

MEETING THE CHALLENGE

WHEN TIME RUNS OUT



AN UPDATE TO THE BIPARTISAN POLICY CENTER REPORT
ON U.S. POLICY TOWARD IRANIAN NUCLEAR DEVELOPMENT

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BIPARTISAN POLICY CENTER

A myriad of national security challenges currently confront our country—the wars in Iraq and Afghanistan, violent extremism in Pakistan and Yemen, North Korean belligerence. But due to its pivotal geographic position, its radicalism and its sponsorship of terrorism, none pose a graver threat than the Islamic Republic of Iran’s pursuit of nuclear weapons.

There are no easy solutions. Preventing a nuclear weapons-capable Iran will require making hard, unpopular, choices. That is why discussing these issues openly and understanding the alternatives is important. Fostering such informed debate has been the goal of the Bipartisan Policy Center’s series of reports on Iran’s nuclear development, which we have been privileged to co-chair.

In *Meeting the Challenge*, published in September 2008, we put forth a bipartisan and realistic, yet robust and comprehensive, policy toward Iran—with the help of several experts who have since joined the Obama Administration, especially Ambassador Dennis Ross and Dr. Ashton Carter. Subsequently, we warned in our September 2009 report, *Time is Running Out*, that time was dwindling to thwart Tehran’s nuclear ambitions.

Now, with Iran on the brink of nuclear weapons-capability despite President Obama’s diplomatic engagement and a fourth round of United Nations Security Council sanctions, we felt it appropriate to consider what could happen if time does run out.

While we continue to hope for a diplomatic solution, we remain steadfast in our belief that a nuclear Iran must be prevented, as President Obama has pledged. Any alternative outcome is unlikely, dangerous or strategically untenable. We hope that this report generates discussion among policymakers, furthers our national understanding and guides the Obama Administration in meeting this most serious challenge.

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MAP 1: RELIEF MAP OF IRAN



EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The most immediate national security threat to the United States is Iran's rapid progress toward achieving nuclear weapons capability—and time is running out. A nuclear Islamic Republic of Iran must be prevented, as it cannot be contained. Indeed, it would spark a dramatically destabilizing proliferation cascade in the Middle East—already a combustible region—and lead to a critical conflict.

In this, our third report on this most serious challenge, we elucidate the outcomes we are likely to face if we do not now act decisively to thwart Iran's nuclear ambitions.¹ We recognize the difficulties we face in addressing this threat. Any solution requires imagination, resolve and risks. But compared with what will happen when time runs out, the choice cannot be clearer.

International Atomic Energy Agency (IAEA) data indicate that by July 2010 Iran is on track to stockpile sufficient low-enriched uranium (LEU) to develop, with further enrichment, a small-yield nuclear device. That would make it possible for Iran to turn this LEU into fissile material for a weapon in less than three months.

DECISIVENESS IS NOW ESSENTIAL, YET TO DATE THE WHITE HOUSE HAS NOT MATCHED ITS DETERMINED RHETORIC WITH AN ASSERTIVE POLICY THAT DEMONSTRATES ITS COMMITMENT TO THWART IRAN'S NUCLEAR AMBITIONS.

Our best chance for successfully meeting the Iranian nuclear challenge is a robust and comprehensive triple-track strategy, involving the simultaneous pursuit of: diplomacy; sanctions; and visible, credible preparations for a military option. This strategy, which we have advocated in our earlier reports, is consistent with President Barack Obama's pledge last year at Camp Lejeune "to use all elements of American power to prevent Iran from developing a nuclear weapon."²

Decisiveness is now essential, yet to date the White House has not matched its determined rhetoric with an assertive policy that demonstrates its commitment to thwart Iran's nuclear ambitions. We supported the Obama Administration's diplomatic outreach to Iran last year and its current pursuit of international sanctions, but after eighteen months neither has proven successful in slowing, let alone stopping, Iran's nuclear program. Furthermore, the decision to downplay potential military options has weakened our leverage and undermined the possibility of a peaceful resolution.

We recognize the difficulties inherent in pursuing a comprehensive strategy that includes military preparations. Our support for this strategy is informed by an evaluation of possible outcomes in the absence of a more forceful and effective U.S. effort. With time rapidly dwindling before Tehran achieves nuclear weapons capability, two outcomes become likely.

The most probable outcome, regardless of U.S. objections, is an Israeli military strike against the Islamic Republic's nuclear facilities. Israeli military action would trigger retaliatory strikes by Iran and its proxies—Hezbollah from Lebanon and Hamas from Gaza—and terrorist attacks.

If Israel strikes Iran, the U.S. will be put in a very difficult position. If the U.S. stood neutral in such a conflict this would only embolden Tehran, antagonize our regional allies, and lead to greater conflicts down the road. On the other extreme, the U.S. could be dragged into a conflict at a time not of its choosing. We expect the U.S. to stand by our Israeli and Arab allies threatened by Tehran and remain focused on the overarching strategic objective to prevent a nuclear Iran—thus assuring our continued commitment to the security and stability of the region.

The second likely outcome is that Iran, in the absence of effective international opposition, will gain all the elements needed for a nuclear weapon—fissile material, detonators and delivery vehicles. Even without assembling or testing such a device, the Islamic Republic would become a *de facto* nuclear power, which would threaten U.S. and regional security and set off a proliferation cascade across the Middle East, effectively ending the international nonproliferation regime. As one of the world’s chief sponsors of terrorism, Iran would be in a position to transfer nuclear materials to its terrorist allies. Further, a nuclear-capable Iran would seek to dominate the energy-rich Persian Gulf, threaten Israel’s existence, destabilize moderate Arab regimes, subvert U.S. efforts in Iraq and Afghanistan, embolden radicals, violently oppose the Middle East peace process and increase support for terrorism and proxy warfare across the region.

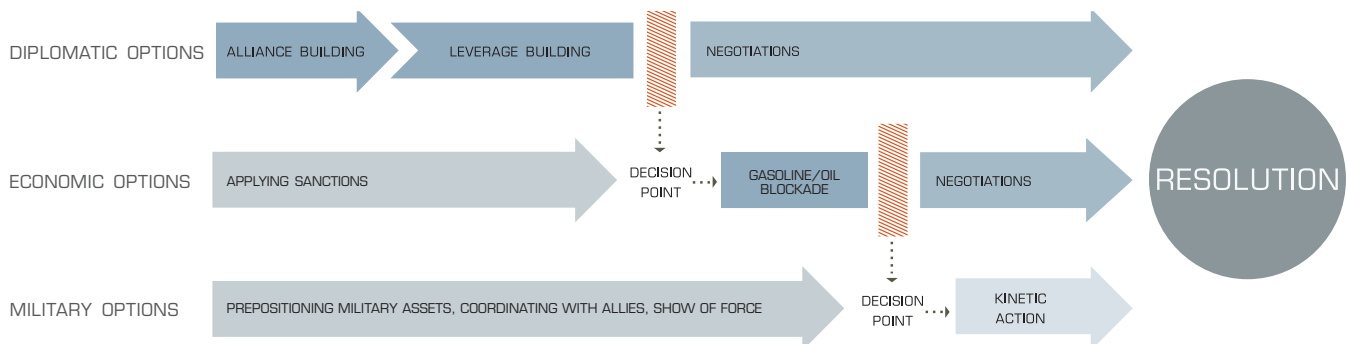
There is a growing belief in Washington that these negative consequences could be minimized through a strategy of containment and deterrence. However, we do not believe a nuclear-capable Iran can be contained as the Soviet Union was during the Cold War. American credibility, so integral to deterrence, would be seriously diminished, if after repeatedly issuing warnings to the contrary it permitted Tehran to cross the nuclear threshold. Restoring U.S. credibility would then require extraordinary action. In addition, nuclear capability

would embolden the already risk-tolerant Iranian regime. Moreover, we lack politically stable, militarily robust and reliable Arab allies who would permit the permanent stationing of U.S. troops as a tripwire. Precisely because containment will not work, a strategy of acquiescence would lead to a far more dangerous conflict involving a nuclear-armed Iran, one that would inevitably drag in the United States at even greater cost.

Many put their faith in the fall of the Khamenei-Ahmadinejad regime, and its replacement by an internationally responsible government, as a way to avoid military action or Iran achieving nuclear weapons capability. Hope, however, is not a strategy. There is no credible evidence that even reformist elements will abandon the country’s nuclear quest. Nor, amidst the brutal suppression of the opposition, does it appear plausible that the regime will fall in the little time left before the Islamic Republic acquires a nuclear weapons capability. Some have pointed to this hope as a rationale to discourage the U.S. from taking a more aggressive stance over the past several months. However, the only regime change that is currently taking place in Tehran is the militarization of the already hard-line government.

With an Israeli strike very risky, containment almost certainly ineffective, and regime change improbable in the near term we return to the strategy we originally recommended, the simultaneous pursuit of a triple-track

RECOMMENDED U.S. POLICY TOWARD IRAN’S NUCLEAR PROGRAM



EXECUTIVE SUMMARY

approach: diplomacy; sanctions; and visible, credible military readiness activity. We support unilateral sanctions legislation that is overwhelmingly supported in Congress. We also welcome the new United Nations sanctions that were passed by the Security Council in June 2010. While they lack sufficient bite, we hope they will encourage other nations to strengthen their own sanctions.

WITH AN ISRAELI STRIKE VERY RISKY, CONTAINMENT ALMOST CERTAINLY INEFFECTIVE, AND REGIME CHANGE IMPROBABLE IN THE NEAR TERM WE RETURN TO THE STRATEGY WE ORIGINALLY RECOMMENDED, THE SIMULTANEOUS PURSUIT OF A TRIPLE-TRACK APPROACH: DIPLOMACY; SANCTIONS; AND VISIBLE, CREDIBLE MILITARY READINESS ACTIVITY.

To maximize the possibility of a peaceful resolution, the U.S. must negotiate with Iran from a position of strength. Toward that end, the U.S. needs to set near-term deadlines for the parallel pursuit of diplomacy and sanctions and for determining their effectiveness. To lend these deadlines greater credibility, and to gird itself for the potential next step, the Administration needs to embrace active and public preparation for the military option.

Many who condemned the Bush Administration's lack of transparency prior to the invasion of Iraq today discourage public discussion of military options concerning Iran. But we ought not shirk this debate or dismiss it as warmongering; it is precisely a public recognition of a viable military option that might reduce or even preclude its need. The Administration needs to

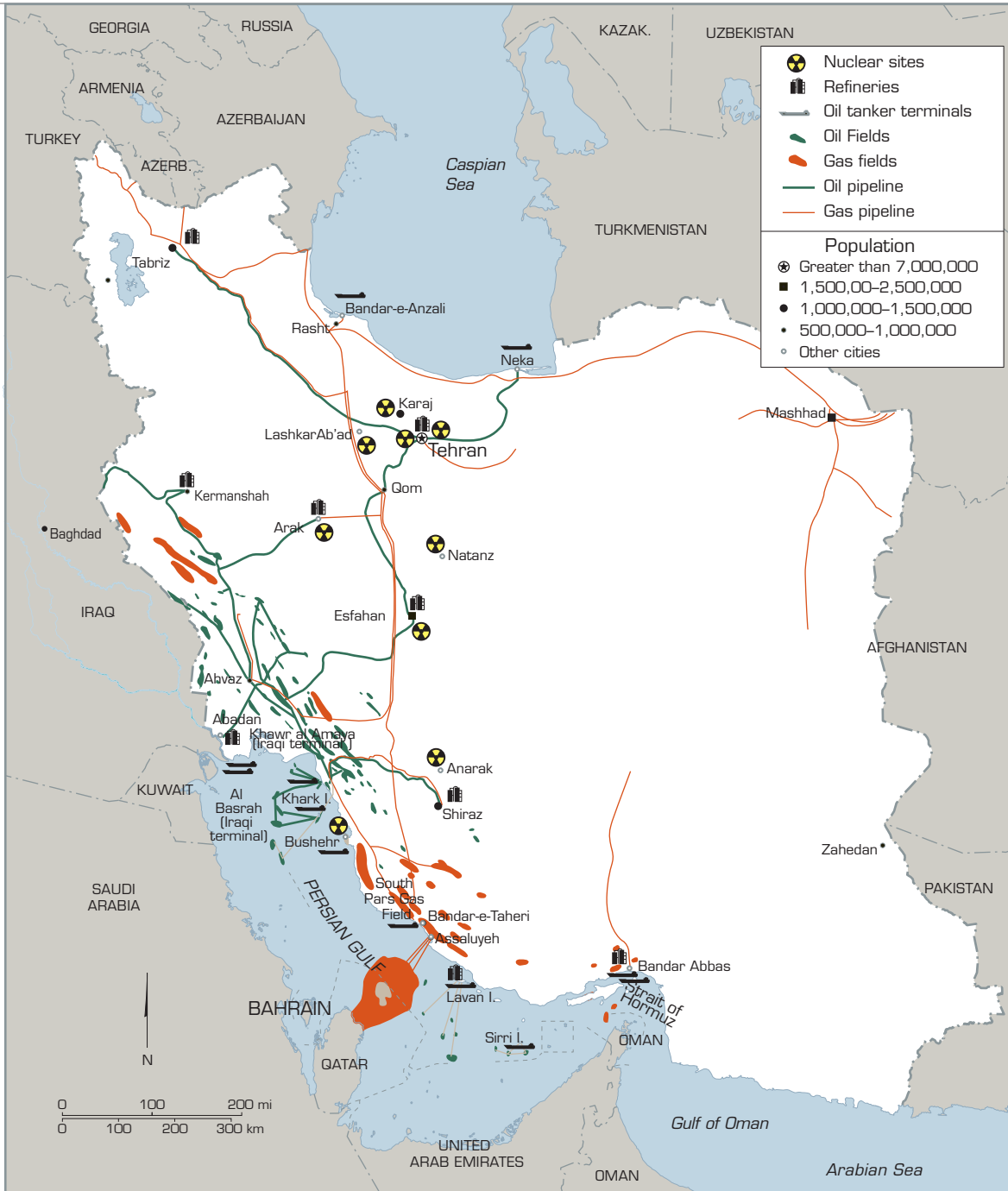
actively engage in a reasoned and public discussion and make clear that it is prepared to employ the military option as a last resort.

Specifically, we recommend the United States: augment the Fifth Fleet presence in the Persian Gulf and Gulf of Oman, including the deployment of an additional carrier battle group and minesweepers to the waters off Iran; conduct broad exercises with its allies in the Persian Gulf; intensify our enhancement of the defensive and offensive military capabilities of our Persian Gulf allies; initiate a "strategic partnership" with Azerbaijan to gain enhanced regional access; and work with the Saudis and Iraqis to improve their capacity to ship oil out of the region without using the Strait of Hormuz. If such pressure fails to persuade Iran's leadership, the United States and its allies would have no choice but to consider blockading refined petroleum imports into Iran, to send a strong signal and to ensure the effectiveness of proposed sanctions on gasoline imports. A blockade would effectively be an act of war and the U.S. and its allies would have to prepare for its consequences.

Should these measures—in conjunction with diplomatic and economic pressures already being pursued—not compel Tehran to terminate its nuclear program, the U.S. military is capable of launching an effective targeted strike on Iranian nuclear and military facilities. This would only set back Iranian nuclear development; it would not destroy Iran's nuclear knowhow. Taking military action would require continued vigilance in the years that follow, both to retain the ability to strike previously undiscovered sites and to ensure that Iran does not revive its military nuclear program. We fully recognize the risks of a strike against Iran: U.S. and allied casualties; rallying Iranians around an unstable and oppressive regime; Iranian reprisals against us and our allies—be they direct or by proxy; and Iranian-instigated unrest in the Persian Gulf states.

We are under no illusions: there exist no easy or risk-free solutions. Our triple-track approach is complicated and challenging, without a guarantee of complete

MAP 2: IRAN: OIL, GAS AND NUCLEAR INSTALLATIONS



success. However, as we argue in this report, the likely alternatives are far more dangerous. The stakes are too high to rely on containment and regime change while not seriously preparing for the potential need for a military strike. We cannot wish this problem away,

nor should we fall prey to the inertia of resignation. Sanctions and diplomacy have a chance to work only if backed by a credible military option. Bold U.S. leadership is required. The risks of inaction are too high and time is rapidly running out.

NEW DEVELOPMENTS

Beginning with the revelation of Iran's secret nuclear facility at Qom at the September 2009 G20 summit, a myriad of political, technological, legal, diplomatic, economic and military developments have changed the policy landscape.

IRANIAN POLITICS

Widespread demonstrations in support of opposition candidate Mir-Hossein Mousavi triggered a strong government crackdown that reflected the growing influence of the hard-line Islamic Revolutionary Guard Corps (IRGC) within the regime. By early 2010 the opposition movement's ability to take to the streets had largely been suppressed.

