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West Adds to Strains on Iran's Lifeline

By JAD MOUAWAD

Western political and economic pressure on Iran over its nuclear program has chilled foreign investment to the extent that it is now squeezing the country's long-fragile energy industry, adding strains to a government that is burdened by sanctions and wary of unrest at home.

The world's fourth-largest oil exporter, Iran sits on the second-largest oil and gas reserves. But it has struggled in recent years to keep its oil production, currently running at about four million barrels a day, from falling.

Some analysts say that if this acute imbalance between stagnant production and rising demand at home continues unchecked, Iran will have no oil left over to export within a decade. Its oil exports, totaling \$47 billion last year, account for half the government's revenue.

"They have a perfect storm of problems feeding into each other," said Robert Murphy, an analyst at PFC Energy, a consulting firm in Washington. He estimated that Iran might have no more oil to export by around 2015 if it did not rein in runaway consumption and reverse the long-term decline in its oil production.

"The domestic energy situation is as big as the international issue, and feeds into it in a very significant way," he said.

To curb demand, which has been driven in part by subsidies that keep the domestic pump price at a mere 35 cents a gallon, the government plans to begin rationing gasoline in March, a measure so unpopular, and potentially explosive, that rationing plans have been put off several times in the past.

Iran's energy problem is in many ways at the heart of the nuclear controversy as well. Iran's leadership says it wants to develop nuclear power generation to free its petroleum resources for domestic use or for exports. The United States and other Western countries say Iran is using the program as a front for building weapons. At a time of relatively high prices, oil is clearly providing Iran's government with enormous strength — but also with an Achilles' heel.

In December, the [United Nations Security Council](#) voted unanimously to impose limited economic sanctions on Iran until it halts its nuclear program. So far, American and European officials say they are not seeking to cut off Iran's oil exports, because that would disrupt global markets and raise prices for Western consumers.

Still, the pressure on Western energy companies not to deal with Iran may ultimately speed that outcome. Iran currently exports about 2.5 million barrels a day.

In recent weeks, senior American officials warned several European oil companies that if they invested in new energy projects, they risked financial sanctions in the United States, according to a European energy executive who spoke on the condition that he not be identified because of the delicate nature of his company's relations with Iran.

Foreign investors, who have helped promote Iran's oil development, have been scarce since the 1979 revolution, and the country's oil industry has now suffered decades of economic, political and technical problems. Iran has signed no firm oil or gas contracts with foreign investors since June 2005, when [Mahmoud Ahmadinejad](#) was elected president and began flaunting the country's nuclear ambitions and renewing tensions with the West.

At home, meanwhile, Iran has had to appease a population historically prone to unrest. It spends about \$20 billion each year, or 15 percent of its economic output, to keep consumer prices low for gasoline, natural gas, electricity and other energy products, according to estimates from the [International Monetary Fund](#) and others. Those subsidies have prompted double-digit growth in consumption in this country of 70 million people.

Iran holds 11 percent of global oil reserves, second only to Saudi Arabia. But each year, Iran has to find ways to make up for natural declines in production from existing wells, which in past years has dipped by 200,000 to 500,000 barrels a day.

It has managed to hold its own, but just barely. Moreover, Iran's refining capacity lags far behind its domestic needs, so the country is forced to import 40 percent of its gasoline.

Because of delays in developing new fields, like Yadavaran, Azadegan and others, Iran has scaled back its targets; it now plans to increase oil production to 4.5 million barrels by 2010, down from 5 million barrels. But even that might prove challenging, according to analysts who cite the figures.

Iranian production is now about 3.9 million barrels. It peaked at more than 6 million barrels a day in the mid-1970s, but plummeted to 1.5 million barrels just after the 1979 revolution. During the eight-year war against Iraq that followed, Iran's oil infrastructure lining the Persian Gulf was a frequent target.

Iran currently uses 1.5 million barrels of oil a day, triple its consumption in 1980, and must import about 170,000 barrels a day of gasoline, which last year cost the government more than \$4 billion.

Some Iranian fields are in dire need of foreign technical expertise to help reverse their natural decline rates, estimated at 8 to 10 percent a year. Modern methods of enhanced oil recovery, which involve reinjecting natural gas to flush out more oil from the fields, can greatly increase production rates but are both costly and difficult to perform without foreign assistance.

"Iran needs to invest more than it does," said Manouchehr Takin, an Iranian energy analyst at the Center for Global Energy Studies in London. "It needs foreign companies to bring expertise, capital and technology."

But oil companies complain that the rewards are limited. Under Iran's stringent buyback contracts, oil companies basically operate as contractors for the government for a limited time. They are not allowed to book the reserves as their own and gain little in extra profits when energy prices go up.

Iran's energy officials have already indicated they would sweeten buyback contracts. At a meeting held at a Hilton hotel in Vienna this month, they unveiled a new licensing round for 17 onshore and offshore exploration blocks. The conference was attended by dozens of European, Chinese and Russian oil executives.

For Gholam Hossein Nozari, the managing director of Iran's national oil company, continued interest from Europe and Asia is "a sure sign companies do not cower to U.S. pressure," according to Iran's official news agency, IRNA.

Fereidun Fesharaki, an energy adviser to the Iranian government before the revolution, said, "For all its faults, the Islamic Republic is very flexible."

Not all countries or international companies have bowed to American pressure. India has rebuffed Washington's efforts to cut off gasoline exports to Iran. New Delhi has also rejected American requests to cancel a planned pipeline project that would take Iranian natural gas through Pakistan to India.

