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IRAN: WHERE WE ARE TODAY

A REPORT
TO THE
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UNITED STATES SENATE

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LETTER OF TRANSMITTAL

UNITED STATES SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC, May 4, 2009.

DEAR COLLEAGUES: For the first time in three decades, the United States and Iran appear to be on a path toward direct bilateral talks. President Obama and other administration officials are determined to explore areas of mutual interest and negotiate the difficult obstacles to an improved U.S.-Iran relationship.

One of those obstacles is the suspicion surrounding Iran's nuclear program. Iran's leaders say that its ambitions are only to develop a civilian nuclear capacity to conserve the country's oil and gas reserves, but the United States and many of its allies have deep suspicions about the potential military aspects of the program. Resolving the issue will be one of the most difficult confronting negotiators for the two countries and the international community.

The attached staff report presents findings from research in Austria, Israel and the United States as well as information obtained from numerous unclassified reports. The report is intended to provide a baseline that will help us understand the questions surrounding Iran's nuclear ambitions and the challenges confronting negotiators as they endeavor to answer them.

Sincerely,

JOHN F. KERRY,
Chairman.

IRAN: WHERE WE ARE TODAY

Iran's progress toward developing a nuclear weapons capability has continued despite restrictions ordered by the United Nations, additional economic sanctions imposed by the United States and incentives to stop offered by the Europeans. The latest landmark was registered in mid-February when the International Atomic Energy Agency (IAEA) reported that Iran had enriched enough uranium to make an atomic bomb if it took the next step in the enrichment process.

There is no sign that Iran's leaders have ordered up a bomb. But unclassified interviews conducted by a member of the Senate Foreign Relations Committee staff make clear that Iran has moved closer to completing the three components for a nuclear weapon—fissile material, warhead design and delivery system. While there are open questions about Iran's progress on a warhead, we do know that the time frame for substantive action by the international community is narrowing and the road to a solution could be long.

Iran's efforts to develop a nuclear weapons capacity carry serious implications for the Middle East and for U.S. policy as the administration starts down the path toward direct talks with Iranian leaders. Senior American diplomats, foreign intelligence officials and IAEA officials said in interviews with the staff that engagement with Iran needs to reconcile the twin goals of stopping Iran's progress short of a bomb and avoiding another conflict in the Middle East.

Efforts to put the brakes on Iran's nuclear program since it was uncovered in mid-2002 have had sporadic success, but ultimately they failed. The IAEA, which is supposed to make sure that peaceful atomic energy is not used for any military purpose, has proven unable to persuade Iran to halt enrichment or to answer questions about the suspected military dimensions of its program. Agency officials acknowledged that they have reached a complete impasse with Iran over the possible military involvement in its nuclear efforts.

While parrying IAEA inquiries and shrugging off three rounds of UN sanctions, Iran has gone from having no capability to enrich uranium six years ago to operating nearly 4,000 centrifuges at an underground facility near Natanz in the central part of the country. The centrifuges are enriching uranium to reactor-grade, with 1,600 more machines ready to go online. By mid-February, they had turned out roughly a ton of low-enriched uranium hexafluoride gas suitable for manufacturing fuel rods for a civilian reactor; the total is estimated to be even greater now. A foreign intelligence agency and some UN officials estimated that Iran could reconfigure

its centrifuge cascades and produce enough weapons-grade material for a bomb within six months.

Testifying before the committee on March 3, Mark Fitzpatrick, a former State Department nonproliferation official now with the International Institute for Strategic Studies in London, estimated that Iran would need several weeks to enrich its stockpile of low-enriched uranium to weapons-grade. He predicted it would take at least six months more to convert the weapons-grade material into uranium metal and fashion a weapon from it, the complex process known as "weaponization."

Natanz is monitored by the IAEA and a shift from producing the permitted low-enriched uranium (LEU) to the prohibited highly enriched uranium would likely be discovered. The same relative confidence does not exist, however, when it comes to the research and development under way at known and suspected facilities that are off limits to IAEA inspectors.

The IAEA has been forbidden to visit plants where Iran is known to be developing the IR-2, a more advanced centrifuge that will enrich uranium two or three times faster than the P-1 version currently operating at Natanz. Iran also has refused to allow the IAEA to inspect the work underway on a heavy water reactor capable of producing plutonium for a weapon. Finally, the agency has been refused access to workshops where evidence provided by the United States and other countries suggests Iran was working on developing a nuclear warhead.