Protests and Crackdowns

In the days immediately following the Interior Ministry's announcement that President Mahmoud Ahmadinejad had won the presidential vote by an implausibly wide margin of 62 to 34 percent, demonstrators took to the streets of Tehran and other cities by the thousands to decry the perceived electoral fraud.³ The government's willingness to publicly and violently break up these protests using the *basij* loyalist paramilitary forces reflected the hardliners' growing preeminence over more pragmatic conservatives and moderates, some of whom expressed reservations over the handling of the election and the severity of the crackdown.⁴

Mass demonstrations continued when Mousavi's formal petition to cancel the election results⁵ was ignored by the Guardian Council, which confirmed Ahmadinejad's reelection on June 29 after a partial recount.⁶ As protestors and *basij* clashed throughout 2009, Ahmadinejad and the IRGC began purging the foreign and intelligence ministries, security services and even universities to make way for more radical loyalists. The gulf between the government and the opposition widened further as protestors expanded their criticisms to Supreme Leader Ayatollah Ali Khamenei and the regime itself for colluding with Ahmadinejad. Tellingly, some of these protests occurred on Quds Day and the anniversary of the U.S. embassy takeover—holidays normally reserved for pro-regime, anti-U.S.

demonstrations.⁷ The government responded with increasingly harsh measures, including mass arrests, bans on reformist parties and newspapers, show trials, prisoner abuses and even executions.⁸ Although Mousavi and other reformists have kept up their criticisms of the regime's actions, the death of reformist Grand Ayatollah Hussein-Ali Montazeri in December 2009 combined with government suppression of leading moderates—including former presidents Seyed Mohammad Khatami and Akbar Hashemi Rafsanjani—has reined in opposition activity since April 2010.⁹

BY APRIL 2010, TWO

INTERRELATED TRENDS WERE

EVIDENT: HARDLINERS HAD ASSERTED

THEIR PREEMINENCE WITHIN

THE IRANIAN REGIME; AND THE

OPPOSITION'S ABILITY TO ORGANIZE

AGAINST THE GOVERNMENT HAD

BEEN CURTAILED SEVERELY.

Iranian Politics in the Aftermath

The IRGC has long been a major factor in Iranian society and politics, especially since Ahmadinejad (an IRGC veteran) first became president in 2005. With Ahmadinejad's help, the IRGC portfolio has steadily expanded beyond its primary role as the regime's praetorian guard, to include: control over Iran's nuclear infrastructure, ballistic missile program, and *basij*; deep involvement in Iran's energy sector, construction contracts, and black market; and growing influence in the country's parliament (Majlis), Guardian Council,

PROTESTS AND VIOLENCE IN IRAN

2009

Date	Location	Information
June 13	Tehran and other cities	Thousands of protestors clash with police after election results announced.
June 15-16	Tehran and smaller cities	Seven Mousavi supporters killed in clashes. Protests at Iranian embassies worldwide.
June 18-20	Tehran	Thousands mourn dead protestors. Dozens more killed; hundreds arrested.
June 22-28	Tehran	Smaller protests occur. Minor clashes; some arrests.
July 17	Tehran	Over one million demonstrate; security forces clash with protestors. Former President Rafsanjani declares Iran in crisis.
September 18	Tehran and other major cities	Opposition leaders and supporters lead thousands in protest on Quds Day. Clashes with security forces; some arrests.
November 4	Tehran	U.S. Embassy takeover anniversary turned into anti-regime protest. Security forces clash with demonstrators.
December 7-8	Tehran, Esfahan, Mashhad, Tabriz, Shiraz and other cities	Thousands of students protest regime. Clashes leave one hundred arrested and injured.
December 21-23	Esfahan and Qom	Clashes between security forces and protestors at memorials for dissident Grand Ayatollah Montazeri.
December 27-28	Tehran and Shiraz	Eight killed, hundreds arrested in clashes during Ashura celebrations. Hundreds of thousands of opposition supporters take part.
December 30	Tehran, Shiraz, Qom, and Arak	Thousands take part in state-sponsored pro-regime demonstrations. Some call for execution of opposition leaders.

2010

February 11	Tehran and cities across Iran	Hundreds of thousands mark Iran Revolution anniversary at state-sponsored demonstrations. Opposition leaders and supporters arrested, attacked by security forces.
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cabinet, security ministries, education system and media.¹⁰ Nonetheless, the aftermath of the June election reflects the emergence of the IRGC and other hard-line elements as the single most important decision-making bloc within Iran. By April 2010, two interrelated trends were evident: hardliners had asserted their preeminence within the Iranian regime; and the opposition's ability to organize against the government had been curtailed severely.

NUCLEAR PROGRAM

Iran has accelerated its ability to produce the materials needed for a nuclear weapon, from enriched uranium for a bomb to the detonators for a warhead. Moreover, several developments in late 2009 and early 2010 have been alarming, signaling Tehran's increasing disregard for the international nonproliferation regime. These include: the revelation of a secret enrichment facility at Qom; an increase in the rate of production of LEU;

NEW DEVELOPMENTS

Tehran's production of 19.8% enriched uranium; and mounting evidence that Tehran never ceased its nuclear weapons program.

These activities—both covert and overt—underscore the hostile intentions of Iran's nuclear program and hasten a potential Iranian "breakout" from the safeguards mandated by the Nuclear Nonproliferation Treaty (NPT) and imposed by the International Atomic Energy Agency (IAEA). Such a breakout, which appears imminent, would severely constrain options to meet the threat of a nuclear Iran.

Since 2007, Iran has expanded the number of operating centrifuges at its Natanz enrichment plant as well as its stockpile of low-enriched uranium (LEU). Every day these centrifuges spin shortens the time Tehran requires to produce a nuclear weapon. Already Iran is on track to accumulate over 1,850 kilograms of LEU by July. This is enough to yield, with further enrichment, sufficient fissile material for a nuclear device. Once it reaches that threshold, Tehran, if it so chooses, could produce enough high-enriched uranium (HEU) for one nuclear device in as little as two months. The Islamic Republic could be a *de facto* nuclear power by the end of 2010.

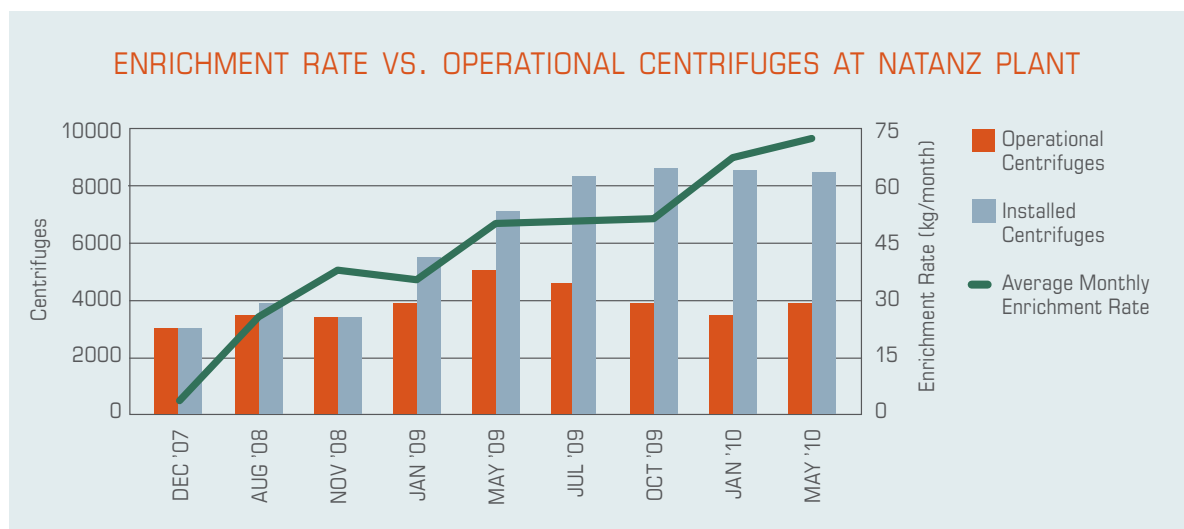
Enrichment

According to the IAEA's May 31, 2010, report, between November 23, 2009, and May 1, 2010, the Islamic Republic produced an additional 619 kilograms (kg) of 3.5% enriched uranium hexafluoride (UF₆), bringing Iran's total low-enriched uranium stockpile to just over 2,400 kilograms of UF₆, equivalent to about 1,640 kilograms of LEU.¹¹

THE ISLAMIC REPUBLIC COULD BE A DE FACTO NUCLEAR POWER BY THE END OF 2010.

This represents Iran's second consecutive increase of its enrichment rate, and its fastest rate of enrichment yet. Between November 2009 and January 2010, Iran was able to produce about 78 kilograms of LEU per month. Over the subsequent 91-day period, Iran achieved an enrichment rate of 81 kilograms of LEU per month, a 45% increase over the production rate for much of 2009.¹²

It is true, however, that the number of centrifuges—both functioning and installed—at the Natanz facility



appears to be generally declining. In May 2010 the IAEA found 8,528 centrifuges installed at Natanz, of which 3,936 were operating (after having dipped to 3,772 in January 2010). In contrast, when inspectors visited the facility in November 2009, they found 8,692 centrifuges, of which 3,936 were spinning.¹⁴

Although seemingly encouraging, these numbers are disturbing for two reasons. First, the enrichment rate increased as the number of operational centrifuges has declined or held steady. While this could be the result of Iranian efforts to cheat and remove some centrifuges before the scheduled arrival of inspectors, the more likely explanation is that Iranian engineers have increased the efficiency of their cascades. Such developments would have a drastic impact on the timing of a potential nuclear breakout.

Second, the IAEA's report raises the question whether the Iranian authorities are simply moving some centrifuges to other nuclear installations, such as the previously secret Qom site, the above-ground Natanz Pilot Fuel Enrichment Plant (PFEP), or an as-yet unknown facility.

Reactor Fuel

On February 8, 2010, the Islamic Republic informed the IAEA that it would begin producing 19.8% enriched uranium to power the Tehran Research Reactor, which the government uses to produce medical isotopes. The above-ground Natanz Pilot Fuel Enrichment Plant would conduct the actual enrichment, a first since all known enrichment to date has occurred at the subterranean Fuel Enrichment Plant (FEP), also located at Natanz.

Despite the IAEA's insistence that Iran not undertake enrichment at the Natanz Pilot Fuel Enrichment Plant until the installation of additional safeguards, inspectors who examined the facility on February 9, 2010, found the centrifuges already spinning. This likely violated Article 45 of its IAEA Safeguards Agreement and prompted the IAEA to remark that "additional measures need to be put in place to ... verify the non-diversion of the nuclear material at PFEP."¹⁵

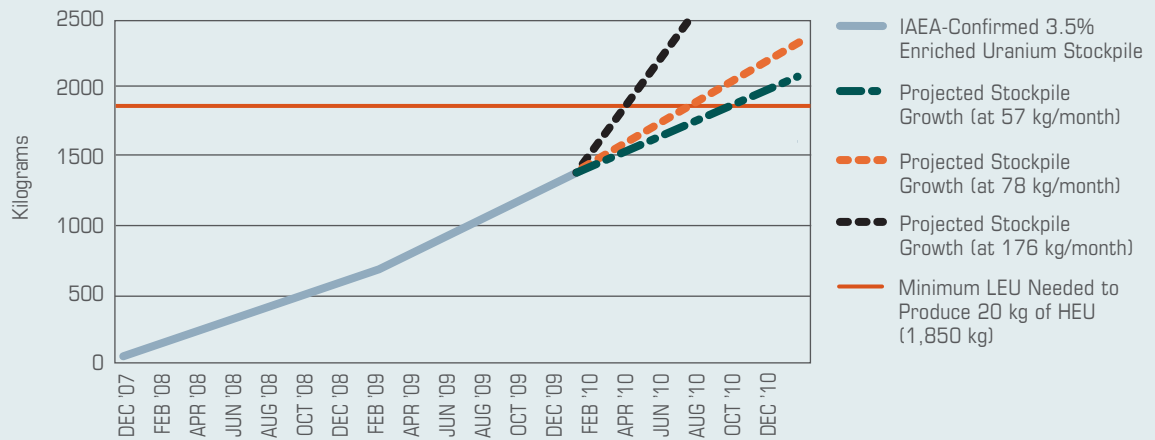
No sooner had the original centrifuges at the PFEP been installed to enrich uranium than Iran notified the IAEA in a March 10, 2010, letter of its intent to install an additional cascade of 164 centrifuges at the Pilot Fuel Enrichment Plant and connect it to the first.¹⁶ Once again, the IAEA responded that this "would constitute a new and significant development in the design and operation of PFEP that required a full revision of the previous safeguards approach."¹⁷ Nevertheless, by April 2010 Iranian technicians had already installed the additional centrifuges though they have, as of May, not yet fed any uranium into them.

With just 164 centrifuges installed, the Natanz Pilot Fuel Enrichment Plant will be able to produce about 2.5 kilograms of 19.8% enriched uranium per month, using 30 kilograms of 3.5% enriched uranium per month. However, the Tehran Research Reactor's annual fuel consumption is only about 7 kilograms of 19.8% enriched uranium.¹⁸ If Iran were interested in assuring ample supply of fuel for the reactor, it would only need run the Pilot Fuel Enrichment Plant centrifuges for three months out of the year and introduce no more than 100 kilograms of the LEU into the centrifuges.

Yet Iran initially transferred 1,320 kilograms of 3.5% enriched uranium, almost its entire stockpile, to the above-ground Pilot Fuel Enrichment Plant facility. It would take almost four years to enrich that quantity of LEU to 19.8% using only the 164 centrifuges. However, several weeks later, Iran moved the majority of its LEU stockpile back underground.¹⁹

On April 14, 2010, Ali Akbar Salehi, Iran's nuclear chief, announced that the Islamic Republic had successfully produced the first batch—5.7 kilograms—of 19.8% enriched uranium at the Pilot Fuel Enrichment Plant.²⁰ Given that enrichment had begun in early February, two months earlier, this amount corresponds to our estimate of a production rate of 2.5 kilograms per month.

GROWTH OF IRANIAN 3.5% ENRICHED URANIUM STOCKPILE (PROJECTED)



Qom Facility

Speaking to the G20 summit in Pittsburgh on September 25, 2009, Presidents Barack Obama and Nicolas Sarkozy and Prime Minister Gordon Brown revealed publicly the existence of a long-secret Iranian nuclear facility near Qom. The announcement sparked allegations that the plant could be part of a weapons program and was constructed in contravention of the NPT.²¹

IAEA inspectors have been conducting monthly inspections of the Qom site. They suggest the facility is designed to hold 2,624 centrifuges and is in an “advanced stage of construction”²² with some of the equipment apparently having been transferred from the Natanz plant. Transplanting centrifuges may expedite operationalization of the Qom facility, though none have been installed as of May 2010.²³

Military Implications

While Mohammad El Baradei, director of the IAEA between 1997 and 2009, sought to balance mandated reporting with concerns about diplomatic ramifications of negative findings, his successor Yukiya Amano has hewn to a more apolitical approach and has returned the IAEA to its technical mission. The IAEA now acknowledges extensive information relating to a

possible military dimension to the Islamic Republic’s nuclear program in the period after 2004.²⁴

This information, which the IAEA says Tehran has not adequately addressed, pertains to development of high-precision detonators, high explosives and re-entry bodies, in addition to various procurement activities—activities which have military implications but no civilian energy purpose. The IAEA has also repeatedly voiced “concerns about the possible existence in Iran of past or current undisclosed activities related to the development of a nuclear payload for a missile,” and noted that these activities “seem to have continued beyond 2004.”²⁵ This statement in particular challenges the controversial 2007 U.S. National Intelligence Estimate, which claimed “with high confidence that in fall 2003, Tehran halted its nuclear weapons program.”²⁶

Breakout Timing

Many experts agree that a crude, small-yield nuclear device requires about 20 kilograms of HEU.²⁷ This fissile material would be assembled into a nuclear device and mounted on a delivery system. However, once Iran successfully acquires fissile material, policymakers must assume Tehran has a nuclear weapons capability, even if it does not test the device.

Iran could obtain 20 kilograms of HEU in three ways. First, it could enrich its own LEU stockpiles in Natanz. By July 2010, Iran is likely to have enough 3.5% enriched uranium to produce the necessary amount of HEU. Second, it could produce the HEU needed for a nuclear device at a covert facility. Third, it could acquire the necessary material from abroad, from countries like North Korea, Pakistan, or even rogue elements in Russia.

However, given Iran’s recent decision to begin producing 19.8% enriched uranium, it could decide to first create a stockpile of this before enriching further. This would effectively allow Iran to conduct one of the two steps in the batch recycling process used for further enrichment while remaining within safeguards and would reduce the time needed to produce HEU.

The amount of time Iran will require to break out depends on three variables: enrichment level of the feedstock; and the number and efficiency of centrifuges. There are several scenarios in which Tehran could acquire 20 kilograms of HEU in less than 60 days, a short enough period of time to enable Tehran to reach breakout capability between IAEA inspections:

- 1) If Iran used 3.5% enriched uranium feedstock and its centrifuges’ efficiency remained at the previous level of 0.5 Separative Work Units (SWU) per machine year, it could breakout in between 73 and 181 days, depending on the number of centrifuges used.
- 2) If Iran used the same feedstock base, but had improved its centrifuges to perform at 0.87 SWU per machine year, as recent data suggests, it could breakout in between 43 and 105 days, depending on the number of centrifuges used.
- 3) If Iran were to use 19.8% enriched uranium for feedstock and only use the currently functioning centrifuges at Natanz, it could produce 20 kilograms of HEU in as few as 8 days.