But recent conversations with European energy executives and consultants, who spoke anonymously to protect their relations with Iran, suggest there is a new wave of concern about starting projects in the country. Even Chinese companies, which Iran is trying to lure with big oil and gas deals, seem to be acting with caution.

Oil companies, including [Royal Dutch Shell](#), [Total](#) of France, [Eni](#) of Italy and [Repsol YPF](#) of Spain, are playing for time in the hope that the political situation may somehow improve, energy analysts said.

Shell and Repsol announced last month a preliminary deal for South Pars, the world's largest natural gas field. But the project, estimated at \$10 billion, has been

delayed for more than a year. A final investment decision is not due until at least the end of 2007.

Asked about the project at a news conference this month, Jeroen van der Veer, the chief executive of Shell, expressed some embarrassment, saying, "We have a dilemma." Iran's oil and gas reserves are too big to ignore, he said, but "we have all the short-term political concerns, as you can see."

Last year, Inpex, a Japanese oil company, agreed to sharply cut its stake in a \$2 billion project to develop the Azadegan field, in the southwestern province of Khuzestan, near Iraq. Inpex cut its stake to 10 percent from 75 percent after problems with land mines left over from the Iran-Iraq war delayed development. But some analysts said the decision reflected Japan's displeasure at Iran's nuclear stance. Japan accounts for 20 percent of all Iranian oil exports.

"Oil companies are simply assessing risk, including what some see as the real risk of a military strike against Iran," said Cliff Kupchan, an analyst at the Eurasia Group, a political risk consulting firm, and a former senior State Department official. "Some are deciding it's not worth it."

The United States is pressing Europeans to trim their government-backed loan guarantees, which amounted to \$18 billion in 2005. European countries have recently said they would not issue guarantees for companies that the United Nations lists as tied to Iran's nuclear or missile programs. But Washington is calling on Europe to make sure it is not dealing with front companies, possibly in the energy field.

Since opening up their energy sector to foreigners in the 1990s, Iran's clerical leaders have sought to turn their energy riches into political alliances. In the mid-1990s, they tried to persuade an American company, Conoco (now ConocoPhillips), to develop an oil field in a strategic bid to thaw relations with the United States; when that failed, after President Bill Clinton banned American investments in Iran, Iran turned to Europe and Japan. More recently, Iranian leaders have set their sights on China and Russia.

But while China's three main state-owned oil companies have been eager to sign preliminary agreements with Iran in recent years, drawing criticism from the United States, analysts say few projects have actually gotten off the ground.

Steven R. Weisman contributed reporting from Washington and Nazila Fathi from Tehran.



US unit works quietly to counter Iran's sway Backs dissidents, nearby nations

By Farah Stockman, Globe Staff | January 2, 2007

WASHINGTON -- For nearly a year, a select group of US officials has been quietly coordinating actions to counter the looming threat of a nuclear-armed Iran, including increasing the military capabilities of Arab allies such as Saudi Arabia, the United Arab Emirates, and Bahrain.

The group, known as the Iran Syria Policy and Operations Group, or ISOG, is also coordinating a host of other actions, which include covert assistance to Iranian dissidents and building international outrage toward Iran by publicizing its alleged role in a 1994 terrorist attack in Argentina, according to interviews with half a dozen White House, Pentagon, and State Department officials who are involved in the group's work.

Pentagon officials involved with the group intend to ask Congress as early as February to increase funding for transfers of military hardware to allies in the Persian Gulf and to accelerate plans for joint military activities. The request, which is still being formulated, is expected to include but not be limited to more advanced-missile defense systems and early-warning radar to detect and prevent Iranian missile strikes.

"There is the perception in the Gulf that Iran is really on the rise," said Emile El-Hokayem, research fellow at the Stimpson Center, a Washington-based think tank. "Washington wants to prepare for a potential show down."

The existence of ISOG reflects an intensification of the Bush administration's planning on Iran. Syria, which has linked itself to Iran through military pacts, is a lesser focus for the group. Its workings have been so secretive that several officials in the State Department's Near Eastern Affairs bureau said they were unaware it existed.

The United States has repeatedly said its policy is not to overthrow the Iranian regime, but one former US official who attended a meeting during ISOG's initial phase eight months ago said in an interview that he got the impression that regime change was a key goal of many of the meetings' participants.

He said that some of the intelligence reports ordered by members of the group were so highly classified that they were accessible to less than a dozen people in the US government, suggesting that some of the group's activities were far from routine.

But interviews with half a dozen current White House, Pentagon, and State Department officials indicated that ISOG's aims are more modest. Several said that as much as they would like to see the regimes in Tehran and Damascus go, ongoing military activities in Iraq and Afghanistan have limited their range of options. The main goal now, they said, is Cold War style "containment" of Iran in the hopes that Iranians one day will opt to change their own government.

The officials, who spoke on the condition of anonymity because they were not authorized to speak about the topic to the press, described ISOG as an inter agency clearinghouse for ideas and strategies to roll back the influence of Iran. Senior officials of the State Department, White House, CIA, Treasury Department, and other agencies meet weekly to report their day-to-day operations.

"It's really more operational, to provide a forum for ongoing interagency group discussions on Iran and Syria, share ideas, and follow things up week after week," said Kate Starr, a National Security Council spokeswoman.

ISOG's work, which focuses on isolating and containing Iran, is consistent with the administration's refusal to reach out diplomatically to Iran and Syria, as the Iraq Study Group has recommended.

"Iran is the key to everything at the strategic level -- the biggest problem we have faced in a long time," said a senior State Department official involved in ISOG, citing Iran's negative impact on Lebanon, Israel, Iraq, Afghanistan, Israel, and the Palestinian territories. "These are all things they are doing because they sense weakness [on the part of the United States]. The best thing for us to project is strength, not 'please talk to us.'"