The status of Iran's work on building a warhead is unknown to outsiders. In late 2007, the U.S. intelligence community said publicly that Iran's military had been working to design nuclear weapons, but halted the effort in the fall of 2003. In an updated assessment, Admiral Dennis C. Blair (USN, retired), director of national intelligence, said in February that the U.S. intelligence community has determined broadly that Iran "has the scientific, technical and industrial capacity eventually to produce a nuclear weapon." He said, however, that the intelligence services believe that Iran had not restarted the weapons design work as of at least mid-2007. He added that, since the fall of 2003, Iran has conducted research and development projects that could have limited use for nuclear weapons.

Intelligence analysts and nuclear experts working for foreign governments agreed in interviews with committee staff that Iran had stopped its weapons work in late 2003. Some of these officials said in unclassified briefings that by that time, however, intelligence indicates Iran had produced a suitable design, manufactured some components and conducted enough successful explosives tests to put the project on the shelf until it manufactured the fissile material required for several weapons.

Many have doubts about whether Iran has a design for a workable nuclear warhead. In early March, Defense Secretary Robert Gates said that there is still time to persuade Iran to abandon its suspected nuclear weapons program. "They're not close to a stockpile, they're not close to a weapon at this point, and so there is some time," he said.

One danger associated with the opacity of Iran's program is the perception of other countries of how much progress Tehran has

made toward a weapons capability. Admiral Blair told the Senate Armed Services Committee in March that the U.S. and Israel have the same basic intelligence about Iran's nuclear efforts, but he said the Israelis "take more of a worst-case approach," which he suggested could lead to an Israeli-Iran conflict.

Many regional experts say that Iran does not need to demonstrate that it has the bomb to change the balance of power in the Middle East. Many nations in the region already fear an ascendant Iran. Simply producing a large enough stockpile of low-enriched uranium for one or more weapons could confer on Iran new leverage over the critical region. It also could motivate some of its neighbors to seek their own nuclear capability. That is why these experts argue that the administration, in concert with Europe, Russia and other countries, must undertake action to stop Iran's enrichment program as soon as diplomacy permits.

HOW WE GOT HERE

In August 2002, an Iranian exile group held a press conference in Washington and disclosed that Iran was engaged in a previously secret nuclear program. The organization identified two major sites—the planned enrichment facility at Natanz, which was under construction at the time, and the site near Arak in western Iran, where work was starting on the heavy water reactor—as well as several smaller research locations.

The IAEA sought immediate inspections of the sites, but Iran was slow to permit the visit. The agency's director general, Mohamed ElBaradei, and a team of IAEA officials did not get into Iran until February 2003. They were allowed to tour Natanz and a handful of other official facilities, but some sites identified by the exile group were declared off limits. It was the start of a cat-and-mouse game between Iran and the IAEA that is still going on today.

The essentials of the game can be illustrated by what happened at a small complex of buildings on the outskirts of Tehran called the Kalaye Electric Company. The exiles claimed that Kalaye was the site of advanced research into centrifuges and that Iran had used enriched uranium as part of tests there, which could violate the Nuclear Non-Proliferation Treaty (NPT) created in 1968 to stop the spread of nuclear weapons. Iran said the site was a watch factory where no nuclear activity had taken place.

IAEA inspectors tried for months to get access to Kalaye to conduct tests for radioactive residue from the alleged research. Iran did not let them into the main building until August 2003, weeks after a cleanup crew had swept through the complex, repainting and retiling throughout and removing tons of dirt in an apparent attempt to get rid of evidence. Despite those efforts, IAEA inspectors found suspicious radioactive particles lingering at Kalaye, which elevated concerns that Iran might be further advanced than outsiders knew. Eventually Iran was forced to acknowledge that it had conducted research at Kalaye on development of centrifuges, the cylindrical machines used to enrich uranium hexafluoride gas to produce fissile material.

The pattern would be repeated many times in the years that followed: The IAEA would receive evidence of suspicious activities at

one site or another, but its attempts to carry out inspections would be delayed or denied. In fact, the complex at Kalaye is once again being used by Iran for research and development of centrifuges—this time, the work is being done on the advanced IR-2 version and once again it is off limits to the IAEA.