Proposed Nuclear Deal

One possible way of stalling a potential Iranian breakout would be to secure Iran’s stockpile of LEU. This was the intent behind an October 2009 proposal by the P5+1 countries to remove 1,200 kilograms of LEU from Iran, first to Russia for enrichment to 19.75% and then to France for processing into fuel rods before returning it a

TIME NEEDED FOR IRANIAN BREAKOUT (Production time for 20kg HEU at Natanz Fuel Enrichment Plant)				
Centrifuges Used	Stockpile Enrichment Level	Centrifuge Efficiency (in SWU/machine years)	Required Stockpile	Time to Produce
3,772	3.5%	0.5	1,960 kg	181 days
	3.5%	0.87	1,860 kg	105 days
	19.75%	0.87	157 kg	19 days
8,528	3.5%	0.5	1,920 kg	84 days
	3.5%	0.87	1,920 kg	50 days
	19.75%	0.87	162 kg	10 days
10,004	3.5%	0.5	1,930 kg	73 days
	3.5%	0.87	1,930 kg	43 days
	19.75%	0.87	163 kg	8 days

TIME TO REPLENISH LEU STOCKPILE

(assuming 0.87 SWU/machine year)

Number of Centrifuges Used	Amount 3.5% Enriched Uranium Produced/Month	Time to Produce 1,200kg UF6	Time to Produce 1,200kg Uranium
3,772	78 kg/month	10 months	15 months
8,528	176 kg/month	5 months	7 months
10,004	207 kg/month	4 months	6 months

year later. As the Tehran Research Reactor uses about 7 kilograms of 19.75% enriched uranium per year, the deal would provide Iran with enough enriched uranium to fuel the reactor for 25 years.²⁸

THE IAEA NOW ACKNOWLEDGES EXTENSIVE INFORMATION RELATING TO A POSSIBLE MILITARY DIMENSION TO THE ISLAMIC REPUBLIC'S NUCLEAR PROGRAM IN THE PERIOD AFTER 2004.

Given Iran's enrichment capabilities, however, this deal would not have bought Western negotiators much time. Simply using the centrifuges currently functioning at Natanz, Iran could replace 1,200 kilograms of LEU in about four to ten months, if not less.

Moreover, Iran could use the 19.8% enriched uranium contained in the returned fuel rods to more quickly break out. As part of uranium ore processing, Iranian scientists have already mastered the technology needed to remove uranium from the fuel rods—a task that would take no more than a month. Further enriching the uranium to 90+% could then be done at the Natanz facility in as little as eight days, with the roughly 180 kilograms of 19.75% enriched uranium yielding about 23 kilograms of HEU. The whole process of producing

fissile material from the internationally-supplied reactor fuel would last less than two months.

The proposed deal would thus not significantly slow Iran's progress towards a nuclear breakout. On the contrary, it might very well facilitate it. Acceding to Iran's counter-offer—a simultaneous exchange of LEU for reactor fuel—would almost certainly hasten Iran nuclear weapons capability.

LEGAL

The NPT requires that “each non-nuclear-weapon State Party to the Treaty undertakes to accept safeguards.”²⁹ In 1974 Iran accepted this requirement by signing a Safeguards Agreement with the IAEA.³⁰

Iranian compliance with the provisions and implementation of this Safeguards Agreement has been a source of public IAEA concern since September 2003. At that time, an IAEA Board of Governors resolution called for Iranian cooperation and transparency, citing “failures by the Islamic Republic of Iran to report material, facilities and activities as it was obliged to do pursuant to its safeguards agreement.”³¹

On November 10, 2003 the Director General of the IAEA reported that Iran was not living up to its obligations under the Agreement, stating, “it is clear that Iran has failed in a number of instances over an extended period of time to meet its obligations under its Safeguards Agreement.”³²

THE PROPOSED DEAL WOULD NOT SIGNIFICANTLY SLOW IRAN'S PROGRESS TOWARDS A NUCLEAR BREAK OUT. ON THE CONTRARY, IT MIGHT VERY WELL FACILITATE IT.

On November 26, 2003, the IAEA's Board of Governors passed a resolution stating that it "strongly deplores Iran's past failures and breaches of its obligation to comply with the provisions of its Safeguards Agreement."³³ The Board of Governors repeated its concerns and call for transparency in numerous resolutions.³⁴ Then, on September 24, 2005, after last ditch European efforts to win diplomatic compromise with Iran failed, the Board found that "Iran's many failures and breaches of its obligations to comply with its NPT Safeguards Agreement ... constitute non-compliance in the context of Article XII.C of the Agency's Statute," and referred the matter to the United Nations Security Council (UNSC).³⁵

Qom Facility

In a letter dated September 21, 2009, Iran notified the IAEA that it was building a uranium enrichment plant near Qom. The existence of that facility was made public by President Obama, Prime Minister Brown and President Sarkozy a few days later. Despite Ahmadinejad's protestations that the plant is "perfectly legal," Mohammad El Baradei, then head of the IAEA, found Iran to be "on the wrong side of the law" because Tehran had failed to provide adequate notification as the facility was being built.³⁶

The Safeguards Agreement that Iran signed with the IAEA in 1974, specifically Article 42, stipulates that the matter of "time limits for the provision of design information in respect of the new facilities" would be set forth in additional Subsidiary Arrangements.³⁷ Iran agreed to such a Subsidiary Arrangement in 1976. Code 3.1 of that Arrangement obligated Iran to report new

facilities "not later than 180 days before the facility is scheduled to receive nuclear material for the first time."³⁸

In the 1990s, however, the IAEA—concerned that the 180-day standard did not give it enough time to implement effective safeguards—modified Code 3.1 to require states to report new facilities as soon as the decision to construct them was made. Iran agreed to these changes in 2003. In a March 2007 letter, however, Iran informed the IAEA that it was withdrawing from the modified Code 3.1 and reverting to the previous reporting standard. The IAEA, though, did not recognize Iran's right to withdraw from the modified Subsidiary Arrangement. Instead it claimed that "in accordance with Article 39 of Iran's Safeguards Agreement, agreed Subsidiary Arrangements cannot be modified unilaterally; nor is there a mechanism in the Safeguards Agreement for the suspension of provisions agreed to in Subsidiary Arrangements."³⁹ Obscured by this debate is the question of when the Iranian government decided to construct the Qom facility.

While Iran has maintained that the Qom plant was decided upon in the second half of 2007, the latest report of the IAEA indicates that the Agency has "received extensive information from a number of sources detailing the design of the facility, which was consistent with the design as verified by the Agency ... and that these sources alleged that design work on the facility started in 2006."⁴⁰ If Iran decided on the Qom plant prior to its March 2007 declaration of withdrawal from the modified Subsidiary Arrangement, as information submitted to the IAEA by Western intelligence agencies seems to suggest, then the reporting standard of the modified Code 3.1 still applies, rendering moot the debate about the legal status of the Islamic Republic's withdrawal, at least with respect to the Qom enrichment facility.

However, given Tehran's April 2010 announcement that it has chosen the locations for ten new uranium enrichment facilities, the debate about the status of the modified Code 3.1 reporting requirements continues to have important ramifications.⁴¹ Indeed, the IAEA has

notified the Islamic Republic that pursuant to the stricter obligations it agreed to under the 2003 Safeguards Agreement, “if a decision to construct new nuclear facilities had been taken by Iran, Iran was required to submit information to the Agency regarding the design, and scheduling of the construction, of the facilities.”⁴²

TEHRAN’S FAILURE TO GIVE THE IAEA PROPER ADVANCE NOTIFICATION OF ITS EFFORTS TO ENRICH URANIUM UP TO 19.8% AT ITS NATANZ PILOT FUEL ENRICHMENT PLANT IS ALSO A VIOLATION OF ITS SAFEGUARDS AGREEMENT.

Additional Enrichment

Tehran’s failure to give the IAEA proper advance notification of its efforts to enrich uranium up to 19.8% at its Natanz Pilot Fuel Enrichment Plant is also a violation of its Safeguards Agreement.

Iran informed the IAEA of its intent to begin this further enrichment in a letter dated February 7, 2010. The following day the IAEA received another letter stating that Iran planned to begin enrichment at the Pilot Fuel Enrichment Plant on February 9, 2010. The Agency replied the same day, invoking Article 45 of the Safeguards Agreement in order to request that Iran delay introducing uranium into the Pilot Fuel Enrichment Plant centrifuges until the necessary safeguards were installed. According to that Safeguards Agreement:

The Agency shall be provided with design information in respect of a modification relevant for safeguards purposes, for examination, and shall be informed of any change in the information provided to it under Article 44, sufficiently in advance for the safeguards procedures to be adjusted when necessary.⁴³

Yet, upon the inspectors’ arrival at the Pilot Fuel Enrichment Plant on February 10, 2010, they found enrichment had already begun. The IAEA has clearly stated that this step transcends Iran’s legal obligations, as it “was not notified to the Agency by Iran with sufficient time for the Agency to adjust its safeguards procedures, as required under Article 45 of Iran’s Safeguards Agreement.”⁴⁴

DIPLOMATIC

The Obama Administration’s diplomatic efforts in the first half of 2010 have mostly revolved around achieving support for new multilateral sanctions. After pursuing only diplomatic outreach in 2009, the Administration pivoted in early 2010 to a dual-track approach of diplomacy and sanctions, focusing on what turned out to be plodding negotiations for UNSC-backed sanctions.⁴⁵

Tehran Takes Advantage of Diplomacy-Only

On July 10, 2009, leaders at the G8 summit in Italy gave Iran until the September 24, 2009, meeting of the G20 nations to begin negotiations over its nuclear disputes.⁴⁶ Despite Tehran’s failure to heed this deadline, and the revelation that Iran had constructed a secret nuclear facility at Qom, the international community took none of the further steps with which it had threatened Iran.

Instead, on October 1, 2009, representatives of the five permanent members of the UNSC—the United States, United Kingdom, France, Russia and China—and Germany, collectively known as the P5+1, sat down with Iranian representatives in Geneva and hammered out an initial three-point agreement: Iran would transfer 1,200 kilograms of its LEU abroad where it would be turned into reactor fuel; U.N. inspectors would be allowed to visit the Qom facility; and the two sides would reconvene at a later date.⁴⁷ The P5+1 backed a December 31, 2009, deadline for Iran to accept the IAEA proposal, or face sanctions.

Shortly after the Geneva agreement, Tehran announced that it was pushing back the date for U.N. inspections of Qom by two weeks, raising fears it would use the delay to

hide evidence of its nuclear activities.⁴⁸ In the meantime, opposition leader and former presidential candidate Mir-Hossein Mousavi criticized the nuclear deal, which, until then, Ahmadinejad appeared to support. Tehran then waited until after the deadline expired to present a counterproposal: instead of shipping LEU abroad in a single batch, Iran offered to send it in stages and replenish its stock by buying LEU abroad.⁴⁹

**NOT ONLY DID IRAN BUY TIME
TO ADVANCE ITS NUCLEAR
PROGRAM, BUT IT ALSO
UNDERMINED U.S. CREDIBILITY.**

This counterproposal would have allowed Iran to keep its LEU stockpile, distrust of which was the original motivation for negotiations. To bypass the deadlock, the Obama Administration offered a back-channel compromise offer for Iran to send its LEU to Turkey or other friendly countries for temporary safekeeping.⁵⁰ Iran's Foreign Ministry first ignored the U.S.'s extended hand, and then slapped it away by declaring Iran would only exchange LEU for nuclear fuel on its own territory.⁵¹ When the IAEA censured Iran, Tehran called the resolution "illegal" and announced its intention to expand its nuclear program dramatically by building ten new enrichment plants.⁵² Ahmadinejad and Foreign Minister Manouchehr Mottaki then announced that Iran itself would begin enriching LEU to 19.8%.⁵³ Iran reiterated this ultimatum on December 31—one day before the deadline agreed at Geneva—giving the U.S. and its allies one month to accept Iran's counterproposals or else Iran would produce its own HEU.⁵⁴

On January 19, nearly three weeks after the stated deadline for diplomacy had passed, Iran submitted a memorandum to the IAEA rejecting the principles agreed in Geneva in October.⁵⁵ Early the next month, Tehran enacted its threat by moving 94% of its LEU stockpile to, and spinning up the centrifuges of, the

above-ground Pilot Fuel Enrichment Plant at Natanz.⁵⁶ On March 17 Iran's atomic chief and vice president Ali Akbar Salehi tabled yet another counterproposal: Iran would hand over 1,200 kilograms of LEU only once it had already received 19.8% enriched uranium and only if the transfer took place on its own soil.⁵⁷

Finally, with the prospect of UNSC sanctions looming, in May 2010 Ahmadinejad announced that he had accepted a deal brokered by Turkish Prime Minister Recep Tayyip Erdoğan and Brazilian President Lula da Silva. The deal is almost identical to one originally offered by the P5+1 in October 2009, save that Iranian LEU would be held by Turkey. However, since the deal was originally proposed, the 1,200 kilograms of LEU has come to represent a much smaller percentage of Iran's stockpile—only about half versus three-quarters in October—and Iran has increased its production rate of LEU. Combined, these developments mean that the deal, if adopted now, would delay Iran's nuclear program much less than it would have in October 2009. Yet, several days later Iran stated it would scuttle the deal if the UNSC approved a draft resolution on a new round of sanctions.⁵⁸

These stalling tactics—of which we warned in previous reports—proved a boon for Tehran. Not only did Iran buy time to advance its nuclear program, but it also undermined U.S. credibility. Although the Obama Administration warned Tehran that it was willing to move toward sanctions if Iran did not agree to a deal, the State Department nevertheless extended its deadline.⁵⁹ As Tehran became increasingly obstinate in its actions, both the House and Senate took up their own sanctions legislation targeting Iran's energy sector. Despite Tehran's defiance, in early January, Secretary of State Hillary Clinton said on April 17, 2010, that sanctions are meant to induce Iran to begin "good faith" negotiations.⁶⁰

By giving the Administration just enough reason to cling to hopes of a diplomatic breakthrough while two deadlines passed without action, the Iranian

regime has proven itself more skillful than its diplomatic counterparts.

U.S. Pivots Toward Dual-Track Approach

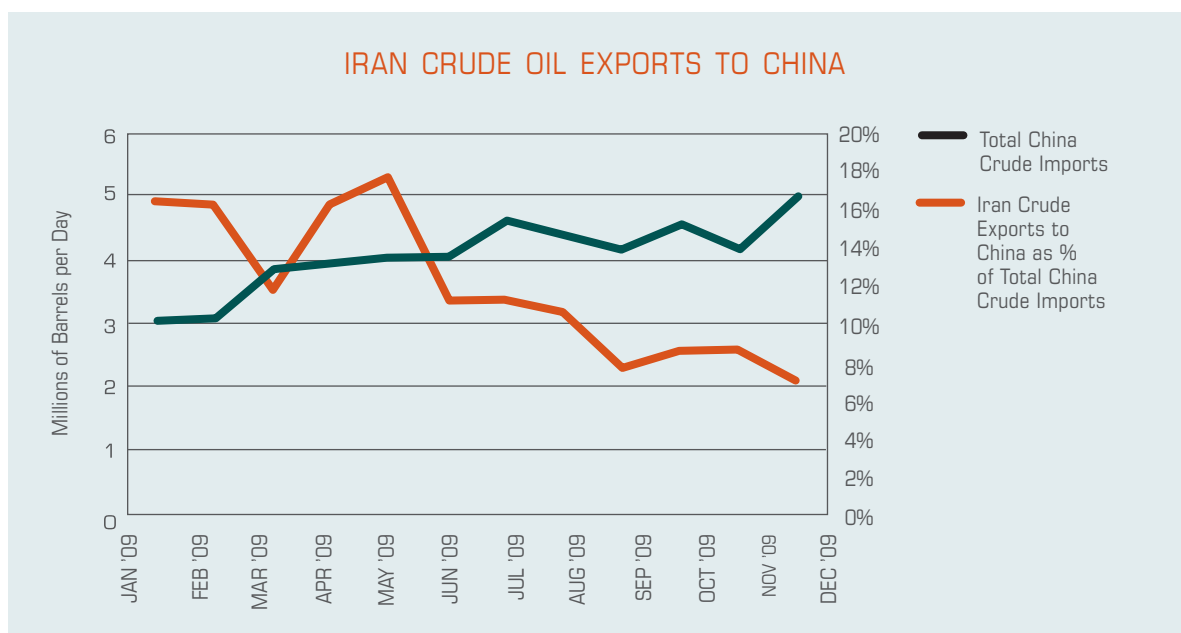
When Tehran appeared to reject the Geneva deal in early 2010, the Obama Administration began discussion of a dual-track approach. Previously, the Administration had conferred with its allies and discussed possible sanctions, but had asked Congress to delay legislation to give diplomacy time. In late January, Secretary Clinton announced Washington would “move forward on the pressure and sanctions track.”⁶¹

By early March, though Washington was working with London, Paris and Berlin to develop sanctions, it remained, together with Moscow and Beijing, open to further negotiations with Iran. In response to Tehran’s March 17, 2010, obstinate offer to only exchange its LEU inside Iran, Obama offered “comprehensive diplomatic contacts and dialogue.”⁶² Supreme Leader Khamenei replied by accusing the United States of being “deceptive” and “arrogant,” but Obama—with

the backing of the G8—said on March 30 “the door remains open [to dialogue] if the Iranians choose to walk through it.” The State Department reiterated the U.S.’s offer to negotiate as recently as April 19.⁶³ However, in responding to the deal struck by Turkey and Brazil, the White House noted its “serious concerns,” citing “Iran’s repeated failure to live up to its own commitments.”⁶⁴