ISOG was modeled after the Iraq Policy and Operations Group, set up in 2004 to shepherd information and coordinate US action in Iraq. ISOG has raised eyebrows within the State Department for hiring BearingPoint -- the same Washington-based private contracting firm used by the Iraq group -- to handle its administrative work, rather than State Department employees.

Some lower level State Department officials saw the decision to outsource responsibility for scheduling meetings, record keeping, and distributing reports as an effort to circumvent the normal diplomatic machinery and provide extra secrecy for the group.

But State Department spokesman Sean McCormack said BearingPoint was hired for its experience and good work on Iraq. He said that about a dozen BearingPoint contractors work out of the Iraq Policy and Operations Group office on the sixth floor of the State Department, and that a few of them have begun working on the Iran and Syria group.

ISOG is led by a steering committee with two leading hawks on Middle East policy as chairmen: James F. Jeffrey, principal deputy assistant secretary of state for Near Eastern Affairs, who once headed Iraq policy, and Elliott Abrams, deputy national security adviser for "Global Democracy Strategy." Michael Doran, a Middle East specialist at the White House, steps in when Abrams is away. Elizabeth Cheney, the vice president's daughter, who was the former deputy assistant secretary of state for Near Eastern Affairs, served as cochairwoman before she took a maternity leave earlier this year.

ISOG is made of five main "pillars," or working groups. The military group explores ways to bolster Arab defenses and create more military cooperation between the Persian Gulf states. The initiative was set into motion in May, when John Hillen, assistant secretary of state for political and military affairs, traveled to the region on his first of a series of trips to the Gulf.

In October, Hillen and Assistant Secretary of Defense Peter W. Rodman, along with National Security Council staff and others, traveled to Oman, the United Arab Emirates, and Bahrain to discuss ways to beef up the military capabilities of those countries.

US officials also conducted the first naval training exercises in the Persian Gulf designed to intercept weapons shipments to and from Iran, with participation from Bahrain, Qatar, and the United Arab Emirates.

A second working group deals with "democracy outreach," focusing on the State Department's effort to provide secret financial assistance to dissidents and reformist organizations inside Iran and Syria. It also seeks ways to use scientific exchanges and human rights conferences to learn more about what is happening inside Iran, officials said.

US financing of pro democracy activities in Iran is expected to double in 2008, according to the senior State Department official. In 2006, \$85 million was allocated for such programs.

A third working group focuses on finances and the Treasury Department's efforts to beef up bilateral restrictions on money transfers to and from Iranian banks. A fourth group focuses on Iran's "special relationships" with Iraq, Lebanon, Afghanistan, and terrorist organizations. That group has closely followed Iran's alleged role in a 1994 bombing of a Jewish center in Argentina.

A fifth working group coordinates media outreach to the people of Iran, Syria, and the region.

The New York Times
nytimes.com

January 2, 2007

West Tries a New Tack to Block Iran's Nuclear Agenda

By HELENE COOPER and STEVEN R. WEISMAN

WASHINGTON, Jan. 1 — The United States and its allies in Europe, in a tacit acknowledgment that sanctions imposed by the United Nations Security Council in late December are too weak to force Iran to abandon its nuclear ambitions, have embarked on a new strategy to increase the financial and psychological pressure.

The plan is to use the language of the resolution to help persuade foreign governments and financial institutions to cut ties with Iranian businesses, individuals in its nuclear and missile programs and, by extension, the Iranian Revolutionary Guard Corps, said Stuart Levey, under secretary of the treasury for terrorism and financial intelligence.

The Guard and its military wing are identified as a power base for President Mahmoud Ahmadinejad.

Under his administration, American officials said, the Guard has moved increasingly into commercial operations, earning profits and extending its influence in Iran in areas involving big government contracts — including building airports and other infrastructure, oil production and the providing of cellphones.

Bush administration officials, who asked not to be identified because they were discussing diplomatic plans, said envoys would soon head abroad to press officials of foreign governments and banks to interpret the Security Council resolution equally aggressively.

The new strategy builds on the Treasury Department's efforts over the past few months to get Western banks to scale back business with Iran or risk running afoul of American laws. In 2006, the European banks Credit Suisse First Boston and UBS said they would not do any new business with Iran.

It is hard to assess how deeply the financial actions may cut, since the most willing parties to the effort — the United States and Europe — have few business dealings with Iran. The United States does have laws that give it considerable leeway to impose financial restrictions on banks and companies doing business in Iran, while European law does not.

That said, Britain is also backing the new push, as is France, although to a lesser extent. Germany, with far more business interests in Iran, is not quite as eager. Japan is not a member of the Security Council, and the country is heavily dependent on the Persian Gulf for oil. But Japanese government officials have recently indicated their willingness to limit some of their business dealings with Iran.

Last month, the Japan Bank for International Cooperation announced that it would not issue any new loans for Iranian projects until Iran resolved the nuclear impasse with the West. In addition, Japan has reduced its stake in an initial \$2 billion deal to develop Iran's largest onshore oil field at Azadegan to 10 percent from the originally agreed 75 percent, citing concern about Iran's nuclear program.

While United States officials have discussed what they are trying to do with their Russian and Chinese counterparts, the belief is that they have gone about as far as they are willing to go with the Security Council resolution that passed Dec. 23. Russia fought to keep certain entities off the list and to keep the list as narrow as possible.