As evidence of deception piled up in previous years, Iranian officials maintained steadfastly that their only goal was to develop civilian nuclear reactors to supply electric power so they could conserve the country's oil and gas. The clandestine enrichment work, they argued, was only to develop low-enriched fuel for those reactors, not to develop the highly enriched version for weapons. They said they had to resort to the nuclear black market and suppliers like Pakistan's renegade scientist A.Q. Khan in the 1980s and early 1990s because of sanctions imposed by the United States after the Iranian revolution in 1979.

The United States accused Iran of concealing a weapons program almost immediately after the disclosures in 2002. But the failure of U.S. forces to find weapons of mass destruction in Iraq after the invasion in March 2003 damaged its credibility on the issue.

As a signatory to the NPT, Iran has the right to enrich uranium for civilian uses. But its secret nuclear activities, which date back to at least 1987, violated its safeguards agreement with the IAEA to declare and allow inspections of all nuclear-related sites. The United States, and later the Europeans, argued that Iran's deception meant it should forfeit its right to enrich, a position likely to be up for negotiation in talks with Iran.

In reports to the IAEA Board of Governors starting in June 2003, ElBaradei criticized Iran, saying it had concealed its nuclear activities and thwarted efforts by the agency to determine whether there was a military side to its program. But he resisted pressure from the United States to take the next step and declare Iran in violation of the NPT because, he said repeatedly, the IAEA had no proof of a military program.

In late 2003, Iran agreed to voluntarily suspend its enrichment activities as part of negotiations with Britain, France and Germany. The group, known as the EU 3, promised Iran access to civilian nuclear technology in return for the suspension. At the same time, Iran signed and provisionally implemented an Additional Protocol to its safeguards agreement with the IAEA; the provision permitted IAEA inspectors to make visits on short notice to suspicious sites that were not part of Iran's official nuclear program. But the negotiations with the EU 3 dragged on for nearly two years without Iran providing the assurances sought by the IAEA and the Europeans to clear up doubts that its program was completely civilian. As a result, Iran was denied access to the civilian technology it sought.

In August 2005, Iran informed the IAEA that it was breaking the seals placed by the agency on its uranium conversion facility at Isfahan as part of the enrichment suspension because the talks were stalled. Then in January 2006, Iran notified the IAEA that it was resuming enrichment activities and instructed the agency to remove seals it had affixed to equipment at Natanz and the other facilities. Iran also stopped the visits to unofficial sites by IAEA inspectors under the provisions of the Additional Protocol. The Euro-

peans responded by asking the IAEA to refer Iran to the UN Security Council for sanctions.

In February 2006, the IAEA board approved a resolution referring Iran to the Security Council. The resolution pointed to Iran's "many failures and breaches of its obligations to comply with its NPT safeguards agreement" and the absence of any confidence that its nuclear program was solely civilian. Iran responded by further restricting the places IAEA inspectors could visit and proceeding at full speed to get the Natanz enrichment plant up and running.

In December 2006, the UN Security Council ordered Iran to suspend enrichment and imposed the first round of sanctions. Countries were ordered to stop supplying Iran with material and technology that could contribute to its nuclear and missile programs. The overseas assets of 10 Iranian companies and 12 people affiliated with the programs were frozen. In the next two years, the Security Council approved two more sets of sanctions. Each time, Iran rejected the demands that it stop enrichment, asserting its legal rights to enrichment under the nonproliferation treaty.

Over the course of dozens of inspections by the IAEA in the last six years, Iran succeeded in answering some of the questions about the nature of its nuclear program. For instance, the radioactive particles discovered at Kalaye were eventually linked to second-hand centrifuge components purchased from the A.Q. Khan trafficking network and tested at the supposed watch factory.

But for every riddle solved, a new one seemed to arise. The most significant questions focus on whether Iran has a separate covert enrichment facility where it could produce weapons-grade uranium, whether its nuclear activities were or still are aimed at building a weapon, and whether the military remains involved in the nuclear project. Iran denies any military role in its nuclear efforts and so far no one has uncovered proof to the contrary.

There is, however, a strong circumstantial case for military involvement, which may or may not have stopped when the weaponization work ended in late 2003. Potentially damning evidence surfaced in 2004 when U.S. intelligence obtained a laptop computer that it said had come from an Iranian engineer. The computer contained thousands of pages of data on tests of high explosives and designs for a missile capable of carrying a nuclear warhead. It also contained videos of what were described as secret workshops around Iran where the weapons work was supposedly carried out.

Some of those documents as well as intelligence material from other countries were shared with the IAEA, which refers to them in its official reports as the "alleged studies." When the agency provided copies of some documents to Iran, the Iranians denounced them as fakes.