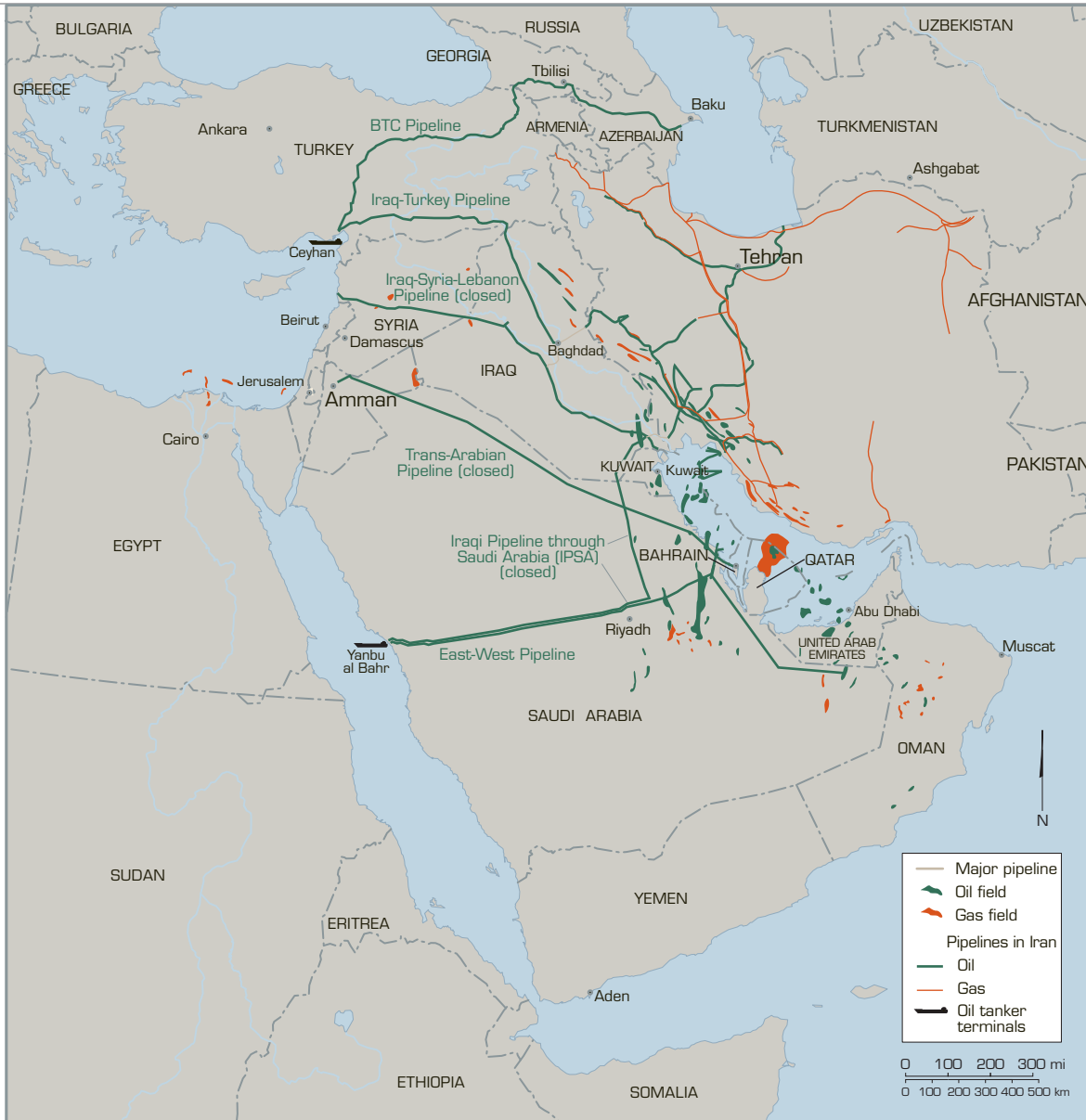
Ironically, even as it has said it would pursue a sanctions-based approach, the Obama White House has tried to water down legislation coming out of Congress, arguing that it would undermine efforts of other nations. While Administration officials have said they prefer “biting” sanctions through the UNSC that would target Iran’s oil sector, military and IRGC, the prospects for, and efficacy of, such robust multilateral sanctions remain uncertain. Saudi Arabia has uncharacteristically voiced its concern that sanctions will be insufficient to thwart Iran.⁶⁵

The United States, Britain, France and Germany prepared a resolution for a new round of sanctions that was passed by the UNSC 12-2 with one abstention



(Sources: OPEC; Energy Information Administration)

MAP 3: MIDDLE EAST: OIL AND GAS INSTALLATIONS



on June 9.⁶⁶ It was only after Iran announced it would enrich its own uranium and the IAEA issued a report suggesting Iran was pursuing a nuclear-capable warhead, that Russia, formerly reluctant, indicated a newfound willingness to consider some punitive measures against the Iranian regime, even as the Kremlin said it would still oppose “crippling” sanctions.⁶⁷ Nevertheless, on March 18 Prime Minister Vladimir Putin announced Russia would complete Iran’s light-water reactor at Bushehr.⁶⁸

Meanwhile Brazil and Turkey voted against the resolution while Lebanon abstained.⁶⁹ In an effort to win support for the sanctions, Germany and Britain persuaded the United States to remove provisions from the original UNSC draft resolution for cutting Tehran’s access to international banking services, capital markets and shipping lanes.⁷⁰ The latest draft resolution contains a loophole that allows Russia to export the S-300 anti-aircraft missile system to Iran. Moreover, the resolution only won approval from Moscow after the Obama

Administration also agreed to lift sanctions against four Russian firms that had been illegally providing Iran and Syria with arms.⁷¹ Similarly, the sanctions managed to gain Chinese approval by placing few, if any restrictions, on Beijing's burgeoning investments in Iran's energy sector.⁷² The prospects that these sanctions will be biting are dim.

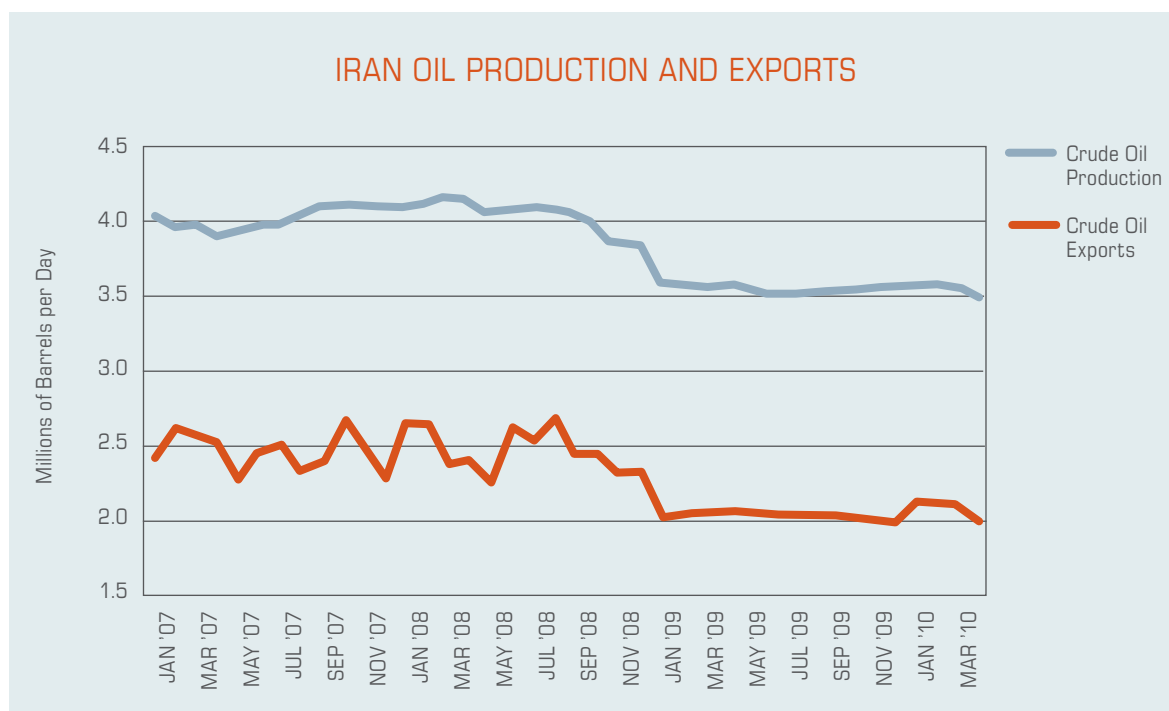
Bringing China Onboard

China has long been recalcitrant on the issue of sanctions, despite extensive lobbying by U.S. and British officials.⁷³ Therefore, as suggested in our 2008 report, Washington sought to leverage the spare crude oil production capacity of Saudi Arabia and other Persian Gulf states. Secretaries Clinton and Gates urged the Persian Gulf states to reassure Beijing they would offset oil supplies should Iran cut its exports as a result of sanctions.⁷⁴

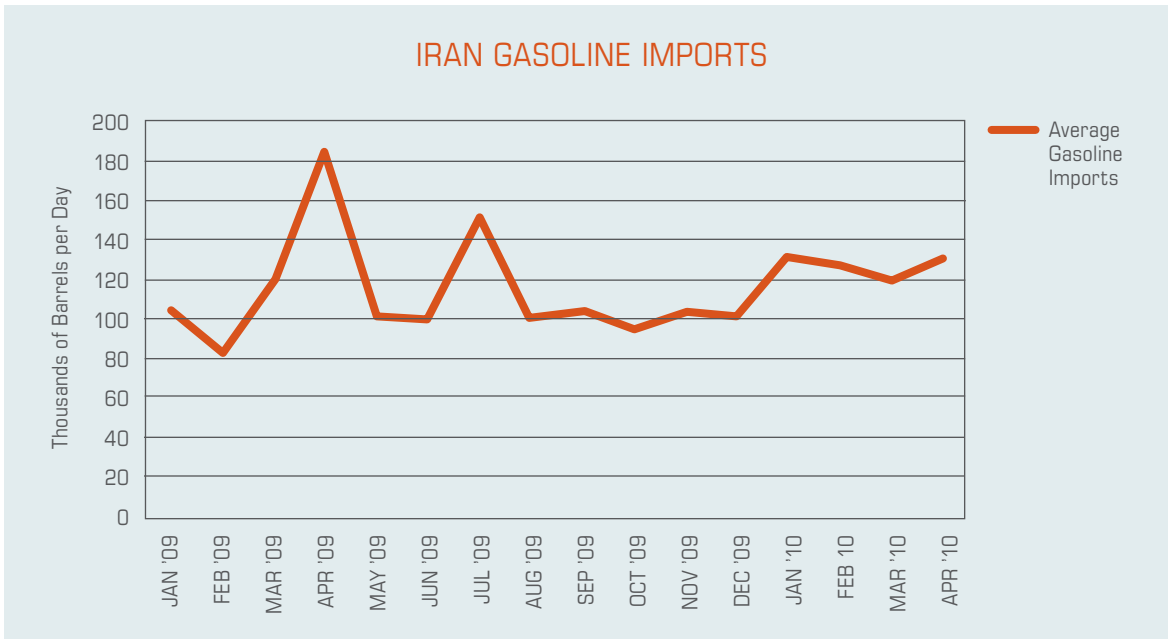
Although Saudi Foreign Minister Prince Saud al-Faisal played down linking oil exports to Chinese behavior in the UNSC, Riyadh could figure heavily in Beijing's decision-making. The U.S. has already been encouraging

Riyadh to increase oil exports to Beijing, to the point that Saudi Arabia now exports significantly more crude oil to China than Iran does.⁷⁵ Over the course of 2009 Iran fell steadily behind both Saudi Arabia and Angola as a supplier of crude oil to China, even as Chinese consumption grew. Comparing the second half of 2009 to the first half, Iranian oil exports to China declined by 29%, while Angolan exports grew by 86% and Saudi exports grew by 27%. For much of the first half of 2010, Saudi Arabia and Angola each supplied China with more than 800,000 barrels per day of crude oil. Iran is a distant third at less than 400,000 barrels per day.⁷⁶

Saudi crude exports to China increased by 15.1% in 2009—compared to Iran's 8.6%—with much of this increase coming in the second half of the year.⁷⁷ Additionally, Saudi energy companies have signed on to build a large slice of China's 3 million barrels' worth of added refining capacity by 2015, and have penned agreements to store oil stockpiles closer to China. Simultaneously, Saudi Aramco and Total are planning to increase refining capacity in Saudi Arabia for export



(Source: OPEC)



(Source: OPEC)

to Asia.⁷⁸ Moreover, while Chinese companies account for a large share of foreign investment in Iran’s energy sector, Sino-Iranian trade volume (\$25 billion in 2009) lags behind Sino-Saudi volume (\$40 billion in 2008, projected to rise to \$60 billion by 2015).⁷⁹

Although China’s already decreased dependence on Iranian crude imports might make Beijing less wary of sanctions against the Islamic Republic, it also, ironically, gives the U.S. less leverage with which to approach the Chinese. Nevertheless, with its spare crude oil production capacity of an estimated 4 million barrels per day, Saudi Arabia could make up for Iran’s *total* crude oil exports (2.04 million barrels per day in 2009), let alone Tehran’s crude exports to China (less than 400,000 barrels per day since the second half of 2009).⁸⁰ However, if military conflict closes the Strait of Hormuz, very little of the 17 million barrels per day that pass through the Strait could be exported through alternative routes.⁸¹

ECONOMIC

Economic pressure on Iran has increased since our September 2009 report. Heavily subsidized commodities strain both the national budget and economic growth. Potential sanctions against Iran’s energy sector and the IRGC have led some Western companies to reduce their business dealings with Tehran, particularly in the energy sector. China has also reduced its purchases of Iranian crude oil. Still, other companies have sought to fill the vacuum.

Economic Troubles

According to Tehran’s official figures, the Iranian economy grew 2.5% in 2009. The World Bank estimated only 1% growth for 2009, and projects 2.2% growth for 2010.⁸² Even with generous subsidies in place, Iran’s industrial sector works only at half capacity. Official unemployment and inflation rates for February 2010 were 12% and 13.5%, respectively, although many Iranian and foreign observers estimate actual rates to be nearly double those reported.⁸³

Oil remains Iran’s main source of revenue, accounting for 80% of Tehran’s export revenues and 40-45% of

NEW DEVELOPMENTS

fiscal revenues.⁸⁴ Decreases in both production and prices have hurt this crucial segment of Iran's economy. Between 2008 and 2009, Iranian crude oil production fell 14% to 3.56 million barrels per day while crude exports dropped by 22% to 2.04 million barrels per day. At the same time, crude oil prices dropped from their peak at \$147 per barrel in 2008, although they have increased off their nadir of low \$30s per barrel in early 2009.⁸⁵ In nominal terms, Iran earned approximately \$54.6 billion net revenue from oil exports in 2009, down one-third from \$82 billion in 2008. On a per capita basis, that represents a 34% decline from \$1,245 in 2008 to \$821 in 2009. Accordingly, government revenues fell 9% compared to 2008.⁸⁶ This trend could hold for 2010 as well. In April reports surfaced of significant increases in Iran's unsold crude oil in floating storage, as major export markets like China, India and Japan began looking elsewhere for crude oil deliveries.⁸⁷

Rapidly depleting government coffers pose a major challenge to subsidies, the regime's major strategy to co-opt political dissent. Tehran devotes 30% of the gross national product—around \$90-100 billion annually—to subsidize basic commodities. Chief among these is gasoline: at the end of 2009, a gallon of gasoline in Iran cost around \$0.38.⁸⁸ Despite being the world's fifth-largest oil exporter, and without market constraints on demand, Iran's refinery capacity—averaging only 285,000 barrels per day in 2009—could only meet around two-thirds of domestic gasoline demand for 2009. According to OPEC, Iran averaged 109,000 barrels per day in gasoline imports over the second half of 2009, costing the government more than \$10 billion in 2009.⁸⁹

These grim economic figures, and perhaps the prospect of international economic sanctions, compelled

ENERGY COMPANIES HALTING BUSINESS WITH IRAN

Name	Date of Sales Halt	Information
British Petroleum (United Kingdom)	Q4 2008/Q1 2009	No longer shipping gasoline. Maintains other interests in Iran energy sector including oil exports.
Reliance Industries, Ltd. (India)	Q1 2009	Suspended gasoline sales early 2009. Destination-restriction clause in contracts December 2009. Also suspended purchases of crude oil from Iran.
Statoil ASA (Norway)	November 09	Announced halt in work on Iran's Anaran oilfield. Will not reinvest in Iran.
Glencore Int'l AG (Switzerland)	November 09	World's second largest oil trader. Imported one-seventh of Iran's gasoline before sales halt.
Independent Petroleum Group (Kuwait)	January 10	Imported up to one-quarter of Iran's gasoline late 2009. Resold Reliance gasoline to Iran late 2009 before sales halt.
ENI SpA (Italy)	February 10	Withdrew bid to develop Iran's Darkhovin oilfield. Will leave Iran after current natural gas contracts expire.
Royal Dutch Shell PLC (Netherlands)	March 10	Halted gasoline sales to Iran, but then resumed sales in May 2010. Will continue pre-existing natural gas projects in Iran. Exports oil from Iran.
Petronas Trading Corporation (Malaysia)	March 10	Imported one-tenth of Iran's gasoline imports since Q4 2009. Possibly resold Reliance gasoline cargoes to Iran in 2009.
Vitol Group (Switzerland)	Q1 2010	World's largest oil trader. Imported up to one-third of Iran's gasoline before sales halt.
Trafigura (Switzerland)	Q1 2010	Imported up to one-third of Iran's gasoline before sales halt.
Lukoil (Russia)	April 10	Imported up to one-seventh of Iran's gasoline before sales halt. Suspending work on Anaran and other oilfields.

the Guardian Council and parliament to debate an Economic Reform Plan in January 2010. Designed to reduce domestic gasoline demand and slash government expenditures—perhaps \$20 billion in 2010-11 alone—the plan envisions lifting subsidies by March 2015 through piecemeal gasoline price increases beginning April 2010.⁹⁰

By lifting subsidies, the regime risks stoking popular opposition as domestic energy prices potentially quadruple and inflation increases. To mitigate political fallout, the government announced it would offset rising prices with direct grants to low-income Iranians. In March 2010, the Majlis submitted—and the Guardian Council approved—a budget that included only half of the proposed subsidy cuts. Tehran simultaneously announced it would begin rationing subsidized gasoline through at least June 2010.⁹¹

Impact of Possible Sanctions

Existing sanctions against Iran have already rendered imported goods expensive, and additional measures would likely raise their prices even higher. However, without a multilateral framework, sanctions are unlikely to stop trade with Iran altogether, and will instead merely reroute it through third parties such as the United Arab Emirates.⁹² This trend is particularly evident in the energy sector, where the threat of new U.S. and/or UNSC sanctions against Iran has led some gasoline shippers and underwriters to halt their dealings with the Islamic Republic, without significantly affecting Iran’s access to refined petroleum products.