Mr. Levey noted that the resolution cited three people as off limits to outside commercial transactions, and, in another section, prohibited transactions with agencies "owned or controlled" by them. The three, he said, are Maj. Gen. Yahya Rahim Safavi, commander of the Iranian Revolutionary Guard Corps; Gen. Hosein Salimi, who is in charge of the air force branch of the corps; and Ahmad Vahid Dastjerdi, who runs the Aerospace Industries Organization.

Thus, an effort to bar future foreign commercial or government involvement, including bank transactions, affecting missile programs and the Iranian Revolutionary Guard is authorized by the resolution, Mr. Levey said.

"This resolution will be a big step forward in getting governments and financial institutions to pay more attention to Iran's use of deceptive financial practices to facilitate its dangerous conduct and to stop doing business with the I.R.G.C.," Mr. Levey said, referring to the Revolutionary Guard.

The resolution says that "all states" will "take the necessary measures" to bar "financial assistance" and "financial resources or services" related to nuclear and ballistic missile programs. The resolution's appendix cites several government and private groups and 12 people as involved in those programs; interrupting foreign involvement with those groups and individuals is also part of the new campaign.

But American officials have no figures on the value of international business done with those cited in the resolution.

The United States and European officials said they had also begun trying maneuvers aimed at undermining the self-assurance of Iranian officials, especially those who travel abroad.

The recent arrests of four Iranian diplomats by American troops in Iraq, the officials said, played into that strategy. Pentagon officials said the Iranians were suspected of transferring improvised explosive devices from Iran to Iraq. Iran complained loudly that the men were diplomats and that their arrest violated accepted diplomatic rules. The diplomats, two of whom American officials said were probably members of the Revolutionary Guard, were eventually released.

But their arrests are "precisely the type of thing that will chip away at their confidence," one European official said. Most of the Western officials spoke on the condition of anonymity because they were not authorized to speak publicly about the issue.

Even before the new effort began, the slowdown in international business was already emerging as a problem for Iran, which has vast oil fields but relatively little refining capacity. It imports 43 percent of its gasoline, according to the Institute for the Analysis of Global Security, a Washington-based nonprofit group that follows energy issues.

In a rare acknowledgment of difficulty, the Iranian oil minister, Kazem Vaziri-Hamaneh, told the ministry's news agency, Shana, recently that Iran was encountering obstacles in financing oil projects. "Currently, overseas banks and financiers have decreased their cooperation," Mr. Vaziri-Hamaneh told the agency.

Iran is already seeking to secure gasoline imports from its allies, including Venezuela, and shifting some dependency from gasoline to natural gas.

"Definitely, the Iranian economy is suffering a great deal as a result of the economic punishment," said Gal Luft, the executive director of the Institute for the Analysis of Global Security. But he added that Mr. Ahmadinejad "is not just sitting on his hands and waiting."

The new strategy comes in part because few believe that the sanctions resolution that passed Dec. 23 has the muscle to sway Iran to abandon its nuclear ambitions, which it insists are focused on energy production, not weapons. The road to sanctions was a tortuous one, filled with wrangling between the United States, which pushed for tough measures, and Russia, which advocated weaker measures.

United States and European officials said they might still try to include tougher sanctions through the United Nations in the months ahead. But they say the West will need to use other measures as well.

Specifically, the United States will press France, Germany, Italy and other European countries to halt credits that encourage doing business in Iran. The German Ministry of Economics, in a credit program called Hermes, says on a Web site that Iran is among "risky markets, which are also growth markets," identified for such

credits.

The New York Times
nytimes.com

January 10, 2007

U.S. Prohibits All Transactions With a Major Iranian Bank

By **STEVEN R. WEISMAN**

WASHINGTON, Jan. 9 — The United States, moving to raise pressure on Iran, on Tuesday barred American financial institutions from doing business with a major Iranian bank after concluding that it had been involved in illicit weapons programs.

The move against Bank Sepah, announced by the Treasury Department, also affected North Korea, which American officials said had used the bank to facilitate payments to a North Korean group that exports missile technologies.

The announcement applies to domestic and foreign branches of American banks, as well as to American citizens working at overseas banks that deal with Bank Sepah anywhere in the world. The department also said that no American bank can transfer dollars to Bank Sepah or its branches and subsidiaries in Rome, London, Frankfurt and Paris.

The Treasury announcement was the second time in the last year that a major Iranian bank had been barred from any dealings with the American financial system. It is the first specific move against an Iranian bank since the imposition of sanctions on Iran by the [United Nations Security Council](#) on Dec. 23.

Last year, the United States took similar action against Bank Saderat, another of Iran's major institutions, citing what it said was the bank's involvement in financing terrorism. Both Bank Saderat and Bank Sepah, cited for financial transactions linked to weapons proliferation, are state owned or controlled.

Though the two banks have virtually no direct links to American banks, the designation means that no American bank can help facilitate — by transferring dollars, for example — any transaction between a European bank and Bank Sepah. Thus if an Italian or German bank wanted to supply dollars for a transaction involving Bank Sepah, it would be unable to do so because American banks would be barred from transferring them.

American experts say these steps effectively extend the reach of American law to other countries, though to only a limited degree.

"By taking this action, the United States is putting immense pressure on our allies and trading partners to treat Bank Sepah the same way we do," said Judith Lee, a partner at Gibson, Dunn & Crutcher specializing in sanctions law. "It is an effort to make U.S. actions against Iran extraterritorial."

European countries have opposed moves by the United States to apply the principle of extraterritoriality, a term referring to cases when American law can affect dealings entirely within another country. But the Bush administration recently has stepped up its use of various laws and directives to press forward with the concept.

For example, since oil is traded in dollars, the reach of American directives could be significant, many banking experts say. In theory, Tuesday's action would prevent Bank Sepah from facilitating an oil sale in which dollars are used. Iran has already announced that, because of American directives, it has begun selling oil for euros rather than dollars.