Senior UN officials and foreign intelligence officials who have seen many of the documents told the committee staff that it is impossible to rule out an elaborate intelligence ruse.

But they said the documents come from more than just the laptop and appear to be authentic, right down to the names, addresses and telephone numbers of the workshops in Iran.

A senior allied intelligence official said the documents contained blueprints for a nuclear warhead that was a perfect match—"down

to the last millimeter”—with designs his agency had obtained from other sources inside Iran. Another document tracked the flight path for a missile, with notations that its warhead would detonate 600 meters above the ground, according to foreign intelligence officials and UN officials. That height would render a conventional explosive ineffective, but would be the optimum elevation for a nuclear weapon intended to wipe out a city.

Last August, IAEA officials thought that they had achieved a major breakthrough when Iran agreed to permit a team of inspectors to visit some of the workshops identified in the alleged studies. The IAEA thought it would finally be able to answer the questions raised in those documents. A specialist familiar with the records was flown in immediately from IAEA headquarters in Vienna to join inspectors already in Iran. But on the day of the promised inspection, the agency was told the government had changed its mind and they would not be allowed into the facilities. After several days of fruitless negotiations, the inspectors returned home empty handed, according to staff interviews with UN officials involved in the effort.

The initial approval for the inspections was granted by officials from Iran's civilian nuclear agency. UN officials said they suspect the permission was withdrawn after either military officers or high-ranking officials in the government learned of the prospective visits.

Senior UN officials now say discussion is stalled with Iran over the accusations in those documents and over other potential military aspects of its nuclear program. Iran refuses to answer any further questions. When asked what's next, a senior UN official said recently that he saw no new course of action to end the stalemate.

A senior U.S. official monitoring the process said he worries that "Iran fatigue" has set in among many of the 35 countries that comprise the IAEA Board of Governors, creating the possibility that the agency lacks the political willpower to resolve the conflict with Iran.

While the impasse drags on, Iran has made steady progress over the last two years at Natanz and the number of centrifuges spinning there increases slowly. The estimated one ton of low-enriched uranium hexafluoride produced as of mid-February is enough for a single nuclear weapon, when converted to HEU through further enrichment, according to most estimates. Since then, IAEA officials estimate Iran has added another 300 to 400 pounds of LEU to its stockpile.

Iran appears to have remained active on the international black market. Iranian officials have told IAEA officials that the nuclear program is self sufficient, but staff interviews with American and foreign officials and intelligence analysts found that Iran is operating a broad network of front organizations to procure additional technology and material for its nuclear projects. Among the most prized materials being sought by Iran are carbon fiber used in the more advanced IR-2 centrifuges under development and maraging steel and specialty aluminums for the IR-2 and the cruder centrifuges operating at Natanz, according to unclassified information provided to the staff.

“We know they received carbon fiber and have used it in IR-2 rotors, but we have no clue where they got it or how much they got,” said a senior official at the IAEA.

On the missile front, Iran’s launch of a satellite into orbit in early February raised concerns that Tehran is improving its ability to deploy long-range ballistic missiles at the very time it is making progress on its nuclear program. Iran is still developing its ballistic missile capability and there are ways to delay its progress by tightening sanctions and cracking down on the front companies involved in procurement.

Authorities suspect that some purchases for Iran’s nuclear and missile program may have come through an elaborate ruse to avoid U.S. financial sanctions on dealings with Iranian banks. In January, a major British bank, Lloyds TSB, agreed to pay \$350 million to settle accusations that it helped Iranian banks conceal hundreds of millions of dollars worth of transactions that passed through U.S. financial institutions. The scheme began in the mid-1990s and continued until January 2007.

Banks in Iran are banned from doing business with U.S. financial institutions under sanctions imposed by the U.S. government. According to statements by the district attorney’s office in New York City and the Justice Department, Lloyds bank employees avoided those prohibitions by routinely removing identifying information from electronic wire transactions involving Iranian banks. This practice, known as “stripping,” allowed the transactions to evade software filters within the U.S. banking system designed to block money transfers involving Iranian banks.

The statements by the DA and Justice said Lloyds handled at least \$300 million of Iranian transfers that ended at American banks and billions of dollars in additional transactions passed through U.S. financial institutions before ending up outside the country. The CIA and FBI have started going through the hundreds of thousands of individual transactions to determine whether the Iranians were buying technology and material for their nuclear and missile programs through the scheme, according to law enforcement officials.

