Intelligence & Policy

Support to Policymakers:

The 2007 NIE on Iran's Nuclear Intentions and Capabilities

Center for the Study of Intelligence

May 2013

Center for the Study of Intelligence
Central Intelligence Agency
Washington, DC 20505
May 2013

CIA Support to Policymakers

The 2007 National Intelligence Estimate on Iran's Nuclear Intentions and Capabilities

By Gregory F. Treverton
RAND Corporation

CENTER FOR THE STUDY OF INTELLIGENCE

May 2013

The mission of the Center for the Study of Intelligence (CSI) is to stimulate within CIA and the Intelligence Community the constructive discussion of important issues of the day, to expand knowledge of lessons learned from past experiences, and to increase understanding of the history of the profession. CSI manages the production of the Intelligence Community journal, *Studies in Intelligence*, and includes the CIA's History Staff, CIA's Lessons Learned Program, and the CIA Museum. In addition, it houses the Emerging Trends Program, which seeks to identify the impact of future trends on the work of US intelligence

All statements of fact, opinion, or analysis expressed in Studies in Intelligence and CSI Publications are those of the Authors. They do not necessarily reflect official positions or views of the Central Intelligence Agency or any other US government entity, past or present. Nothing in the contents should be construed as asserting or implying US government endorsement of an article's factual statements and interpretations.

This report is based on a review of unclassified documents, publicly available oral history interviews, and interviews with senior policymakers involved in supporting the White House during the administrations of George H. W. Bush, William Clinton, and George H. Bush. This research was sponsored by the Center for the Study of Intelligence and conducted by RAND.

CIA Support to Policymakers: The 2007 NIE on Iran's Nuclear Intentions and Capabilities

By Gregory F. Treverton

ISBN 978-1-929667-29-1
This monograph, originally classified UNCLASSIFIED//FOR OFFICIAL USE ONLY, was first published by the Center for the Study of Intelligence in May 2013; this UNCLASSIFIED version was produced in July 2016.

Center for the Study of Intelligence
Central Intelligence Agency
Washington, DC 20505

Contents

Summary ..... *v*

The Controversy *1*

Iran's Nuclear Program in 2000 ..... *1*

Assembling, and Reassembling, the NIE *2*

The Firestorm *5*

Lessons for the Future *7*

Appendix A: Unclassified Key Judgments *11*

Appendix B: Conveying Uncertainty: Two Schools of Thought *21*

Endnotes *25*

❖ ❖ ❖

Summary

We judge with high confidence that in fall 2003, Tehran halted its nuclear weapons program.

So declared the opening words of the key judgments of the November 2007 national intelligence estimate (NIE), *Iran's Nuclear Intentions and Capabilities*.[a] Done by the National Intelligence Council (NIC), those key judgments, or "KJs" in intelligence-speak, were declassified and released in December 2007, igniting a firestorm of controversy. The clause seemed to undercut not only any argument for military action against Iran but also the Bush administration's international campaign for sanctions against that country. President George W. Bush called the language "eye-popping," all the more so because it came "despite the fact that Iran was testing missiles that could be used as a delivery system and had announced its resumption of uranium enrichment."[1]

This case study is the story of how intelligence and policy disconnected. On one hand, those who produced the estimate were proud of the tradecraft that went into it, and its main conclusion stood the test of time. Yet the furor over the public release of its key judgments left policy officials feeling blindsided. As the president himself put it: "The NIE had a big impact—and not a good one."[2] How that disconnect came to be and what lessons it suggests for future best practices are the subjects of this case.

A footnote to that first sentence added the following caveat: "For the purposes of this Estimate, by 'nuclear weapons program' we mean Iran's nuclear weapon design and weaponization work and covert uranium conversion-related and uranium enrichment-related work; we do not mean Iran's declared civil work related to uranium conversion and enrichment." And the second clause of the KJs added the companion judgment to the first: "We also assess with moderate- to-high confidence that Tehran at a minimum is keeping open the option to develop nuclear weapons."

Yet both the second statement and footnote were lost in the subsequent furor. It was precisely that "civil" nuclear program referred to in the footnote that was the target of the administration's campaign lest Iran take itself to the brink of a nuclear weapons capacity through purportedly "peaceful" enrichment programs. A UN Security Council resolution in June 2006 had demanded that Iran stop its enrichment activities, and in December another resolution imposed sanctions on Iran. Any halt in Iran's "nuclear weapons program" did little to ease the policy concerns about the possible military implications of its civilian nuclear program, especially its efforts to enrich uranium. The shouting over that eye-popping first clause drowned out the more nuanced findings contained in the balance of the estimate.

a.Unless noted, all the quotes from the estimate itself in this case are from the NIE's unclassified key judgments and are available at http://www.dni.gov/press_releases/20071203_release.pdf. The release version is reproduced in Appendix A.