"Bank Sepah is the financial linchpin of Iran's missile procurement network, and has actively assisted Iran's pursuit of missiles capable of carrying weapons of mass destruction," said Stuart Levey, the Treasury under secretary for terrorism and financial intelligence.

Mr. Levey said Bank Sepah had been involved in transactions for Iran's Aerospace Industries Organization and two Iranian missile companies. These three entities were mentioned in the Security Council resolution approved in late December calling on all countries to avoid doing business with various groups in Iran.

Mr. Levey also said the United States had been in touch with authorities in Britain, France, Italy and Germany to discuss the need to persuade local financial institutions to stop doing business with Bank Sepah.

Unlike the United States, Mr. Levey said that European countries, which have not enacted laws like those passed here, "don't have specific authority to act as the United States does" against European banks or businesses engaging in transactions with other banks and businesses linked to terrorism or weapons programs.

Nevertheless, Treasury officials say Treasury Secretary **Henry M. Paulson Jr.** and Mr. Levey have pressed European authorities and banks to try to isolate both Bank Sepah and Bank Saderat.

Mr. Levey said that the branch of Bank Sepah in Rome had had significant involvement in financial transactions related to Iran's missile program, and that Italian authorities had been alerted to the problem.

There was no immediate comment from the press office of the Italian Embassy in Washington on whether Italy was taking any separate actions in consonance with the United States actions.

When the United States moved against Bank Saderat last year, many banking experts predicted that it was only a matter of time before Washington took action against other financial institutions in Iran.

American officials say already intensive diplomacy has been stepped up after the Security Council resolution adopted in late December as part of a campaign to get Iran to stop enriching uranium in what the West has charged is a clandestine nuclear weapons program.

That resolution ended up being weakened at the request of Russia and China, and some American officials say they need to shift tactics and use other means to exert financial pressure on Iran.

www.haaretz.com

January 28, 2007

Israel to aid U.S. effort to boycott Iranian banking

By **Aluf Benn** and **Shmuel Rosner**

Prime Minister Ehud Olmert will appoint a special coordinator responsible for monitoring the flow of funds from Iran to elements hostile to Israel. The coordinator will assist the United States in its efforts to boycott Iranian banking operations.

An Israeli delegation headed by Transportation Minister Shaul Mofaz and participating in the strategic dialogue forum with the United States, informed U.S. officials of the decision at a meeting in Tel Aviv last week.

During the meeting, the U.S. delegation presented its plan to isolate Iranian funds, in order to make it difficult for Tehran to fund its nuclear program and support militant groups around the world. The project is headed by Stuart Levey, under secretary for terrorism and financial intelligence at the U.S. Treasury, who is also coordinating efforts with European and banking authorities. Levey visited Israel last year.

According to an Israeli official, the Israeli coordinator will monitor the transfer of funds to Hezbollah, Hamas, Islamic Jihad and other groups, both in Israel and the territories. "Enormous sums are being transferred and an organization is necessary to counter this," the source said.

The coordinator will function as part of the unit to prevent the funding of terrorism, which was established early during the intifada and has focused on locating and blocking means of funding Palestinian terrorism.

The American government has asked for help from Israeli sources to comprehend the internal developments in Iran and elements that affect the stability of the regime.

The intelligence community in the U.S. has hired Farsi speakers and experts on Iran, but U.S. officials believe that Israeli intelligence has more experience with the subject and has great advantages in this field.

Last week's meeting signaled a tightening of Israel-U.S. cooperation in the struggle against Iran, aimed at countering Tehran's nuclear program and preventing its efforts to achieve hegemony in the region.



Iran's Nuclear Capacities

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Why should the international community believe Iran wants nuclear power for civilian purposes only when Tehran has lied about its nuclear program for the past 20 years? Despite signing the Nuclear Non-Proliferation Treaty (NPT) in 1968, Iran has been breaching it since the 1980's. [1]

The NPT stipulates that countries can enrich uranium to provide fuel but since the same technology can be used to build a bomb, the International Atomic Energy Commission (IAEA) insists that all enrichment programs be fully declared and secured.

Details about Tehran's deviation from the NPT, and its true nuclear agenda, were exposed in August 2002 when a group of Iranian exiles accused Iran of concealing a uranium enrichment facility at Natanz and a heavy water plant at Arak. [2]

Six months later IAEA inspectors found traces of highly enriched weapons-grade uranium at Natanz and elsewhere. [3]

In October 2003, British, German and French foreign ministers persuaded Tehran to agree to stop producing enriched uranium and to allow unannounced IAEA inspections of its nuclear sites. Iran then reluctantly admitted to 18 years of secret atomic experiments, including the unreported uranium enrichment. [4]

Abdul Qadeer Khan, the founder of Pakistan's nuclear bomb, announced in February 2004 that he had sold nuclear weapons technology to Iran since the late 1980s. That same month the IAEA accused Iran of testing polonium-210, which is used to detonate a nuclear bomb. [5] Tehran then agreed to stop enrichment, again. In June 2004 IAEA inspectors again found traces of enriched uranium at two sites in Iran. [5]

The cat and mouse game between the IAEA, Iran and the international community has been going on ever since. U.N resolutions have been passed but Tehran ignores them and all attempts of defusing the issue have been thwarted by Iran. The EU even offered Iran sophisticated civilian nuclear technology as a substitute to its current program, but Iran rejected the deal. [6]

In Jan. 2006, reports surfaced of an Iranian scheme to embed agents in the IAEA, which could redirect information on its nuclear program from the nuclear watchdog. The former chief of Iran's parliament energy committee, Hosein Afarideh, commanded an elite band of nuclear energy experts who were consigned with infiltrating the IAEA's Vienna headquarters. [7]