Indeed, since the fall of 2009 almost all major Western energy companies—including British Petroleum, Glencore International, Vitol Group, Trafigura, Royal Dutch Shell and even India’s Reliance Industries—

ENERGY COMPANIES STILL CONDUCTING BUSINESS WITH IRAN

Name	Information
CNPC/Petrochina (China)	Selling gasoline to Iran on Asian spot markets since September 2009. Developing 260,000 bpd Azadegan oilfields, and large natural gas projects.
Daelim (Rep. of Korea)	\$2 billion in contracts for Iranian natural gas projects.
Emirates National Oil Co. (U.A.E.)	Supplied unknown amounts of gasoline to Iran in April 2010.
Gazprom (Russia)	Signed memoranda of understanding in 2009 to develop oil and natural gas projects in Iran.
Petroleos de Venezuela SA (Venezuela)	Agreed September 2009 to provide one-sixth of Iran's gasoline import needs. Possibly began shipping early 2010.
Sinopec (China)	Likely began supplying gasoline April 2010. Controlling interest in 300,000 bpd Yadavaran oilfield. Also developing Iran's refinery capacity.
SKS Ventures (Malaysia)	Signed memorandum of understanding to invest \$20 billion to develop Iranian oil and natural gas fields.
Tecnimont (Italy)	Signed \$2 billion contract in July 2009 to help develop South Pars natural gas field.
Total (France)	Imported up to one-third of Iran's gasoline January 2010. Said will halt supplies only when U.S. sanctions enacted. No new projects in Iran. Previously in violation of Iran Sanctions Act (waived).
ZhenHua Oil (China)	Selling gasoline to Iran on Asian spot markets since September 2009. Reportedly importing one-third of Iran's gasoline early 2010.
Zhuhai Zhenrong Corp. (China)	Agreed to purchase 240,000 bpd Iranian crude oil in 2010.

NEW DEVELOPMENTS

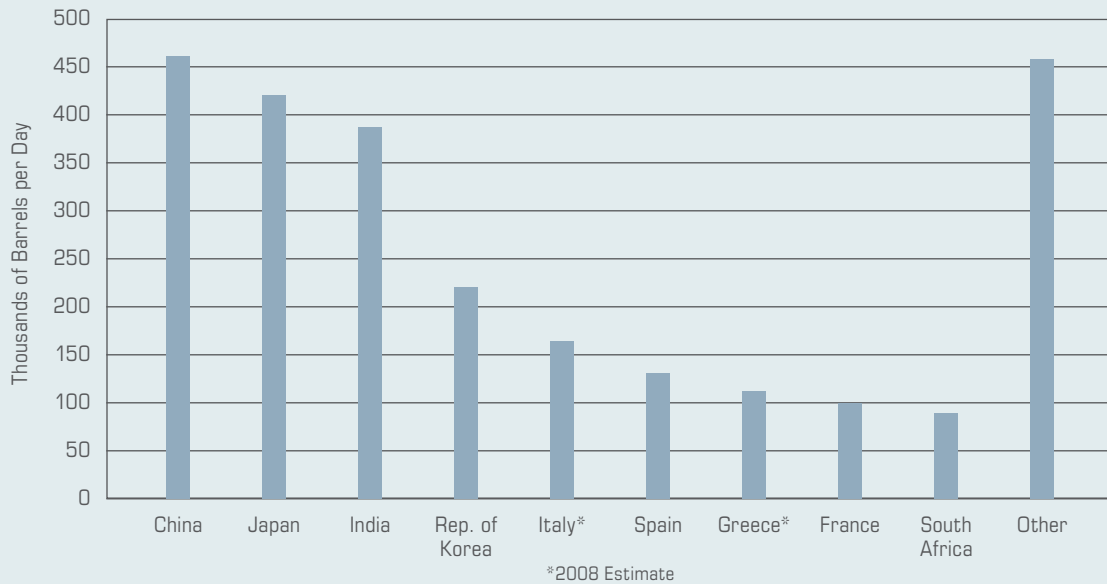
have suspended gasoline sales to Iran. Together these companies supplied about two-thirds of Iran's gasoline imports in 2009, but for many of them Iran represents a small fraction of their portfolio, especially compared to U.S. and European partners, both public and private.⁹³ France-based Total is the lone Western energy major to maintain significant ongoing gasoline shipments to Iran—33,000 barrels per day in January 2010—and is the only Western company to speak out openly against sanctions. However, Total has said it will comply with any eventual U.S. or other gasoline sanctions.⁹⁴

As a result, non-Western companies have moved to fill the void. One major issue is the use of destination-restricting clauses in fuel sales contracts. Without them, middlemen might simply buy from major gasoline providers and resell to Iran. But even restrictions on such maneuvers might not be sufficient. For instance, even though Reliance announced use of such a clause in all its contracts, Kuwait-based Independent Petroleum Group and Malaysia-based Petronas Trading Corporation have each sold Reliance-refined gasoline to Iran.⁹⁵ Additionally, in September 2009

OTHER COMPANIES HALTING BUSINESS WITH IRAN

Name	Date of Sales Halt	Information
Allianz SE (Germany)	February 10	Reinsurance company; not renewing contracts with insurance companies in Iran.
Caterpillar Inc. (United States)	February 10	Building equipment group; barring non-U.S. subsidiaries from deliveries to Iran (deliveries included oil-drilling, tunnel-boring equipment).
Daimler AG (Germany)	April 10	Automaker; cancelling delivery of vehicles convertible to missile-launch platforms. Stopped supplying Khodro Diesel, the Middle East's largest carmaker.
Ernst & Young (United States)	April 10	Accounting firm; officially cutting ties with Iran's accounting firm Tadvin Co.
General Electric Co. (United States)	September 09	World's largest company; said halting all business with Iran.
Hamburg Port Consulting GmbH (Germany)	January 10	Cancelled contract to renovate Iran's Bandar Abbas port (major gasoline entry point).
Hannover Re AG (Germany)	February 10	Reinsurance company; said would comply with any new sanctions.
Huntsman Corp. (United States)	January 10	Chemical manufacturer; foreign subsidiaries halting sales to Iran.
Ingersoll-Rand PLC (United States)	March 10	Industrial-parts manufacturer; prohibiting subsidiaries from selling to Iran. Equipment possibly used in oil and natural gas sectors and nuclear plants.
KPMG LLP (Netherlands)	April 10	Accounting firm; ending affiliations with Iranian accounting firm Bayat Rayan.
Lloyd's of London (United Kingdom)	February 10	Reinsurance company; cutting coverage for refined oil cargoes to Iran if sanctions passed (covered 10% of Iran's refined oil cargoes).
Munich Re AG (Germany)	October 09	Reinsurance company; halting marine cargo reinsurance for oil product cargoes and property reinsurance in Iran.
PricewaterhouseCoopers LLP (United States)	April 10	Accounting firm; ending affiliation with Iran after relationship with Agahan & Co. expired 2009.
Siemens AG (Germany)	October 09	Conglomerate; taking no new orders from Iran by mid-2010. Still honoring existing contracts (\$700 million FY09). Faced possible sanctions for joint venture with Nokia to sell eavesdropping equipment to Tehran in 2009.

IRAN TOP OIL EXPORT DESTINATIONS 2009



(Source: Energy Information Administration)

China National Petroleum Company and Zhenhua Oil—among other Chinese companies—began selling 30,000-40,000 barrels per day of gasoline to third parties that ship it to Iran. This amounts to one-third of total Iranian gasoline imports.⁹⁶ That same month Petroleos de Venezuela SA agreed to supply Iran with 20,000 barrels per day of gasoline.⁹⁷

The effect of current and potential sanctions, however, has had a broader impact. In addition to ceasing gasoline exports to Iran, Western energy companies have withdrawn from upstream projects, as well. Total, Norway-based Statoil ASA, Italian energy company ENI SpA and Russia-based OAO Lukoil Holdings have all pulled out of oil or natural gas development deals in Iran. Meanwhile, Japan announced in March 2010 that its imports of Iranian crude oil would fall to the lowest level in 17 years.⁹⁸

Companies from other sectors have also been rethinking business with Iran. Industrial giants General Electric Co. and Germany-based Siemens AG have both ceased taking orders from Iran.⁹⁹ Large insurance companies—

including Germany-based Munich Re AG, Allianz SE and Hannover Re AG, as well as Lloyd's of London—have begun to decline coverage of shipments, especially of gasoline, to Iran. At the same time, Germany-based Hamburg Port Consultancy cancelled a contract to renovate Iran's Bandar Abbas port, a major entry point for gasoline shipments.¹⁰⁰ Other companies with indirect foreign subsidiaries that have done business with Iran have also announced that they would cut off commercial relations. Among these are: U.S.-based chemical manufacturer Huntsman Corporation; U.S.-based building equipment group Caterpillar Inc.; and U.S.-based industrial-parts maker Ingersoll-Rand PLC.¹⁰¹

MILITARY

While Iran and its Lebanon-based proxy Hezbollah have flouted their missile capabilities and used saber-rattling rhetoric, the United States and Israel have quietly prepared missile defense and aerial attack capabilities against Iran. However, senior Administration officials have downplayed the viability of a U.S. or Israeli military strike.

United States

Despite President Obama's 2009 pledge to "use all elements of American power to prevent Iran from developing a nuclear weapon," U.S. officials have been sending conflicting messages about just how far they are willing to go. Admiral Michael Mullen, chairman of the Joint Chiefs of Staff, and General David Petraeus, commander of U.S. Central Command (CENTCOM), have each said that any potential U.S. military option against Iran would be unlikely to include ground forces. General Petraeus, however, acknowledged that Iran's nuclear installations "certainly can be bombed."¹⁰² Yet, at the beginning of 2010 U.S. and Israeli officials denied discussing a military strike against Iran. On April 18, 2010, Mullen stated a military strike was the "last option," and that the unintended consequences of the military option were as bad as Iran developing a nuclear weapon. Only a few days later, U.S. Undersecretary of Defense for Policy Michèle Flournoy said a military strike against Iran is "off the table in the near term."¹⁰³

Nevertheless, an October 2009 Pew Research Center survey found 61% of the U.S. public favored using military action to prevent Iran from acquiring a nuclear weapon.¹⁰⁴ That same month, the United States and Israel conducted their biennial joint air defense exercise—codenamed Juniper Cobra 10—to prepare both countries' missile defense capabilities against a simulated attack by Iran and its proxies. The exercise tested the interoperability of U.S. land-based Terminal High Altitude Area Defense (THAAD) and Patriot PAC-3—and sea-based Aegis—missile interceptor systems with Israel's land-based Arrow-2 system. Although the Pentagon removed many of its assets from Israel after the exercise, it retains U.S.-manned X-band radar batteries in Israel to augment the Arrow-2's ability to detect and intercept incoming missiles.¹⁰⁵

The Pentagon has also emplaced two Patriot missile batteries each in Bahrain, Kuwait, Qatar and the United Arab Emirates, while helping Saudi Arabia stand up 30,000 security personnel to protect the country's oil facilities, ports and water desalination plants.¹⁰⁶ Aegis-

equipped U.S. Navy cruisers capable of intercepting medium-range ballistic missiles, such as those in Iran's arsenal, began continuous patrols in the Persian Gulf. In a departure from previous practice, Israel voiced no opposition to this U.S. military assistance to Persian Gulf countries.¹⁰⁷

Simultaneously, the United States has accelerated the production of twenty of its most powerful "bunker-buster" bombs. The fifteen-ton, precision-guided GBU-57 Massive Ordnance Penetrator (MOP) is scheduled to be outfitted for B-2 stealth bombers in December 2010. When deployed, the MOP will be the strongest non-nuclear bomb in the U.S. arsenal, reportedly able to penetrate two hundred feet of reinforced concrete.¹⁰⁸ Currently, the U.S. and Israeli military's most powerful deployed bunker buster is the precision-guided GBU-28, which is carried on F-15 fighter jets and can only penetrate twenty feet of concrete or one hundred feet of earth.¹⁰⁹ (According to U.S. intelligence estimates, the underground enrichment plant at Natanz is shielded by thirty feet of earth and concrete.¹¹⁰) The Pentagon also possesses a BLU-118/B warhead that can be mounted on certain bunker-buster bombs to increase underground lethality. In mid-March 2010, the U.S. military reportedly prepositioned 387 precision-guided bunker-buster bombs at the Diego Garcia airbase in the Indian Ocean, which was used for offensive air operations during both the 1991 and 2003 Iraq wars, although these bombs and their warheads are less than a quarter as powerful as the new MOP.¹¹¹

Israel

Prime Minister Benjamin Netanyahu said in February 2010 that Israel is "not planning any wars," but he left an Israeli military strike against Iran open as a "last resort."¹¹² In practice, this has translated into concerted efforts by Israeli leaders to support strong sanctions against the Islamic Republic, while simultaneously bolstering the country's ability to execute a military strike.

Israel has focused on enhanced defensive measures to insulate itself from the effects of any potential Iranian

and/or proxy attack. First, Israel is trying to bolster its missile defense capabilities through a multi-layered system of air defenses. In addition to its existing Arrow-2 system for intercepting conventionally-armed medium-range ballistic missiles, Israel hopes to deploy by 2014 a more advanced Arrow-3 system to intercept Iran's medium-range ballistic missiles.¹¹³ Second, Israel will deploy short-range interceptors in the near future to defend against attacks from Iranian proxies Hezbollah and Hamas. "Iron Dome" may begin service in summer 2010 to protect Israel from artillery, Qassam rockets and missiles launched from Gaza and southern Lebanon, while "David's Sling" should come online this year to

protect northern and central Israel from longer-range artillery, rockets and missiles launched from southern Lebanon and possibly Syria.¹¹⁴ Finally, Israel is trying to bolster its passive defense capabilities, and so conducted its largest civil defense drill ever in June 2009. It also began distributing gas masks to all its citizens in February 2010.¹¹⁵

Israel is also adding to its deterrent and offensive military capabilities. The Israeli Navy is expanding its conventional submarine fleet from three to five *Dolphin* class units. By sailing one of these vessels through the Suez Canal in June 2009, Israel signaled its readiness and

IRAN'S MILITARY CAPABILITIES

Personnel	220,000 in regular army ("Artesh"). 130,000 in IRGC Ground Resistance Forces. 18,000 in regular navy; plus 20,000 in IRGC navy. 52,000 in air force; plus 12,000 in air defense forces. ~15,000 in IRGC Qods Force. Up to 1,000,000 <i>basij</i> paramilitary forces available for mobilization.
Ground Systems	1,600+ main battle tanks (including 480 Soviet-designed T-72, and 540 obsolete Soviet-designed T-54/55). 610 infantry fighting vehicles (Soviet-designed BMP-1/2). 640 armored personnel carriers (300 Soviet-designed BTR-50/60, 200 U.S.-designed M-113, and 140 Iranian-designed Boragh). 310 self-propelled guns (mainly U.S.-designed M-109 howitzers); 2,000+ towed artillery pieces; 900 multiple-rocket launchers (mainly outdated Soviet-designed Type-63); 5,000+ mortars.
Naval Systems	3 Soviet-made Kilo class attack submarines, plus several indigenous and North Korean-made midget submarines. 6 principal surface combatants (4 frigates; 2 corvettes). 200+ anti-ship missile boats and smaller high-speed patrol torpedo boats.
Aircraft	338 fighters and fighter-bombers (2 Soviet-made MiG-29 squadrons; multiple squadrons of outdated U.S.-designed F-4D/E and F-14; and French-designed F-1E). 9 reconnaissance aircraft; 4 tankers; 60 helicopters; 96 transport aircraft.
Air Defense Systems	150+ I-HAWK, Tor M1, and Stinger mobile missile defense systems. 1,700 anti-aircraft artillery pieces. Purchased but not yet acquired advanced Russian-made S-300.
Ballistic Missiles	~1,000 total ballistic missiles in deployed arsenal (largest in Middle East).
Cruise Missiles	Naval vessels and mobile coastal defense batteries equipped with Chinese-designed anti-ship missiles allow Iran to target to entire Strait of Hormuz.

Sources: Office of Secretary of Defense; Congressional Research Service; IISS Military Balance.