In a separate inquiry, New York District Attorney Robert Morgenthau charged a Chinese businessman and his company in early April with selling tons of sensitive material to Iran in violation of the UN resolutions banning trade that could assist Tehran’s nuclear and missile programs. Tungsten, high-strength maraging steel and other exotic metals with military uses were sold from 2006 to 2008 to entities affiliated with the Iranian Defense Industries Organization. The state-owned defense company was already under American sanctions for activities related to developing weapons of mass destruction. Since many of the transactions were conducted in US dollars, the indictment said the Chinese firm used fictitious names and bank accounts to evade US financial prohibitions on dealing with Iran.

In mid-April, Canadian police charged a Toronto man with attempting to ship devices to Iran that could be used to enrich uranium to what Canadian authorities described as “weapons-grade product.” The Iranian-Canadian man was arrested on charges of violating the UN sanctions on shipping technology with nuclear ap-

plications to Iran after attempting to buy 10 devices known as pressure transducers from a company near Boston. Transducers are sophisticated gas-pressure gauges that can be used by pharmaceutical and food companies or in centrifuges for enriching uranium. While the man told the company he planned to ship the items to Dubai, authorities said the ultimate destination was Iran.

If Iran's leaders decide to move forward toward a nuclear weapon, they could exercise what's known as the "breakout option," following North Korea's example by withdrawing from the non-proliferation treaty, throwing out the IAEA inspectors and reconfiguring the centrifuges at Natanz to produce weapons-grade material. As an alternative, Iran might have a parallel enrichment program where the conversion and enrichment of undeclared uranium is already underway or to which LEU from Natanz could be shipped in the event of a breakout scenario.

American and other intelligence agencies don't know which option Iran might choose, but the unclassified portion of the National Intelligence Estimate released in December 2007 said the U.S. intelligence community believes that Iran would use a covert facility to move from low-enriched uranium to weapons-grade material.

WHAT IT MEANS

Iran embarked on its nuclear program in the mid-1980s when it was locked in a devastating war with Iraq. Iran lost hundreds of thousands of people in eight years of war, including some killed when Saddam Hussein used chemical weapons. At the time, Tehran's determination to develop a nuclear deterrent was unquestionably a reaction to the Iraqi threat.

More recently, Iran's concerns focused on tough rhetoric from President George W. Bush and fears of a U.S. invasion, particularly in the months after the start of the war in Iraq in March 2003. But motives are rarely black and white. Iran is clearly driven to establish its nuclear credentials as part of its determination to assume what it views as its rightful place as a regional power. It has invested tens of millions of dollars—as well as a big measure of its prestige—on winning legitimacy for its enrichment program.

Along with understanding Iran's motives, examining the course of Iran's nuclear program since its exposure in mid-2002 offers lessons in how the administration should proceed if it wants to break the current stalemate and resolve the dilemma.

Publicly available U.S. intelligence reports and published reports show that Iran had been running a military nuclear program in parallel to the supposedly civilian one since the late 1980s when its work was exposed in mid-2002. Critical work was being conducted at military facilities on designing and testing explosives for a warhead and developing nuclear-capable missiles.

The international community, initially through the IAEA, applied pressure on Iran to come clean about its secret nuclear history. Iran dragged its feet, drawing out negotiations and dodging the tough questions. By the end of 2003, several factors had changed and Iran put the military aspects of its program on hold and decided to suspend enrichment activities.

While the reasoning of Iran's leadership is unknown, one factor was probably the presence of tens of thousands of U.S. troops next

door in Iraq. But the public assessment by U.S. intelligence says Iran's decision was influenced primarily by the increasing international scrutiny and pressure from the exposure of its previously secret nuclear work.

The enrichment suspension lasted until the end of 2005. By that time, Iran's leaders had a different assessment of the obstacles they confronted. The United States was unlikely to attack because it was bogged down in Iraq and rising oil prices meant Iran could withstand the expected UN sanctions. So Iran announced that it was resuming enrichment activities.

In his annual threat assessment in February, Admiral Blair said that since the fall of 2003 Iran has conducted some research and development that has potential military applications. He said, however, that the U.S. does not know whether Iran currently intends to develop nuclear weapons, adding that Tehran "at a minimum is keeping open the option to develop them."

