steel for possible use in Iran's missile programs and discussed with Iran sales of telemetry equipment for missile testing.<sup>7</sup> Asked about the press reports, Secretary of State Albright testified before the Senate Appropriations Committee June 16 that the United States had continuing concerns about China's proliferation record. One day later, and about a week before President Clinton's trip to China, China announced new regulations controlling dual use technology exports.

Under a contract signed in February 1993, China agreed to expand its nuclear cooperation with Iran by constructing in Iran two 300 megawatt nuclear reactors and providing technology and training.<sup>8</sup> In mid-1997, Administration officials said they had blocked a deal between Iran and a Chinese government-owned firm for the sale to Iran of a "uranium conversion facility,"<sup>9</sup> although China reportedly had given Iran blueprints for the facility.<sup>10</sup> In advance of the October 1997 U.S.-China summit, the Administration said it received a firm written assurance that China would end its nuclear relations with Iran, although two small ongoing projects<sup>11</sup> would continue. The Administration said that, in order to certify to Congress that China is cooperating to end nuclear proliferation, it required this assurance, even though Iran's known nuclear facilities are under IAEA safeguards. This certification, required by P.L. 99-183 and signed on January 12, 1998, opened China to nuclear cooperation with the United States under a 1985 bilateral agreement. Despite press reports on March 13 that China and Iran negotiated in early 1998 to supply Iran with uranium enrichment material,<sup>12</sup> Congress did not formally disapprove within the thirty legislative day period, and the certification took effect on March 18. Nonetheless, an Iranian newspaper reported May 10 that an Iranian nuclear team might visit China in June 1998 to discuss peaceful nuclear cooperation.

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<sup>7</sup>Gertz, Bill. China Assists Iran, Libya on Missiles. *Washington Times*, June 16, 1998.

<sup>8</sup>During 1985-87, China supplied Iran with a small research nuclear reactor and an electromagnetic isotope separator (calutron).

<sup>9</sup>Smith, R. Jeffrey. China Firm That Angered Washington May Get New Deal. *Washington Post*, June 20, 1996. P. A21.

<sup>10</sup>Pomfret, John. U.S. May Certify China on Curbing Nuclear Exports. *Washington Post*, September 18, 1997. P.A28.

<sup>11</sup>These projects are a zero power nuclear reactor and a factory to produce tubing for nuclear fuel rods.

<sup>12</sup>The Administration discovered the negotiations and scuttled the sale, according to a March 13, 1998 *Washington Post* article, entitled U.S. Action Stymied China Sale to Iran, by Barton Gellman and John Pomfret.

U.S. officials have said publicly that Iran has a large and increasingly self-sufficient chemical weapons program that has been supplied or assisted, in part, by Chinese firms. On May 22, 1997, Secretary of State Albright announced that U.S. sanctions would be imposed, under the Chemical and Biological Warfare Elimination Act of 1991 (P.L. 102-182), on two Chinese firms (Nanjing Chemical Industries Group) and Jiangsu Yongli Chemical Engineering and Technology Import/Export Corp.) and one Hong Kong firm (Cheong Lee Ltd.) for knowingly and materially aiding Iran's chemical weapons programs. The Administration said there was no evidence the Chinese government was aware of the transfers. On June 10, 1997, the State Department announced suspension of an Exim bank loan for a U.S. firm's exports to the Nanjing firm above. According to an October 30, 1997, Washington Times report, the Nanjing company has recently finished building in Iran a plant that can be used to manufacture equipment suitable for a chemical weapons program. A London Daily Telegraph report of May 24, 1998 said that Iran had recently received from China's Sinochem 500 tons of material banned under the Chemical Weapons Convention, to which Iran has been a party since November 1997.

### **Other Suppliers**

Among other suppliers, North Korea has an established relationship with Iran. The core of Iran's current missile force consists of 200-300 North Korean-supplied Scud-B and Scud-C missiles, with ranges of 320 km and 500 km respectively. North Korea has also supplied ten to fifteen mobile launchers. Iran reportedly wanted to take delivery of North Korean-made Nodong 1 missiles (1,000 mile range) when those are ready for export, and it reportedly has partially funded the development of the missile. In an apparently successful attempt to head off deliveries of the Nodong, the United States, as part of the October 1994 agreement with North Korea on nuclear issues, began talks with North Korea in April 1996 on limiting North Korean missile sales to the Middle East. U.S. officials hailed the talks as a "good beginning," but the Administration issued a determination<sup>13</sup> on May 29, 1996 that entities in Iran and North Korea had engaged in missile proliferation activities.

On August 6, 1997, following a second round of U.S.-North Korea talks on Middle East missile sales (June 11-13), the United States imposed trade sanctions on two North Korean firms for missile-related activities believed to involve Iran and Pakistan. Iran's Shahab program, assisted primarily by Russia, is apparently based on the Nodong design. On June 17, 1998, the Washington Post reported that North Korea's official media had acknowledged that North Korea had and would continue to export ballistic missiles, although no specific technology or recipients were mentioned in the North Korean announcement. No U.S.-North Korean missile export control talks have been held since the June 1997 discussions.

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<sup>13</sup>See Federal Register, June 12, 1996. P. 29785. Bureau of Political-Military Affairs, Department of State. Public Notice 2404.