NEW DEVELOPMENTS

ability to strike Iran with submarine-launched ballistic missiles.¹¹⁶ In January 2010, the Israeli military released footage showing in-flight refueling of Israeli Air Force (IAF) F-15 fighter jets, a maneuver that any air strike against Iran would require. The following month, the Israeli military undertook several large-scale military exercises to prepare for potential attacks from Lebanon and Syria. The IAF also unveiled a new pilotless drone that it claimed could reach Iran. Although these drones may eventually carry air-to-surface weapons, they are currently only configured for surveillance and counter-surveillance missions that could form part of a larger military strike.¹¹⁷

Iran

By all appearances, Iran has continued its aggressive pursuit of offensive conventional and nuclear weapons capabilities. Shortly after the disclosure of

Iran's secret uranium enrichment facility at Qom, the IRGC announced it had test-fired two medium range ballistic missiles: the Shahab-3 and the Sejil-2. Compared to the older, liquid-fueled Shahab-3, the solid-fueled Sejil-2 is more accurate, requires less time to launch, and can be hidden more easily. The two missiles' ranges—800 to 1,200 miles—mark the first time Israel and most U.S. Persian Gulf bases are within range of Iranian ballistic missiles. A December 2009 Sejil-2 test suggested Iran might be able to hit targets in southeastern Europe as well.¹¹⁸

In February 2010, Iran test-launched the Kavoshgar-3 satellite rocket and unveiled the Simorgh booster rocket. While the Islamic Republic is likely many years from developing booster rockets capable of carrying intercontinental ballistic missiles to the U.S.'s eastern seaboard, the satellite launch suggested Tehran intends

IRAN'S MISSILES: ARSENAL AND RANGES

Missile Name	Type	Range	Payload	Information
Tondar-69	Unguided artillery rocket.	93 miles.	400 lbs.	Solid-fueled. Road-mobile. Based on CCS-8 delivered from China. Not highly accurate.
Zelzal-2	Unguided heavy artillery rocket.	130 miles.	1,300 lbs.	Solid-fueled. Vehicle-launched.
Fateh-110	Short-range ballistic missile.	120+ miles.	1,100 lbs.	Solid-fueled. Road-mobile. More accurate than Tondar-69.
Shahab-1	Short-range ballistic missile.	185 miles.	1,700-2,200 lbs.	Liquid-fueled. Road-mobile. Reverse-engineered Scud-B missiles delivered from Libya and North Korea.
Shahab-2	Short-range ballistic missile.	310 miles.	1,700+ lbs.	Liquid-fueled. Road-mobile. Reverse-engineered Scud-C missiles delivered from North Korea.
Shahab-3	Medium-range ballistic missile.	800+ miles.	2,200 lbs.	Liquid-fueled. Road-mobile. Based on North Korean Nodong-1. Successfully intercepted by Israel's Arrow-2 during simulation.
Shahab-3 Variant	Medium-range ballistic missile.	1,200 miles.	Up to 1,500 lbs.	Liquid-fueled. Road-mobile. Also known as Ghadr-1.
Sejil-2	Two-stage medium-range ballistic missile.	1,200+ miles.	Up to 2,200 lbs.	Solid-fueled. Possibly road-mobile. Currently under development. Could be deployed by 2012. More accurate than Shahab-3.

HEZBOLLAH'S MISSILES: ARSENAL AND RANGES

Missile Name	Type	Range	Payload	Information
Grad	Unguided multiple-launch artillery rocket.	12 miles.	40 lbs.	Also known as Katyusha. Employed extensively against Israel in 2006 Lebanon War.
Fajr-3	Unguided multiple-launch artillery rocket.	25-30 miles.	100 lbs.	More advanced form of Katyusha rocket. Iranian origin. Also known as Khaibar-1.
Fajr-5	Unguided multiple-launch artillery rocket.	Up to 45 miles.	380 lbs.	More advanced form of Katyusha rocket. Iranian origin. Also known as Khaibar-1. Vehicle-launched.
Zelzal-2	Unguided heavy artillery rocket.	Up to 130 miles.	1,300 lbs.	Solid-fueled. Vehicle-launched. Iranian origin.
M-600	Internally-guided short-range ballistic missile.	150 miles.	1,000 lbs.	Solid-fueled. Based on Iranian Fateh-110. Likely delivered from Syria.

HAMAS' MISSILES: ARSENAL AND RANGES

Missile Name	Type	Range	Payload	Information
Qassam	Crudely fabricated unguided artillery rocket.	7-8 miles.	12 lbs.	Indigenously manufactured.
Grad/Arash	Unguided artillery rocket.	12+ miles.	40 lbs.	Iranian-made. Successfully intercepted by Israel's Iron Dome during simulation.
Fajr-3	Unguided multiple-launch artillery rocket.	Up to 30 miles.	100 lbs.	Iranian-made. More advanced form of Katyusha rocket. Also known as Khaibar-1.
Fajr-5	Unguided multiple-launch artillery rocket.	Up to 45 miles.	200 lbs.	Iranian-made. More advanced form of Katyusha rocket. Also known as Khaibar-1. Vehicle-launched.

to develop such a capability. The IAEA has reported that Iran has sought to develop a missile-compatible nuclear warhead.¹¹⁹

The Islamic Republic is also seeking to improve its conventional capabilities. Shortly after the U.S.-Israeli exercises, Iran conducted its own large-scale air defense war games.¹²⁰ Iran has also begun developing or producing new naval destroyers, unmanned aircraft, stealth aircraft, anti-aircraft missiles, short-range surface-to-surface missiles, anti-ship speed boats and anti-ship cruise missiles, although it remains unclear how effective any of these platforms will be.¹²¹ More importantly,

Russia's state arms trader Rosoboronexport refuses to say whether it will cancel its contract to deliver the advanced S-300 air defense systems to Iran, although the U.S.'s recent decision to lift sanctions may ease the way for delivery. In the meantime, Iranian engineers seek to reverse-engineer their own version of the system.¹²² The Islamic Republic has also been steadily replenishing Hezbollah's rocket and missile arsenal since the 2006 Lebanon War. The Israeli military estimates Hezbollah possesses 40,000 rockets—double the amount it had in 2006. This arsenal almost certainly includes Iranian-made Zelzal-2 rockets and M-600 missiles that can reach Tel Aviv.¹²³

THREE LIKELY OUTCOMES

THREE LIKELY OUTCOMES

Based on these recent political, technological, diplomatic and military developments, we foresee three likely outcomes should the United States fail to act decisively to prevent a nuclear weapons-capable Iran: the Islamic Republic becoming a *de facto* nuclear power; Israel undertaking a military strike against Iranian nuclear facilities; or peaceful and democratic regime change in Tehran.

We believe that a nuclear weapons-emboldened Iran cannot be contained, that an Israeli strike holds many pitfalls for the United States, and that regime change is very unlikely to address the threat.

IRAN GOES NUCLEAR

Tehran is likely to be satisfied in the near term with attaining nuclear weapons capability—possessing all the elements of a nuclear device—without necessarily assembling or testing a weapon. This would make Iran a *de facto* nuclear power, while allowing just enough ambiguity to prevent strong international censure. Yet this nuclear weapons capability would be enough to embolden Iran and spark a host of negative consequences that we believe could not be minimized by a strategy of containment and deterrence. While many in Washington look to the Cold War for lessons on how to control a nuclear adversary, we do not find the comparison to the Soviet Union analogous. Today we have neither the credibility, nor reliable allies, nor deterrable enemy needed for containment to succeed.

A Nuclear Weapons-Capable Iran

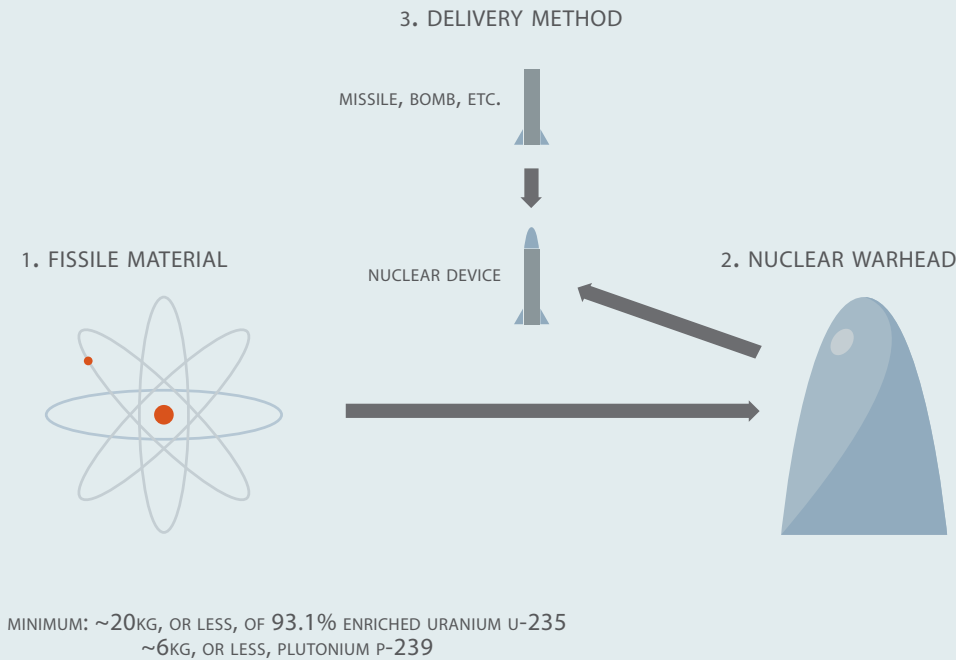
While Iran continues to amass the parts and technology needed for a nuclear weapon—enriched uranium, weapons designs and ever more advanced missiles—the exact status of its nuclear program is likely to remain clouded in ambiguity for the foreseeable future. Indeed, this is the scenario that a recently-leaked memorandum from Secretary of Defense Robert Gates to President Obama apparently predicts.¹²⁴ By hinting to the world that it has, or readily could produce, nuclear weapons without actually backing out of the NPT or testing a bomb, Tehran can reap all the benefits of joining the nuclear club—having a nuclear deterrent and greater sway in the region—without any of the drawbacks.

For this reason, throughout this report we have referred to the threshold of “nuclear weapons-capable Iran,” rather than a nuclear-armed one. The former refers to Iran attaining the materials, technology and proficiency necessary to assemble quickly the three main elements of a nuclear device—fissile material, detonators and delivery mechanism—without actually having done so. Yet the mere fact of this capability will imply that Iran could produce and use a nuclear weapon should it ever decide to do so. Once Iran reaches this stage of nuclear development, it will have already become a *de facto*, if not *de jure*, nuclear power with an effective nuclear deterrent.

IRAN’S ACTIONS SEEM TO BE IN KEEPING WITH A STRATEGY OF STAYING IN TECHNICAL COMPLIANCE WITH THE NPT BUT SOWING SUFFICIENT DOUBT ABOUT THE ACTUAL STATUS OF ITS NUCLEAR PROGRAM TO BE TREATED AS A *DE FACTO* NUCLEAR POWER.

There are several reasons why Iran is likely to be satisfied with a nuclear weapons capability, rather than outright declaring that it has developed an atomic bomb. First is the issue of timing. Were Iran to decide to test a nuclear weapon it would face the quandary of either having to test the first device it produces or wait until it has more than one weapon. In the first case, Iran would have effectively demonstrated its mastery of nuclear weapon design, but would have just used its sole nuclear weapon,

THREE COMPONENTS OF A NUCLEAR DEVICE



thereby losing the primary advantage of possessing such weapons—deterrence—and leaving itself vulnerable to a military strike. Waiting to test until it has at least two nuclear weapons, however, would mean delaying its nuclear ascendancy significantly. However, Iran can gain most of the benefits of possessing a nuclear weapon, without having to wait until it has actually built multiple devices, simply by leading the world to suspect it has attained nuclear weapons capability.

Second, any ambiguity surrounding Iran's nuclear weapons program allows Tehran to sow further disarray among nations that seek to censure it. An assumed nuclear weapons capability on the part of Iran would force U.S. military planners to treat Iran as if it already had a weapon—much as they did with North Korea for the period between 1996 and 2006, before Pyongyang tested a bomb. Yet without confirmation that Iran had in fact broken out of its NPT obligations, it would

remain difficult to gather international consensus on robust penalties against Iran. Over the last seven years Iran has perfected the tactic of feinting and dissembling in order to stall diplomacy. Given its success, Iran is likely to continue such tactics.

Indeed, Iran's actions seem to be in keeping with a strategy of staying in technical compliance with the NPT but sowing sufficient doubt about the actual status of its nuclear program to be treated as a *de facto* nuclear power. By stockpiling enough LEU to produce the fissile material needed for a nuclear weapon, further enriching uranium to 20% and constructing secret nuclear facilities, Tehran has been telegraphing its intentions without having to reveal them. If Iran's program ever appears far enough advanced that we are forced to assume it to have reached a nuclear weapons-capability, U.S. strategy will have to change accordingly. A military strike would become far more dangerous and

THREE LIKELY OUTCOMES

any chance of the current regime voluntarily giving up its nuclear program would all but disappear. Instead, the U.S. would be forced to shift to a policy of containment, hoping to deter Iran from using or transferring nuclear weapons and to maintain the balance of power in the region. Yet, despite the apparent success of containment during the Cold War, we doubt that the same strategy will prove effective in deterring Iran.

Could a Nuclear Iran be Contained?

As many in Washington policy circles seemed to have resigned themselves to the eventual emergence of a nuclear Iran, there has been a tacit shift towards containment as the default U.S. strategy. Yet, those who believe that the Cold War affirmed the reliability of this approach overestimate the parallels between Iran and the Soviet Union while under-appreciating both the complexity of containment and the difficulties of deterrence. The U.S. lacks the key elements of a successful containment strategy—credibility; robust, reliable and coordinated allies; and a deterrable enemy. More importantly, however, containment, even if executed effectively, could not limit the negative eventualities likely to be sparked by an Iranian breakout. Containment was designed to protect allies, not prevent proliferation among our allies or the transfer of nuclear technology to terrorist groups.

What Would We Contain?

After the last two tumultuous decades—filled with civil wars, genocides, state failure and terrorism—many yearn for the seeming stability of the Cold War years. In hindsight, the nuclear standoff between the United States and the Soviet Union appears to have provided, if not true peace, then at least a predictable structure to international relations for nearly five decades. Reasoning by analogy, many in Washington envision a U.S.-guaranteed “nuclear shield”¹²⁵ providing the same stability to the Middle East, should Iran acquire a nuclear weapons capability.

This conclusion is, unfortunately, faulty; the analogy between the Soviet Union and Iran does not hold. At issue is not only the question of the Iranian regime’s

nature—is it rational and self-interested enough to be deterred?—but the question of what we would be containing. During the Cold War, the United States sought to protect its allies from the aggression and influence of the Soviet Union. Most Western European countries not only shared our political values, but readily signed mutual defense agreements and accepted the stationing of U.S. troops on their territory.

CLASSIC CONTAINMENT WILL NOT BE ENOUGH TO PREVENT OUR ALLIES FROM BEGINNING THEIR OWN NUCLEAR PROGRAMS.

If the U.S. fails to prevent Iran from going nuclear, however, our aim will be not just to protect ourselves from Iran, but also from our own allies, as well as terrorists. A nuclear weapons-capable Iran will dramatically unsettle its neighbors, especially given Iran’s determination to expand its sphere of influence in the region. Saudi Arabia, Egypt, Turkey and perhaps others will seek to acquire their own nuclear weapons to offset the Iranian threat. Unlike the British and French development of nuclear weapons, a Middle East nuclear arms race would prove decidedly destabilizing and potentially disastrous. Secretary Clinton’s assurances of a “nuclear shield” are meant as much to preclude this possibility as to extend our protection to the region. But classic containment will not be enough to prevent our allies from beginning their own nuclear programs.

To stave off the proliferation cascade that a nuclear Iran would almost certainly precipitate, the U.S. would have to both deter Tehran and police its own allies. Yet these nations are hardly interested in a mutual defense agreement with the United States, let alone the permanent stationing of U.S. troops on their soil. Whereas the allies that joined with the United States to form the North Atlantic Treaty

Organization (NATO) not only received U.S. protection but were also willing to commit to come to our defense, the same almost certainly is not true of our Middle Eastern partners.

Further, during the Cold War our adversary was a nuclear-armed state. But Tehran is the world's largest state sponsor of terrorism. It is known to transfer arms to Hamas and Hezbollah. Should Iran acquire nuclear weapons capability, the U.S. will have to contend with the very real possibility that it might transfer nuclear materials or technologies to its terrorist proxies. This is precisely the sort of "loose nuke" scenario that President Obama's recent nuclear summit meant to forestall, even though Iranian proliferation was not even on the agenda.¹²⁶ Classic containment strategy, however, is not adequate to the task of deterring non-state actors. Without easily targetable political, social or economic interests, such entities are not susceptible to the logic of mutually assured destruction.

Thus, Cold War-era containment does not translate well to the threats a nuclear weapons-capable Iran would pose. Even if executed properly, it was never meant to persuade unreliable allies to forgo proliferation or to deter terrorists. Unfortunately, we are not even convinced that the U.S. would be able to institute an effective containment strategy.

Credibility Deficit

Containment advocates argue that Washington should clarify and enforce redlines for a nuclear Iran: no conventional war; no use or transfer of nuclear weapons, materials or technology; and no support for terrorism or subversion. To deter any Iranian transgressions, Washington might establish a regional defense umbrella, and state its willingness to retaliate with conventional and/or nuclear weapons.¹²⁷ Indeed, containment is fundamentally a military strategy. It requires constant vigilance in addition to conventional and nuclear military deployments. However, advocates of this approach tend to overlook the importance of credibility within a successful containment strategy.

Lack of Certain Response

Credibility is the bedrock of deterrence. Achieving it can be painstaking, involving a serious commitment of resources and an ironclad commitment to punish transgression of redlines.¹²⁸ During the Cold War, the United States built up credibility through its willingness to risk war with the Soviet Union over Iran, Turkey, Berlin and Cuba. Cold War containment policy required successive U.S. Administrations to maintain bases around the world with tens of thousands of soldiers, sailors and airmen, prepare in earnest for conventional and nuclear war, engage in costly proxy conflicts and even weather nuclear crises. Because of its efforts to contain Iraq in the 1990s, the Pentagon launched military operations such as Desert Fox and Desert Strike in addition to enforcing no-fly zones for more than a decade under operations Southern and Northern Watch.