One month following UN Security Council calls to cease uranium enrichment Iran broke IAEA seals at Natanz and resumed uranium enrichment. President Ahmadinejad proclaimed "I formally declare that Iran has joined the club of nuclear countries," to a crowd of military and religious figures in Mashad. In a televised speech Ahmadinejad announced, "At this historic moment, with the blessings of God Almighty and the efforts made by our scientists, I declare here that the laboratory-scale nuclear fuel cycle has been completed and young scientists produced enriched uranium needed to the degree for nuclear power plants." [8]

On April 28, 2006, Iranian President Ahmadinejad said Iranians didn't "give a damn" about UN resolutions on its nuclear ambitions. [9] Iran was also reported that month to have expanded its underground nuclear facilities and covered them with a 25ft protective layer of concrete. [10] In May 2006 the IAEA found traces of highly enriched uranium at an Iranian site linked to the Islamic Republic's defence ministry. [11]

On July 31st the UN Security Council passed resolution 1696 calling on Iran to stop enriching uranium and gave Tehran until the end of August to comply. A few days later Iran announced it would ignore the resolution and will continue with its nuclear program. [12] In October Iran made good on its word and doubled its capacity to enrich uranium at the nuclear facility in Natanz [13].

Iranian President Ahmadinejad continued to taunt the UN Security Council as they convened (again) to deliberate sanctions against Iran on November 10th. "By God's grace our powerful nation will continue its path and the enemy cannot do a damn thing on the nuclear issue," Ahmadinejad said. [14]

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NUCLEAR STATUS: IRAN'S PATH TO THE BOMB

Iranian President Mahmoud Ahmadinejad and other top Iranian officials have pledged to continue Iran's pursuit of the nuclear fuel cycle, the nuclear know-how to build an atomic weapon. Below is a step-by-step guide to the nuclear fuel cycle and the currently known status of Iran's progress in mastering this process.

DEVELOPING A NUCLEAR WEAPON	IRANIAN PROGRESS
STEP 1 - Uranium Uranium is an element that can be used to create an atomic bomb. The other is plutonium.	Iran, like dozens of other nations throughout the world, has uranium occurring naturally in its soil.
STEP 2 - Mining Uranium Uranium ore is removed from the soil in mines.	Iran is mining uranium and has developed two sites to carry out this work. In a violation of the Nuclear Non-Proliferation Treaty, Iran did not report these operations to the IAEA.
STEP 3 - Milling Uranium Uranium ore rocks are ground into a paste and the uranium is separated from the other materials with sulphuric acid. The uranium-rich solution is filtered, uranium is separated and dried out to produce solid "yellowcake."	Iran imported 18 tons of yellowcake from China in 1991 that it never reported to the IAEA. Iran also has produced several more tons of yellowcake in its own milling facilities.
STEP 4 - Conversion Solid yellowcake is converted into a gas that can then be enriched, an integral step in the development of nuclear weapons.	Since last August when it began refining uranium "yellowcake" ore into the gas needed to produce nuclear fuel, Iran has produced enough of this uranium "feedstock" at its conversion plant in Isfahan to potentially fabricate a dozen or more atomic weapons.
STEP 5 - Enrichment Enriching uranium involves cycling gas through a series of high-speed centrifuges to increase the percentage of uranium. Low-levels of enriched uranium generate power, while highly-enriched uranium is used to make bombs.	Since breaking IAEA seals on uranium enrichment equipment at its pilot plant in Natanz in February, Iran has begun refining material that can form the core of a nuclear bomb. The Iranians have assembled a pilot "cascade" of 164 centrifuges that is used to produce the highly enriched uranium gas needed for nuclear bombs. Iranian officials have stated they plan to build a full-scale 3,000 centrifuge operation that would enable Iran to stockpile enough highly enriched uranium for its first bomb after a year of operation.
STEP 6 - Operating a Reactor Uranium is converted into pellets and put into fuel rods. These rods are fed into the core of a nuclear reactor producing energy and creating plutonium as a byproduct.	With Russian assistance, Iran is nearing completion of a reactor at Bushehr capable of producing dozens of nuclear bombs each year and has announced its intention to build an additional 20 reactors.
STEP 7 - Reprocessing Spent Fuel Once the rods have been used to power a reactor they are considered spent fuel. The rods contain plutonium, which can be extracted and used to form the core of a nuclear warhead.	Iran has attempted to reach a deal with Russia whereby it does not have to return the spent fuel, which contains materials that can be used to create an atomic bomb.
STEP 8 - Fabricating a Warhead In order to produce a nuclear warhead, highly enriched uranium gas is converted into a solid and molded into a spherical atomic warhead.	Iran is suspected of having sought the industrial machinery for molding a warhead and has received blueprints detailing how to make a weapon. Tehran has been accused of testing explosives at sites the IAEA has not been permitted to inspect.
STEP 9 - Delivering the Weapon Ballistic missiles can be used to guide the atomic warhead to its target.	Iran has developed Shihab-3 missiles with a range of more than 1,200 miles, capable of striking U.S. troops, allies and other strategic interests.
STEP 10 - Enhancing the Yield Elements such as polonium can be used to boost the explosion that occurs inside a nuclear weapon.	Iran announced that it has been experimenting with polonium; the IAEA has expressed suspicion over Iranian intentions.

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Q & A on uranium enrichment

Associated Press, THE JERUSALEM POST

Jun. 1, 2006

Here are some questions and answers on uranium enrichment.