What is certain is that Iran has developed a sustainable enrichment capacity, from purifying uranium ore and converting uranium oxide to the gas used as feedstock for centrifuges to churning out LEU at Natanz. About 4,000 centrifuges were spinning in February, the last date reported by the IAEA, with 1,600 waiting in the wings. Piping has been installed for another 9,000 centrifuges and Iran has said it intends to eventually operate 54,000 centrifuges in the vast underground halls at Natanz. Because of its success in mastering enrichment technology, Iran believes that it has secured its right to continue enrichment.

Iran's success at Natanz raises the question of whether the world can live with an Iran that continues to enrich uranium. Some experts argue that enrichment is a fait accompli, so the world should focus diplomatic efforts on stopping Iran from taking the next step and beginning to enrich to a weapons-grade level. Others contend that Iran cannot be trusted after years of deception, so it must relinquish its right to enrich uranium.

In one scenario, Iran would freeze enrichment at current levels while its parliament ratifies the Additional Protocol, which allows the IAEA to make more intrusive inspections on short notice. Side agreements might be required to establish an even tighter safeguards regime at Natanz, something officials at the IAEA refer to as "Additional Protocol Plus." Iran also could be required to ratify the Comprehensive Nuclear Test Ban Treaty, which prohibits nuclear weapons testing.

Under this approach, Iran also would be required to answer the IAEA's long list of outstanding questions raised by the laptop documents and other sources about its weapons work and related clandestine activities. Only after implementing a tougher inspections regime and getting a clean bill of health on the military questions could Iran resume enrichment at Natanz at civilian levels.

This version would offer Iran the opportunity to disclose any military aspects of its past program in exchange for the right to move forward on civilian enrichment. But questions remain about whether this deal would end the suspicion: Each time Iran has told the IAEA it has come clean in the past, the agency has discovered concealed aspects of its nuclear program. And from Iran's perspec-

tive, disclosure of incriminating details about its nuclear efforts might lead to an international outcry that could scuttle any deal.

A second approach would take a tougher stance, requiring Iran to relinquish all rights to enrichment and close down Natanz and related facilities. Proponents of this view argue that Iran cannot be trusted because of its long history of concealing nuclear activities and they do not trust the spotty record of the IAEA when it comes to identifying clandestine nuclear programs.

Further, this group believes that allowing Iran to continue enriching and stockpiling enough LEU, even without converting a gram to weapons-grade, would give Iran greater power in the region and could lead neighbors like Saudi Arabia, Egypt and possibly Turkey to seek their own nuclear capabilities—a cascade certain to increase the risks of a nuclear confrontation.

Neither scenario is perfect because the ultimate solution to the conundrum of Iran's nuclear ambitions is not technical, but political. In testimony before the committee during two days of public hearings on Iran in early March, Karim Sadjadpour, an associate at the Carnegie Endowment for International Peace, contended that the nuclear dispute must be viewed as a symptom of the broader mistrust between the U.S. and Iran, not as an underlying cause of the tension.

Deadlines have come and gone with Iran, and so have predictions about when it might have a nuclear weapon. The fact that it has enriched a significant quantity of reactor-grade uranium gives Iran the option of moving quickly if its leaders make a political decision to build a bomb. And even if Iran's current leaders do not proceed, the decision is inherently reversible as long as it retains its enrichment capability.

A complicating factor is how Israel might respond if Iran continues to increase its uranium stockpile. There have been reports that Israel sought American support for an attack on Iran's nuclear installations in the last months of the Bush administration and was turned down. Israel's public stance has been that Iran must give up its enrichment capabilities, so a deal which allows Iran to continue to enrich would be expected to keep the possibility of an Israeli attack on the table.

WHAT WE DO

Unclassified U.S. intelligence assessments and staff interviews with government officials and diplomats in Washington and foreign countries leave little doubt that Iran has the technological and industrial capacity to eventually develop an atomic bomb. In the unclassified judgment of U.S. intelligence, only a political decision by the country's leaders is likely to prevent Iran from someday producing a nuclear weapon. And that decision is inherently reversible. At a minimum, one goal of the administration's strategy on Iran should be to provide the right balance of pressure and opportunity to persuade the regime to agree not to take any further steps toward enhancing its capability to build a bomb and to accept strict verification standards.

Direct engagement must be part of that strategy, but after 30 years of distrust and inflammatory rhetoric, providing a climate conducive to successful talks will require patience and discipline.