U.S. officials have not demonstrated similar resolve toward a potential nuclear Iran. In 2003, President George W. Bush stated that his Administration would not "tolerate the construction of a nuclear weapon [by Iran]." The current Administration has warned Tehran repeatedly of the potential costs of its noncompliance, with President Obama committing to use "all the elements of our national power" to prevent Iran from developing nuclear weapons.¹²⁹

However, neither the United States nor its allies have backed up any of these threats. Iran has crossed multiple redlines—converting yellowcake into uranium, spinning centrifuges, refusing diplomatic proposals—without significant punishment. More recently, President Obama's threat to impose harsh sanctions has been undercut, if not altogether stymied, by the glacial pace of the United Nations. Washington's credibility is undermined further by its lack of support for Iran's opposition, its apparent desperation to engage, public spats with allies such as Israel and its downplaying of military options.¹³⁰

Lack of Tools

Containment advocates stress the need for Washington to detect transgressions and ensure Iran abides by

THREE LIKELY OUTCOMES

U.S. redlines, principally through forensics and intelligence.¹³¹ However, the United States lacks precise intelligence and has never successfully predicted a nuclear breakout. The Soviet Union's nuclear test in 1949, France's test in 1960, China's acquisition of nuclear bombs in 1964, India's tests in 1974 and 1998, and advanced Libyan, Syrian and Iraqi programs each surprised U.S. intelligence. President Obama signed the Nuclear Forensics and Attribution Act in February 2010 to address the U.S.'s shortcomings in this field, but this focused primarily on preventing WMD attacks against the U.S. homeland. U.S. government agencies still lack a robust capability to detect the development or transfer of nuclear weapons capabilities by Iran.¹³²

U.S. GOVERNMENT AGENCIES STILL LACK A ROBUST CAPABILITY TO DETECT THE DEVELOPMENT OR TRANSFER OF NUCLEAR WEAPONS CAPABILITIES IN IRAN.

The Islamic Republic's successful record of hiding facilities for years suggests we may well be caught by surprise again. The revelation of the secret facility at Qom and the February 2010 IAEA report, which contradicted the 2007 National Intelligence Estimate by claiming Tehran continued weapons development after 2004, only further demonstrate the difficulty of determining Iran's nuclear intentions and capabilities.¹³³

Dearth of Reliable Allies

Containment advocates argue the United States can maintain a balance of power through missile defense, arms transfers and regional security cooperation.¹³⁴ But they overlook the importance of collective defense organizations like NATO as well as mutual defense alliances with Australia, Japan, New Zealand, Philippines, South Korea and Taiwan to the success of

Cold War containment. Deterring Iran would require similar regional alliances, which take years to establish interoperability before they become stable and effective instruments for containment. Creation of such a network in the Middle East is infeasible. The Middle East is not Western Europe.

Lack of Unity

With the exception of Israel, the United States' Middle Eastern allies are not strong enough to deter aggression with any certainty. To be sure, the United States has been selling its Gulf Cooperation Council (GCC) allies (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) billions of dollars in advanced aircraft, all-weather precision-strike weapons, air-to-air missiles, helicopters, cruise missiles and air refueling tankers.¹³⁵ However, the Persian Gulf countries have no record of military success in battle, while Iraq has many years to go before it can field a strong air force.¹³⁶

Meanwhile, the United States has done little to multiply the effectiveness of its in-theater forces or create regional security coordination and collective defense mechanisms. The Pentagon has engaged in serious defense planning only with Israel. The Gulf Security Dialogue, established in May 2006 between the U.S. and GCC members to augment joint defense planning, primarily has served as a conduit for U.S. arms sales. It has not coordinated the aforementioned ambitious procurement policies around regional objectives such as theater defense or coordinated retaliatory strikes nor has it provided for joint planning or exercises.¹³⁷

Moreover, U.S. regional partners remain almost as suspicious of one another as of Iran. Jerusalem worries sales of highly advanced weaponry to Persian Gulf countries supersede Washington's long-standing commitment to Israel's qualitative military edge.¹³⁸ At the same time, GCC countries have been reluctant to cooperate with Shiite-led Baghdad, despite Secretary Gates' admonishment to "embrace Iraq ... to help contain the ambitions of Iran." Without a common defense policy, and without the historical Iraqi bulwark between

Tehran and the Arab world, the United States' regional partners would be unable to contain a nuclear Iran.¹³⁹

Lack of Tripwires

Unlike the Cold War, the U.S. is not able to bolster its credibility or compensate for disunity by creating tripwires. Beginning in the 1950s, the U.S. adopted what military planners referred to as a “forward defense” strategy: U.S. troops were placed on allies’ soil in the path of any potential Soviet-bloc aggression, rendering an attack on any U.S. ally an automatic attack on the United States as well.¹⁴⁰ Stationing troops in Central Europe, West Berlin and East Asia boosted the credibility of U.S. deterrence. The U.S. military now has bases in Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, Turkey and the U.A.E., but compared to the 1990s maintains no substantial forward-deployed combat forces in the region. Placing tripwires with substantial U.S. personnel around Iran would be difficult, given both Congressional wariness of permanent bases and local hostility to U.S. presence in predominantly Muslim countries. The Strategic Framework Agreement with Iraq stipulates the U.S. cannot establish a permanent military presence in the country, nor use the country as a base for military operations.¹⁴¹

After drawing down troops upon completion of Operation Desert Storm, the United States tried a strategy of “dual containment” to counter both Iraq and Iran. This involved sanctions, WMD inspections, no-fly zones over Iraq and an increased military presence in the region. Under dual containment, U.S. troops levels in the Middle East increased from 10,000 in 1995 to 30,000 by 1998.¹⁴²

Today, rather than forward defense and explicit security guarantees, the Pentagon is opting for offshore and over-the-horizon force postures. The U.S. Navy recently deployed Aegis-equipped cruisers in the Persian Gulf to counter Iran’s medium-range missiles. The Obama Administration is also reorienting missile interceptors to counter Iran’s growing long-range missile capabilities and, to deal with Iran’s short-range ballistic missiles and

cruise missiles, the Pentagon has provided additional Patriot interceptor batteries to Bahrain, Kuwait, Qatar and the United Arab Emirates.¹⁴³ Israel, and to a lesser extent Saudi Arabia, already possess significant interceptor capabilities. In recent years, Gulf countries have also purchased or received a variety of advanced surface-to-air missile (SAM) and anti-aircraft systems and early-warning radars from the U.S.¹⁴⁴ This situation, however, creates a less credible defense posture. While a multifaceted missile shield may provide some measure of self-defense to U.S. partners in the region, it does not commit Washington to come to their defense if attacked.

WHILE A MULTIFACETED MISSILE SHIELD MAY PROVIDE SOME MEASURE OF SELF-DEFENSE TO U.S. PARTNERS IN THE REGION, IT DOES NOT COMMIT WASHINGTON TO COME TO THEIR DEFENSE IF ATTACKED.

Lack of Stability

Adding uncertainty to any containment regime is the domestic impact which Iranian nuclear capability would have on U.S. regional allies. When France and Britain developed their own nuclear weapons during the Cold War, this enhanced regional security. However, if our Middle Eastern allies launch nuclear programs in response to Iran’s nuclear capability, it will only further destabilize the region. Containment advocates note U.S. successes in preventing West Germany and Japan from seeking nuclear weapons during the Cold War, but fail to mention that Bonn and Tokyo only agreed to forego nuclear weapons after concrete U.S. security commitments.¹⁴⁵

The Iranian Regime Is Not Deterrable

Rationality—understood as the instinct of self-preservation—is a necessary precondition for mutually

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assured destruction to be effective. Thus, proponents of containment contend that while Iran's military regime is ruthless, it is also pragmatic, and concerned primarily with self-preservation, just like the Soviet Union, Communist China and North Korea before it. Proponents of the Islamic Republic's rationality argue that Tehran has exercised restraint against U.S. interests in Iraq and elsewhere, its foreign policy is generally risk-averse, and it seeks nuclear weapons more for prestige and self-protection than for power projection. Accordingly, a nuclear Iran would be a status quo power.¹⁴⁶

This conjecture may turn out to be true; but it also may not. The hard-line IRGC's consolidation of power within Iran has altered the role of nuclear weapons in Tehran's decision-making. The messianic leadership of the Islamic Republic may not be ideological to the point of national suicide, but historically it has pursued expansive regional aspirations, which have proven difficult enough to contain even when Iran lacked a nuclear deterrent and its regime was not dominated by hardliners.

Rationality must be accompanied by transparency. Maintaining the delicate balance between two nuclear-armed adversaries requires that both fully know each other to be rational. Yet, the intentions and motivations of the Iranian regime remain opaque. The IRGC, the most ideological element in Iranian society, would likely have command and control over any nuclear weapon. Even if the Guard remained cautious, should regime change come to Iran because of the regime's domestic unpopularity, the Guardsmen may in their last hours launch nuclear weapons against foreign enemies knowing that neither Jerusalem nor, for that matter Washington, would retaliate against a country whose regime had already fallen. Israeli officials privately say this is their nightmare scenario: one which traditional deterrence or the assumption of rationality would do little to counter. As Netanyahu said last year, "You don't want a messianic apocalyptic cult controlling atomic bombs. When the wide-eyed believer gets hold of the reins of power and the weapons of mass death, then the

entire world should start worrying, and that is what is happening in Iran."¹⁴⁷

Moreover, even if Iran's clerical regime were wedded to self-preservation, they might still push boundaries or act through proxies. The Soviet Union and its proxies, before settling into a nuclear equilibrium, tested U.S. commitment in a series of crises and proxy conflicts. North Korea's recent torpedoing of a South Korean warship is yet another example of a nuclear power testing the boundaries of deterrence.¹⁴⁸ Should a nuclear Iran attempt to similarly test U.S. resolve, events could spiral out of control. That Tehran has already been developing capabilities and strategies for low-level asymmetric warfare increases the potential for miscalculation, escalation and conflict.¹⁴⁹

EVEN IF IRAN'S CLERICAL REGIME WERE WEDDED TO SELF-PRESERVATION, THEY MIGHT STILL PUSH BOUNDARIES OR ACT THROUGH PROXIES.

Additionally, it is difficult to say with certainty that Tehran would resist the temptation to transfer technology. In 2008, Ahmadinejad told his Senegalese counterpart that he saw no problem in transferring technology to other Muslim countries.¹⁵⁰ Indeed, an Iranian nuclear breakout would be fundamentally different from that of other countries because there has never been a true state sponsor of terrorism with nuclear weapons. Uncertainty over Iranian capabilities and intentions will make Iran more immune to conventional deterrence and give the Islamic Republic a *de facto* nuclear deterrent, which could embolden it to reinvigorate its export of revolution and escalate support for terrorist groups.

Ultimately, containing a nuclear-armed adversary is not an inherently straightforward task under the best of circumstances. Given the unique challenges a nuclear weapons-capable Iran would pose, it would be all but impossible.

ISRAELI STRIKE

Jerusalem's commitment to prevent the Islamic Republic from acquiring a nuclear weapons capability makes an eventual Israeli military strike on Iranian nuclear facilities likely. Such a scenario poses significant risks for the United States, albeit on a lesser scale than if the Islamic Republic possessed nuclear weapons. A surprise Israeli military strike could plunge the U.S. into a regional conflict at a time and under conditions not of its choosing and threaten the global economic recovery. At best, it might delay Iran's nuclear progress by a few years. Nevertheless, it is imperative Washington be prepared for an Israeli strike and, should it occur, maintain its strategic objectives and seek to limit its negative consequences without undercutting Israel or the interests of our Arab allies.

Israel, the United States, and a Nuclear Iran

Israeli leaders across the political spectrum have long been determined to prevent nuclear proliferation in the Middle East. In 1981 Menachem Begin, prime minister and head of the right-wing Likud Party, ordered a successful military strike against Iraq's Osirak nuclear reactor. The Israelis carried out the attack even though they thought it would only set Iraq's nuclear program back less than a year; the program was never fully restored. In 2007, Ehud Olmert, prime minister and head of the centrist Kadima party, along with defense minister and Labor Party leader Ehud Barak, ordered the successful attack on a nuclear facility in Syria; it too apparently has not been reconstructed.

Israeli politicians have also made clear that a nuclear weapons-capable Iran poses an existential threat. Iran's leaders have often called for the destruction of Israel. President Ahmadinejad related at a Holocaust-denial conference how Iran's "dear Imam [Khomeini] said that

the occupying regime [Israel] must be wiped off the map." He went on to declare this, "a very wise statement."¹⁵¹ In 2008, Ahmadinejad declared that "Israel's days are numbered," adding that "the peoples of the region would not miss the narrowest opportunity to annihilate this false regime." In 2010 Khamenei has called Israel a "cancerous tumor" and said "the day will come when nations of the region will witness the destruction of the Zionist regime."¹⁵²

It thus not surprising that Israelis often compare the Iranian threat to that posed by Hitler in the 1930s. Even current president and former leftist Labor leader, Oslo peace champion and Nobel Peace Prize winner Shimon Peres has made this analogy. He told President Obama last year, "As Jews, after being subjected to the Holocaust, we cannot close our eyes in light of the grave danger emerging from Iran.... If Europe had dealt seriously with Hitler at that time, the terrible Holocaust and the loss of millions of people could have been avoided. We can't help but make the comparison."¹⁵³

Israeli leaders have been equally explicit about their intent to do what is necessary to prevent another Holocaust. In 2006, in response to Iranian threats to annihilate Israel, Peres directed comments to Iran that hinted what Israel might do. "Be careful with your threats. Those who threaten to destroy are in danger of being destroyed."¹⁵⁴ Then-Prime Minister Olmert said in 2007, "The Jewish people, with the scars of the Holocaust fresh on its body, cannot afford to allow itself to face threats of annihilation once again. No nation has the right even to consider its position. It is the obligation of every country to act against this with all its might." He added, "we can stand up against nuclear threats and even prevent them."¹⁵⁵

Other prominent Israeli politicians have been more explicit. Shaul Mofaz, a former army chief of staff and leader in the Kadima party, said in 2008, "If Iran continues its nuclear arms program—we will attack it." He added that Ahmadinejad "will disappear before Israel does." Ephraim Sneh, a general, former deputy defense

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minister and long-time champion of peace process with the Palestinians, wrote an op-ed recently that Israel will be forced to strike Iran militarily by November 2010.¹⁵⁶

The Obama Administration recognizes the existential threat posed by a nuclear Iran. Vice President Joseph Biden said in Israel in March 2010: “I know that for Israel ... there is no greater existential strategic threat. Trust me, we get that.”¹⁵⁷ U.S. officials also understand how fearful Saudi Arabia, Jordan and other Arab allies are of a nuclear Iran. However, the Administration has sent generally negative signals about an Israeli strike. In May 2009, CIA Director Leon Panetta went to Israel to warn its leaders not to strike Iran without notifying the U.S. beforehand. Admiral Mullen has expressed repeatedly his concern an Israeli strike would be “very destabilizing,” and although Vice President Biden—along with Congressional representatives from both parties—stated publicly that Israel has a right to “determine for itself” its interests “relative to

ISRAEL FEARS THE ADMINISTRATION IS PREPARED TO LIVE WITH A NUCLEAR IRAN.

Iran and anyone else,” President Obama immediately reiterated that U.S. policy was “to resolve the issue of Iran’s nuclear capabilities in a peaceful way through diplomatic channels.”¹⁵⁸

As a result, Israel fears the Administration is prepared to live with a nuclear Iran. The recent spat over Jerusalem housing permits during Biden’s trip to Israel likely made the Israelis additionally nervous about the reliability of the United States and diminished the likelihood that Israeli officials would ever rely on a U.S. nuclear umbrella.¹⁵⁹

It appears likely that Israel is determined to deal with Iran’s nuclear program on its own terms, without first seeking the U.S.’s blessing. Defense Minister Ehud

Barak seemed to acknowledge differences between Washington and Jerusalem when he told a U.S. audience in February 2010 of “a certain difference in perspective and judgment, a difference in the internal clock, a difference in capabilities,” in relation to Iran; “I don’t think that there is a need to coordinate in this regard.”¹⁶⁰ Three criteria will drive an Israeli decision to strike: progress in Iran’s nuclear program, an appraisal of international efforts to stop the Islamic Republic’s program, and Iran’s own defensive capabilities. Any Russian decision to deliver to Iran its advanced S-300 air defense system, for instance, could trigger an Israeli strike.

Military Challenges of an Israeli Strike

Israel would prefer not to conduct such a strike, given the multiple military challenges inherent in such an operation. Distances involved would push the limit of Israel’s capabilities. The Israel Air Force’s successful 1981 attack on Iraq’s Osirak light-water reactor involved a round-trip flight of around 1,200 miles for the attacking aircraft. At this range, the Israel Air Force aircraft had to be fitted with heavy external fuel tanks which were topped off on the runway immediately prior to takeoff. Any strike against Iran’s facilities would require flight distances of more than twice that amount.

One military analysis conducted in early 2009—before the revelation of the second Iranian enrichment facility—estimated that even if the Israel Air Force used 20% of its total combat aircraft (ten times as many F-15s and F-16s as were used against Iraq or Syria in 1981 and 2007, respectively), Israel would need to use its entire tanker fleet to refuel its attacking aircraft on both the outbound and inbound legs of the strike.¹⁶¹

Whereas Israeli planes only violated Saudi (and Iraqi) airspace for the Osirak strike, any attack on Iran would require Israel to violate multiple countries’ airspaces, adding a number of political and operational risks.