Q: Are there different types of uranium?

A: Yes. Uranium ore that is mined contains about 99 percent of the U-238 isotope. Less than 1 percent is U-235, the lighter isotope needed for nuclear fission that creates huge amounts of energy.

Q: How is the uranium processed?

A: The raw ore is milled into uranium oxide, also known as "yellowcake," then chemically converted to uranium hexafluoride which can be in the form of a solid, liquid or gas. This material is then shipped to an enrichment facility.

Q: What do they mean by enrichment?

A: Enrichment simply refers to increasing the concentration of the U-235 isotopes by separating them from the U-238.

Q: Are there different levels of enrichment?

A: Yes. A concentration of 3 percent to 5 percent U-235 is adequate for use in a commercial power reactor. This is referred to as "low enriched uranium," LEU. A concentration of 20 percent or more U-235 is defined as "high-enriched uranium," HEU. For weapons purposes, a concentration of 80 percent to 90 percent U-235 is desirable.

Q: How is the U-235 separated?

A: Two processes have been used widely: gaseous diffusion and use of a centrifuge. Gaseous diffusion, used in the United States, is technically more difficult and requires huge amounts of electricity. The centrifuge process, which uses the force of gravity, has been used in Europe for decades and is being pursued by Iran.

Q: How does a centrifuge work?

A: Gaseous uranium hexafluoride is pumped into small high-strength aluminum cylinders that are rotated at more than 300 meters per second, or roughly the speed of sound, which creates a strong centrifugal force. The heavier U-238 molecules push toward the outer wall and drop to the bottom, while the lighter U-235 molecules remain at the center and are collected at the top of the chamber.

Q: How many centrifuges are needed?

A: The centrifuges are installed in stacks and groups of stacks so that the slightly enriched gas can cascade from one unit to the next for more separation.

Q: How difficult is it to build a system of centrifuges and how many do you need?

A: The material must be of high strength and built to extremely precise specifications to avoid an imbalance during high-speed rotation. Operating a system of hundreds, if not thousands, of centrifuges, also is complex.

Q: How many centrifuges does Iran have?

A: Currently it has an operating cascade of 164 centrifuges at a pilot enrichment facility in Natanz, and it is building more. The facility is scheduled to have 1,000 centrifuges in the next year or two, according to the Institute for Science and International Security (ISIS), a Washington-based arms control group. Iran has said it plans to begin installing 3,000 units this year, eventually to have more than 50,000.

Q: Iran claims it needs to produce fuel for its future commercial nuclear program including a planned 1,000 megawatt commercial power reactor already under construction. Why is that being questioned?

A: Uranium enrichment is not necessary for a commercial nuclear program. European countries and Russia are prepared to make available low-level nuclear fuel if that's the only purpose for an Iranian enrichment program.

Q: What's needed to get enough highly enriched uranium for a weapon?

A: It takes about 1,500 centrifuges operating for a year to make enough highly enriched uranium for a weapon.

Q: How can outsiders know if centrifuges are being used to make low-enriched fuel or highly enriched material for a weapon?

A: It is virtually impossible. The technology is the same. Centrifuge systems can be hidden. Iran appears to be building two large fuel enrichment facilities 75 feet underground, covered with concrete and dirt, according to unclassified satellite images made available by Digital Globe and ISIS.

Iran could have a 500-centrifuge cascade for low-level enrichment, but then build a secret second cascade to enrich the material further without detection, says ISIS President David Albright.

Q&A on Iran Crisis

What is the background to this confrontation?

The current debate over Iranian uranium enrichment dates back nearly 20 years; in 2003, the IAEA reported that Iran had been hiding its nuclear program for 18 years. Iran refused to stop its enrichment program, defying pleas from western members of the IAEA. The country would not even commit to a temporary halt. Iran claims its uranium enrichment program is for peaceful purposes and thus complies with the Nuclear Non-Proliferation Treaty and should be allowed, even though Iran violated the treaty in the past. Countries opposed to Iran's nuclear program have been trying to get the UN Security Council to act against Iran's enrichment activity.

Where does the conflict stand?

Iran's apparent refusal to suspend uranium enrichment, in a counterproposal to a Western nuclear incentives package, sets the stage for a showdown at the UN Security Council at the end of August - with no certainty that the United States would win a promise of tough sanctions from its partners.

Iran's counterproposal, submitted on August 22nd, said it was ready for "serious negotiations" on its nuclear program, offering a new formula to resolve the crisis with the West. But a semi-official news agency said the Iranian government was unwilling to abandon uranium enrichment - the key US demand.

The world powers, the five permanent UN Security Council members plus Germany, have given Iran until August 31 to accept the package to halt uranium enrichment or face economic and political sanctions.

If Iran doesn't back down, will Security Council sanctions be the end result?

It seems unlikely. The Chinese and Russians have balked at British, French and US efforts to put the resolution under Chapter 7 of the UN Charter. Such a move would declare Iran a threat to international peace and security and set the stage for further measures if Tehran refuses to suspend its uranium enrichment operations. Those measures could range from breaking diplomatic relations to economic sanctions and military action. If sanctions are imposed, they could be tough to enforce, could cripple Iran's economy and damage its standard of living — and almost certainly would force up world oil prices.

Is there evidence that Iran wants a bomb?

The UN atomic agency found traces of highly enriched uranium at an Iranian site linked to the country's defense ministry, diplomats said May 14. The Islamic republic denies accusations it wants to make nuclear arms and says it is only interested in uranium to generate power. The International Atomic Energy Agency determined earlier traces of weapons-grade uranium were imported on equipment from Pakistan that Iran bought on the black market during nearly two decades of clandestine activity discovered just over three years ago.