Even the threshold decisions are complicated: Do bilateral talks start at lower levels to promote trust or at the top where the decisions will be made? Should negotiations proceed slowly and methodically or should a time table be imposed to prohibit Iran from dragging out the process while it adds to its uranium stockpile? Are preconditions, such as a freeze on further enrichment, required? Will the international community, particularly Russia and China, back sanctions tough enough to persuade Iran that failure to reach an agreement will carry severe consequences? Can Iran be permitted to retain its capacity to enrich uranium despite its history of deception?

In its two days of hearings in March, the committee explored the status of Iran's nuclear ambitions with two panels of expert witnesses. Among the witnesses there was unanimous support for the administration's overtures to Iran, a consensus that the path to success will be long and difficult, little support for tough preconditions to talks, and broad agreement that the United States cannot do it alone.

"There's no serious unilateral option for the United States," Richard Haass, the president of the Council on Foreign Relations and a former director of policy planning at the State Department, told the committee. "And the goal should be to get international agreement on what we want of Iran, what we are prepared to do for Iran, but also what we are prepared to do to Iran if we can't get that agreement."

Developing a regime of tougher sanctions to pressure Iran will require that Russia, China and other allies and friends accept the need for actions that could cause them economic harm because of their trade ties with Iran. Among the proposed sanctions discussed at the hearings was curtailing Iran's ability to import gasoline and other refined petroleum products essential for its economy. Iran could retaliate by reducing or even stopping exports of crude oil, which would raise the price of oil and have dramatic economic consequences for many countries.

Some analysts argue that setting an advance time table for progress in talks is a recipe for failure. Their argument is that it will take time for the United States to assure Iran that it cannot afford the price of acquiring a nuclear arsenal and that Washington recognizes Tehran as an influential regional player. For others, however, time is more critical because of Iran's progress toward nuclear weapons capacity. They contend that Iran should understand, either privately or publicly, that substantive progress on negotiations must occur within a specific time frame or Iran's failure to abide by the UN Security Council resolutions will trigger significant new sanctions.

None of the witnesses proposed removing the possibility of military action as a last resort, but there was an overriding concern about the consequences of an attack on Iran either by Israel or the United States. Two former White House national security advisers, Zbigniew Brzezinski and General Brent Scowcroft, warned the United States against military action in an attempt to destroy Iran's nuclear installations, saying the results would be chaotic and dangerous. Former U.S. Ambassador Frank Wisner cautioned that

an attack by Israel would threaten the interests of the United States and other countries in the region.

If negotiations occur on Iran's nuclear ambitions, a major sticking point for the United States and its allies may be whether to permit Iran to continue to enrich uranium as part of a final deal. As a signatory to the NPT, it has a legal right to enrich uranium solely for peaceful purposes. The United States and other countries have argued, however, that Iran can no longer be trusted with that right because of its past deception, the evidence that its nuclear program has a military dimension and its refusal to abide by UN Security Council resolutions demanding that it suspend current enrichment activities. For their part, Iran's leaders have maintained steadfastly that they will not bargain away their enrichment capability, which they say is solely for civilian purposes.

A few years ago, the United States and its allies thought they could stop Iran's nuclear ambitions short of mastering the enrichment process. Iran has crossed that line and now expects the international community to put the stamp of legitimacy on its activities as part of any talks. This would be a highly controversial concession, even if it came with strings attached. The toughest inspection regime and fullest disclosure by Iran about the likely military aspects of its program might not ease the anxieties of the Israeli government and some of Iran's neighbors. In fact, coming clean about the military aspects of its program, even if they are in the past, may increase distrust among Iran's neighbors. Despite the potential problems of permitting Iran to continue enriching in defiance of the UN Security Council, the administration has indicated that it is willing to begin talks with Iran without demanding a suspension of enrichment, according to senior State Department officials.

None of the hearing witnesses or other experts interviewed predicted that it will be easy to engage Iran in meaningful negotiations on the future of its nuclear ambitions. Winning support from Russia, China and other countries for a united front will require difficult diplomacy on several fronts. But there is reason for optimism in the administration's willingness to talk and the recent overtures toward Iran by President Obama and Secretary of State Hillary Clinton. A diplomatic solution on the nuclear issue, or even the process of engaging Iran, would open the door for more effective U.S.-Iran relations on issues like extremism in the Middle East, smoothing the departure of U.S. troops from Iraq and bringing stability to Afghanistan. It could also avoid a nuclear arms race in the Middle East.