In addition, the target set for a strike against Iran is much more substantial than that of Israel’s strikes

against Iraq in 1981 or Syria in 2007, both of which involved single targets. To set back Iran's nuclear program in any meaningful way, Israel would likely have to strike uranium enrichment facilities and conversion facilities in Natanz, Esfahan and Qom, as well as the nuclear reactor in Arak. Iran has applied the lessons from Israel's successful strikes on relatively unprotected above-ground facilities in Iraq and Syria by burying infrastructure underground and bolstering anti-aircraft defenses. This not only makes attacking these sites more difficult, but also complicates pre- and post-strike intelligence collection and analysis. Therefore, Israel would need to use many more fighter-bomber and interceptor aircraft—equipped with heavy precision-guided payloads—than it employed in previous strikes. These armaments would increase fuel consumption further, straining the Israel's refueling capacity to the limit. Given these hurdles, military analysts agree, an Israeli strike would be risky and not assure success.¹⁶²

This may lead Israel to consider ballistic and cruise missile strikes. The Israeli Navy's *Dolphin* class submarines are armed with cruise missiles that can strike Iranian targets from the Mediterranean Sea and Gulf of Oman. Israel is also estimated to possess ballistic missiles (Jericho-2 and -3) capable of reaching Iran from launch sites in Israel. Without the advanced S-300 air defense system, Iran would be unable to intercept any potential ballistic missile attack. In a best-case scenario, massive conventional ballistic missile strikes could be more feasible than air-launched bunker-buster attacks.¹⁶³

Aftermath of an Israeli Strike

Even if a strike met Israel's goal of setting back Iran's nuclear program three to four years, the aftermath of any attack would be destabilizing. Tehran has a variety of retaliatory options at its disposal. Other than simply absorbing the attack or launching Shahab-3 and Sejil-2 missiles at Israel, Tehran could direct Hezbollah in Lebanon to unleash its tens of thousands of missiles onto Israel, and encourage Hamas in Gaza to do the same.

Iran could also encourage attacks on U.S. forces in Iraq and Afghanistan, subvert U.S. partners in the Persian Gulf, attempt to close the Strait of Hormuz or, more significantly for the international oil market, attack directly or by proxy the southern Iraqi oil fields.¹⁶⁴ As in the aftermath of Osirak, governments across the world and at the United Nations would likely condemn Israel publicly, even if many states would privately be pleased if an Israeli strike was effective.

If Iran or its proxies attacked Israel with rockets and missiles, the combination of the projectiles' low accuracy, Israel's preparedness and U.S.-Israeli missile interceptors could limit casualties. However, the more prolonged, intense and direct Iranian retaliation becomes, the

EVEN IF A STRIKE MET ISRAEL'S GOAL OF SETTING BACK IRAN'S NUCLEAR PROGRAM THREE TO FOUR YEARS, THE AFTERMATH OF ANY ATTACK WOULD BE DESTABILIZING.

greater the likelihood of Israeli casualties and that Israel might launch further cruise or ballistic missile strikes against Iranian nuclear, conventional military and/or energy infrastructure. The actions of Iranian proxies might also force Israel to expand the conflict into Gaza, Lebanon and even Syria.¹⁶⁵

Any Israel-Iran conflict would lead to a spike in crude oil prices, which, depending on the duration of the conflict, could undermine the global economic recovery. There is currently sufficient spare production capacity in the world to cover a loss of Iranian and even Iraqi oil exports; the Saudis could cover much of that themselves. But if the conflict disrupted oil flowing through the Strait of Hormuz or destabilized the Saudi government politically in any way, the impact on oil prices would be significantly greater.

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MAP 4: IRANIAN AND ALLIED MISSILE AND ROCKET RANGES



What Should the U.S. Do?

We believe U.S. policy should be guided by four key strategic objectives: eliminating the Iranian nuclear threat, ensuring the security of our regional allies, enhancing of our credibility and influence in the region and strengthening moderate forces across the region.

Negative Effects of U.S. Inaction

Given the Obama Administration's opposition, the Israelis are unlikely to give much, if any, warning to Washington before its planes take off. The Administration might well distance itself from an Israeli strike. However, Iran would likely take advantage of any apparent discord between Washington and Jerusalem to retaliate strongly against Israel, assuming it had nothing to fear from the United States.¹⁶⁶

History offers a cautionary tale about the consequences of the United States distancing itself from its allies. In 1956, Britain, France and Israel launched an attack on the Suez Canal after Egyptian President Gamal Abdel Nasser nationalized the waterway. U.S. President Dwight D. Eisenhower and Secretary of State John Foster Dulles refused to support the operation and, indeed, sought to undermine it by moving the U.S. Sixth Fleet into a blocking position against further operations, refusing to offset Arab oil embargoes and threatening to devalue the sterling.¹⁶⁷

Although intended to increase its credibility in the region, U.S. policy weakened two of its major NATO allies undermined cohesion within the alliance as a whole, sent Nasser's stature soaring across the region and emboldened him to seek to overturn the status quo in

MAP 5: ISRAEL: ROCKET AND MISSILE THREATS



Beyond managing any immediate crisis, Washington should work with its Israeli, Egyptian, Jordanian and Persian Gulf allies to strengthen their defenses against possible Iranian and/or proxy counterattacks. Without credible guarantees from Washington for their security, U.S. partners in the Persian Gulf will find it necessary to hedge their bets by cultivating better relations with Tehran. U.S. policymakers should also be prepared to release oil from the Strategic Petroleum Reserve, work closely with the Saudis to produce more oil and cooperate with regional allies to ensure maximum possible oil exports through the Persian Gulf, Turkey or the Red Sea. Furthermore, it is important that Washington minimize the surge in oil prices in order to deny the Iranians another international lever.

Finally, the Obama Administration should use that opportunity to focus international pressure on Iran to end its nuclear weapons program and accept international inspectors. This would be followed by years of overflights to ensure Iranian compliance, similar to operation Southern Watch over Iraq in the 1990s.

REGIME CHANGE

The blossoming of democracy in Iran, there can be no doubt, would be good for the people of Iran, the Middle East and the United States. But regime change, all but unthinkable prior to last year's post-election protests, is neither a *deus ex machina* nor a silver bullet. Washington should certainly support Iran's democratic opposition in every manner possible—morally, financially and politically—as part of its strategy to pressure the current regime and help the Iranian people. But hoping for regime change cannot be the sole U.S. policy for preventing the emergence of a nuclear weapons-capable Islamic Republic of Iran: it is too big a gamble.

Despite the massive protests that followed the June 12 elections, there is nothing in recent activities of the Green Movement, nor in the history of democratic movements generally, to indicate that Iran is teetering on the brink of political transformation. The IRGC—the same group that would command and control

the Middle East. This encouraged Nasser to launch the Six Day War eleven years later.¹⁶⁸

U.S. Must Support its Allies

In order to minimize the possibility of regional conflict following an Israeli strike, U.S. policymakers would have to make crystal clear that the U.S. will stand by its Israeli and Arab allies should a military conflict with Iran emerge. At the same time, the Pentagon should begin augmenting its military capabilities in the region—particularly air and naval forces—to protect the Strait of Hormuz, reassure U.S. allies and prepare to respond to possible Iranian retaliation. President Obama needs to make clear to the world that Iran's actions have been in longstanding violation of United Nations resolutions and the NPT.

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a nuclear weapon—remains an impediment to real political change. Even if the current regime were to fall, a possible successor—Mir-Hossein Mousavi—has given, at best, conflicting signals about his stance on Iran’s nuclear program. Most recently, he criticized Ahmadinejad for being *too willing* to accept a nuclear deal with Western powers.¹⁶⁹ Finally, the prospects for Iranian democracy ought not blind us to the regime change that is currently taking place in Tehran: the militarization of the already hard-line clerical regime.

Arguments for Regime Change

The Green Movement exploded onto the world stage in the summer of 2009 with mass demonstrations, many of which ended with arrests, bloodshed and even death. This rapid social mobilization in the name of democracy captured the imagination of many U.S. foreign policy experts, if not the Obama Administration. From across the political and ideological spectra—right and left, neo-conservative and realist alike—pundits have argued, in the words of Richard Haass, president of the Council of Foreign Relations, that “the United States, European governments, and others should shift their Iran policy toward increasing the prospects for political change.”¹⁷⁰

Arguments in support of this position are myriad: from the moral duty to support activists that share our values; to the failure of engagement; to the fact that only regime change could remove the most ideological element in whose hands nuclear weapons would rest. All these points are indisputable. The simple fact is that the peaceful emergence over the next several months of a democratic, pro-Western, anti-nuclear regime in Tehran would be the most elegant possible solution to Iran’s nuclear threat. But elegance is a virtue better suited to mathematical theorems than foreign policy. There are too many unknown variables that call into the question the viability of regime change as both a U.S. strategy and an eventual outcome: the timing of an eventual regime change; the process of political transformation; and the nature of the subsequent government.

Timing

Perhaps the chief lesson to be garnered from the fall of the Soviet Union and the democratic wave that swept through Eastern Europe in the early 1990s is just how unpredictable transformative events are. Iran is no different. Although the prospect of large-scale electoral manipulation was entirely foreseeable in the run-up to the June 12 election, few guessed that it would result in the mobilization of a mass opposition movement. Predictions that the Iranian regime is about to topple after nine months of civil unrest are just as fallible. Academics and policymakers alike are unable to prophesy the tumultuous and fickle course of human events with any accuracy.

FOR REGIME CHANGE TO BE A VIABLE POLICY OPTION FOR THE UNITED STATES, IT WOULD HAVE TO OCCUR BEFORE THE TOTALITARIAN REGIME OF AYATOLLAH KHAMENEI AND PRESIDENT AHMADINEJAD MANAGES TO ASSEMBLE THE TECHNOLOGY AND MATERIALS NEEDED FOR A NUCLEAR DEVICE.

Yet, it is precision that is needed. For regime change to be a viable policy option for the United States, it would have to occur before the totalitarian regime of Ayatollah Khamenei and President Ahmadinejad manages to assemble the technology and materials needed for a nuclear device. Yet, as the centrifuges spin, Tehran draws inexorably closer to nuclear weapons capability. Our analysis suggests it could easily attain it this year, should it so choose. Can a democratic, anti-nuclear government arise organically in Tehran before the Islamic Republic becomes a nuclear power?

This is the critical question for proponents of regime change. Suggestions that it does not matter whether democracy can beat the atomic clock fail to consider how the regime's behavior might change once it safely ensconced behind a nuclear deterrent. Were it to acquire a nuclear weapons capability, Tehran's proxies will be emboldened to foment unrest in stable Arab states and attack Israel, the Middle East will start down the road of nuclear proliferation and energy prices will skyrocket. Even if the United States were willing to bear these costs while awaiting a democratic Iran, we must consider the fate of the democratic movement at the hands of a brutal regime further fortified by a weapon of mass destruction. It is more than likely that the peaceful protestors would meet a fate worse than that which the *basij* militia has already meted out—beatings, show trials, even death. Shielded from foreign intervention and inured to criticism, the Islamic Republic's thugs would be free to savagely suppress the democratic movement.

The security of both the international community and the Iranian opposition depends upon thwarting Tehran's nuclear ambitions. The primary policy consideration, therefore—perhaps especially for those that extol, rightly, the moral virtues of solidarity—ought to be the timeframe for a given strategy to yield results. Can a policy of regime change spare the world and the Iranian people the ruthlessness of a nuclear weapons-capable Iran?

There is much to suggest it cannot. The pace and intensity of protests in Iran has drastically slowed since the early heydays of the Green Movement last summer. At the same time, the regime has taken concerted steps to intimidate, isolate and defang the opposition. Thousands of protestors remain jailed at Tehran's notorious Evin prison and the family and supporters of the opposition leaders—most recently, the grandson of former President Akbar Hashemi Rafsanjani—continue to be arrested.¹⁷¹ In January, two political prisoners were hanged and shortly thereafter the regime threatened to execute nine more. At the same time, Tehran has sought to sequester the opposition, blocking visits by European Union and other delegations as well

as blocking satellite signals carrying foreign media into Iran.¹⁷² These measures seem to have been largely effective. Opposition rallies planned for February 11—the 31st anniversary of the Islamic Revolution—fizzled, leading one activist to declare “It's all over. Our only option is to leave the country.”¹⁷³

Nor does history offer much hope for swift political transitions. Indeed, more often than not they are drawn out, torturous affairs.¹⁷⁴ Whatever the conditions necessary for successful regime change might be—economic, social, political and demographic factors have all been suggested—past experience makes this much clear: mass dissent, even if mobilized, is not enough. Hungary and Czechoslovakia witnessed mass protests against Communist rule in 1956 and 1968, respectively, only to have the opposition violently suppressed and suffer through two more decades of totalitarianism. The birth of the Solidarity movement in Poland in 1980, emerging from strikes at the Lenin Shipyard in Gdańsk to gain more than ten million members nationwide, was met with brutality, detentions and more than two years of martial law. It took almost a decade for the movement to regroup and successfully topple the regime.

Political revolutions are inextricably tied to violence: the willingness of the rulers to order bloodshed; the inclination of the security apparatus to unleash it; and the ability of the opposition to endure it. In Prague and Budapest, Soviet forces quickly quashed those who dared dream of a better society. To the north, the prospect of Soviet tanks on the streets of Warsaw was enough to scare the government into taking brutal action against protestors on its own. What changed in 1989? The commitment to suppress opposition dissolved.

Under Mikhail Gorbachev's policies of *perestroika* and *glasnost*, Polish President Wojciech Jaruzelski felt free of the threat of Soviet intervention, allowing him to negotiate with Solidarity, rather than jail its leaders. East German soldiers, guarding the Berlin Wall, faced with confusing orders and a swelling crowd, choose

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to give way to the people rather than fire upon them. So too the Soviet Union, and the military regimes in Chile and Argentina, fell because the government's desire to wield violence faltered in the face of society's opposition. As their credibility and confidence crumbles, regimes collapse.

THIS MILITARIZATION OF THE IRANIAN GOVERNMENT IS THE REGIME CHANGE THAT THE UNITED STATES OUGHT TO BE WORRIED ABOUT.

Unfortunately, there is little indication that the Iranian regime is loosening its grasp on power. Unlike in the Soviet Union—where according to Stephen Kotkin, “not all, but a number, of party officials preferred to become an asset-owning bourgeoisie”¹⁷⁵ to propping up the derelict Communist regime—elements of the Iranian regime, especially the IRGC, have a deeply-rooted financial interest in the survival of the system. The penetration of the IRGC into the political and economic fabric of Iran has been astounding. Ahmadinejad, himself a veteran of the IRGC, has overseen the ascendancy of IRGC members in both the central and regional government.¹⁷⁶ At the same time the Corps has seized control of Iran's economy. By 2007 they controlled some 100 companies—in such crucial sectors as construction, oil and gas, import-export and telecommunications—and accounted, by some estimates, for as much as two-thirds of Iran's GDP.¹⁷⁷

This militarization of the Iranian government is the regime change that the United States ought to be worried about. It is unlikely that Ayatollah Khamenei will repeat the Shah's swan song: “I hear your revolution.” A fundamental lesson that the clerics-turned-rulers took from the Islamic Revolution of 1979 was that compromise, in the face of opposition, invites overthrow.¹⁷⁸ Rather than show weakness, the current regime will likely continue to condemn, repress and prosecute the opposition.

New Regime

Even should the Green Movement succeed in deposing the current regime before they are able to develop nuclear weapons capability, the question still remains of what shape the new government would take and what policies it might adopt, especially vis-à-vis the nuclear program. The common assumption among proponents of regime change is that any government ushered in by the opposition is likely to reflect the supposed values of its predominantly young, educated backers: open, pro-Western and anti-nuclear. This is not necessarily the case.

A notable difference between today's Green Movement and the Islamic Revolution of 1979 is the commitment of the former to work within the system. Their political grievances have remained largely confined to the electoral fraud of June 12 and a demand that their voices be heard and votes counted. Rather than overthrow Iran's political system entirely, the opposition aims at institutional reform.

Thus, even were the Green Movement to achieve its goals, it is unlikely Iran would emerge from under the sway of the Supreme Leader. Instead, Mousavi—a veteran of the Revolution—could assume the presidency, leaving intact the political apparatus of the Islamic Republic, including the IRGC who control the nuclear program. Moreover, there is little to indicate that Mousavi, once considered among the Islamic Republic's most militant officials, is opposed to Iran's nuclear ambitions or open to the idea of suspending uranium enrichment. In April 2009, while still a presidential candidate, Mousavi told the *Financial Times* that “no one in Iran will accept suspension.”¹⁷⁴ And as Iranian negotiators were meeting with Western counterparts to discuss an exchange of nuclear materials—a deal for which Ahmadinejad had expressed initial support—Mousavi criticized the plan, claiming that “the discussions in Geneva were really surprising and if the promises given (to the West) are realized then the hard work of thousands of scientists would be ruined.” Though some dismiss these remarks as political posturing meant to burnish Mousavi's nationalist credentials, there is no evidence to suggest he holds different views.¹⁸⁰

Regime change, then, even if it were to come soon enough to avert a nuclear weapons-capable Iran, will not necessarily yield a government willing to give up its nuclear program. Though the U.S. should lend aid and succor to the democratic opposition, as it did throughout much of the Cold War and especially in the 1980s, doing so cannot be the sole or primary policy for thwarting Iran's nuclear ambitions. Simply put, hope is not a strategy.

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