If the West is so worried, why not just use air strikes to disable Iran's program?

That could be much harder, militarily, than it seems. Any strikes — to be effective — would have to take out several sites, some underground. Other sites may be unknown. And with the United States occupied with Iraq, any larger effort, such as an invasion, seems unlikely. The Bush administration says such a military operation is not an option now. In addition, even a limited strike would be highly unpopular with US allies, and could rally Iranians — known for their strong nationalism.

Iran has plenty of ways to retaliate, from stirring up trouble in southern Iraq to using an oil boycott as an economic weapon against Europe, China or India. Oil supplies are tight worldwide and prices are already high.

This crisis seems to have blown up so fast: Weren't Iran and Europe negotiating just a few months ago?

Yes. And the Bush administration had tacitly agreed that negotiations were the way to proceed. But after the election of hard-line President Mahmoud Ahmadinejad, Iran became more insistent on its right to pursue a nuclear program, and European negotiators say it became less cooperative.

Its decision to restart small-scale uranium enrichment — and its swipes at Israel — apparently rattled China and Russia enough that they agreed to push its case to the Security Council.

Why is Iran's president taking such a confrontational stance? What does he really want, and is he really in control?

The United States and much of the West have struggled for years — decades even — to discern whether Iran's hard-line clerics or the president are really calling the shots.

It's clear that many hard-liner aims are unpopular among young Iranians, who previously had voted for reformers until those reformers failed. But the goal of Iran being a world nuclear technology leader is widely popular —

almost a national point of pride.

It may be that Ahmadinejad, trying to solidify his political support, has found an issue that plays well among the public. Or, perhaps the clerics are trying to rally people, thus finding a way to revive support for their Islamic Republic. Criticism of the United States also still plays well in a country that has always blamed America for first overthrowing a democratically elected Iranian government in the 1950s, and then supporting a hated shah.

Ahmadinejad's weak spot is Iran's dire economy. Like any leader anywhere, he may just be trying to distract attention from what he can't fix.

What will happen next?

Since Iran is so involved in the world oil market, full economic sanctions are unlikely at present. Travel bans or other commercial cutbacks could be imposed, though, following the IAEA report. The diplomatic debate over Iran's enrichment program is likely to echo throughout international affairs for a while, even if Iran does agree to compromise on its program.

JPost.com staff and AP



Iran is at least two to three years away from being able to produce a nuclear weapon, a leading global think-tank said on Wednesday.

But the International Institute for Strategic Studies said pressure on the United States to stop the programme, including possibly through military strikes, would increase this year as Tehran mastered the process of enriching uranium.

January 31, 2007: Reuters

www.iiss.org/whats-new/iiss-in-the-press/january-2007/iran-still-2-3-years-from-atom-bomb

LONDON (Reuters) - Iran is at least two to three years away from being able to produce a nuclear weapon, a leading global think-tank said on Wednesday.

But the International Institute for Strategic Studies said pressure on the United States to stop the programme, including possibly through military strikes, would increase this year as Tehran mastered the process of enriching uranium.

The IISS said Iran's stockpile of 250 tonnes of uranium hexafluoride (UF₆), the raw material for feeding into linked cascades of centrifuges, was enough to produce between 30 and 50 nuclear weapons when enriched.

"The main bottleneck to producing such weapons remains learning how to run UF₆ through the cascades for extended periods. If Iran overcomes the technical hurdles, the possibility of military options to stop the programme will of course increase," IISS Director-General John Chipman said.

The United Nations Security Council imposed sanctions on Iran on December 23 and gave it 60 days to suspend uranium enrichment. Tehran denies pursuing the bomb and says it is developing nuclear energy only to generate electricity.

An Iranian parliamentarian said on Saturday that Iran had started installing 3,000 new atomic centrifuges at its Natanz uranium enrichment facility, although this was later denied by an Iranian nuclear official.

Chipman, presenting the IISS annual report, "The Military Balance", said Iran was probably on track to meet its goal of producing 3,000 centrifuges by the end of March or soon after.

He said there would be no technical logic in installing them all until Tehran had succeeded in running two smaller experimental cascades of 164 centrifuges each, something it has yet to achieve on a continuous basis.

NEGOTIATING PLOY

But Iran might go ahead anyway to signal technological prowess to its people and defiance to the West, and to position itself for any subsequent negotiations on capping the size of its enrichment programme.

If and when Iran does have 3,000 centrifuges operating smoothly, the IISS estimates it would take an additional nine to 11 months to produce 25 kg (55 lb) of highly enriched uranium, enough for one nuclear weapon.

"That day is still two to three years away at the earliest," Chipman said.

Mark Fitzpatrick, non-proliferation expert at the IISS and a former U.S. State Department official, said Washington would be pleased by signs of mounting domestic criticism of Iranian President Mahmoud Ahmadinejad as Tehran felt the impact of the U.N. sanctions, political and financial pressure.

But pressure on the United States to stop Iran's programme, including potentially by military strikes, would increase as Tehran mastered the enrichment process to the point where it could set up new centrifuge cascades at secret sites.

"I don't think Washington is giving up on diplomacy," Fitzpatrick said. "As the year goes on, the pressures will increase, though, to see whether this programme can be stopped."

Neither Israel nor the United States has ruled out military force, although Washington says its priority is to reach a diplomatic solution.

Some analysts are sceptical whether bombing strikes could destroy the Iranian programme, which is spread across numerous sites, some of them underground. They also fear Iranian retaliation and destabilisation of the wider region.

The head of the U.N.'s nuclear agency said last week an attack on Iran would be "absolutely counterproductive and...catastrophic".