The controversy over the estimate was rife with ironies. For those taken aback by that first clause, the irony was that the estimate attributed the Iranian decision to halt its nuclear weapons program precisely to the international pressure that the conclusion seemed to undercut: "Our assessment that Iran halted the program in 2003 primarily in response to international pressure indicates Tehran's decisions are guided by a cost-benefit approach rather than a rush to a weapon irrespective of the political, economic, and military costs." While the drafters intended that conclusion as positive—diplomacy can work—that is not the spin the story acquired.

For the NIC and the Intelligence Community, the immediate irony was that the estimate, and the key judgments, were meticulous in many respects, and NIC leaders had worked hard to improve both the process and product of NIEs after the disaster of the October 2002 estimate about Saddam Hussein's weapons of mass destruction (WMD). The declassified KJs incorporated a text box from the body of the estimate that carefully explained what the NIC meant by such words of subjective probability as "likely" or "probably" or "almost certainly," as well as judgments like "high confidence." Beyond more clarity in language, the NIC had also sought more rigor in process, especially by requiring formal reviews by the major collectors of the sources included in the estimate. And, the furor notwithstanding, the primary findings of the 2007 NIE were neither retracted nor superseded, and were in fact reiterated by senior intelligence officials, including the director of national intelligence (DNI), many times through early 2012. New information and new scrubs of older information tended to confirm the judgment.

What is most striking about the case is how separate the intelligence "tribe" or culture was from policy. The corresponding lesson is that intelligence needs to carefully consider the circumstances surrounding an NIE or other intelligence estimate with a document of record quality. (Several other lessons are laid out in the conclusions.) The NIC's 2005 findings were on the record, and Congress had asked for the estimate, so the new finding was bound to be compared with the old. In those circumstances, with only some benefit of hindsight, it is hard to imagine that intelligence officials did not anticipate the effect of that first clause even if the KJs did not become public.

That anticipation would have led the NIC down either of two paths. Instead of defining the issue very narrowly and without context, the NIE might have addressed what its title implied—*all* of Iran's nuclear intentions and capabilities, both military *and* civilian. After all, the question on the minds of policymakers was broad, not narrow—"How worried should we be about Iranian nuclear activities?" The broader scope would have enabled an overarching discussion that could have included an update of the 2005 NIE, and it would have avoided stark language ripe for misinterpretation. If a comprehensive estimate were deemed impossible, perhaps for reasons of complexity, then at a minimum the KJs should have opened with a flashing light warning of what the estimate was not about—Iran's "civil" nuclear programs that had earned Iran censure from the International Atomic Energy Agency and sanctions from the United Nations and were the main objects of US policy.

The Controversy

The NIE's Specific Conclusions Were Repeated Long after 2007

Gen. Ronald Burgess, director of the Defense Intelligence Agency, to *Voice of America*, 2010:

The bottom line assessments of the NIE still hold true. We have not seen indication that the government has made the decision to move ahead with the program. But the fact still remains that we don't know what we don't know.[a]

With the exception of two barely noticeable changes in word order, this exactly duplicated Clapper's statement on the same topic before the Senate Armed Services Committee in 2011.[b]

DNI James Clapper before Congress, January 2012:

We assess Iran is keeping open the option to develop nuclear weapons, in part by developing various nuclear capabilities that better position it to produce such weapons, should it choose to do so. We do not know, however, if Iran will eventually decide to build nuclear weapons.[c]

a. Gary Thomas, "US Defense Spy Chief: Iran Undecided on Nuclear Bomb", *Voice of America* website, 12 January 2010; available at http://www.voanews.com/english/news/US-Defense-Spy-Chief-Iran-Undecided-on-Nuclear-Bomb-81256887.html.
b. James R. Clapper, "Statement for the Record on the Worldwide Threat Assessment of the US Intelligence Community for the Senate Committee on Armed Services," 10 March 2011, 5.
c. James R. Clapper, "Unclassified Statement for the Record on the Worldwide Threat Assessment of the US Intelligence Community for the Senate Select Committee on Intelligence," 31 January 2012, 6.

Iran's Nuclear Program in 2000

Iran ratified the nuclear Non-Proliferation Treaty (NPT) in 1968, and negotiated a safeguards agreement with the International Atomic Energy Agency (IAEA) in 1974.[a] Iran under the shah was a close American ally, and the United States helped with the country's civilian nuclear program. However, a 1974 special national intelligence estimate, or SNIE, concluded that despite that US role and despite the NPT and safeguards, "If [the shah] is alive in the mid-1980s . . . and if other countries [particularly India] have proceeded with weapons development we have no doubt Iran will follow suit."[3] Rumors of a renewed Iranian effort to acquire nuclear weapons reappeared in the mid-1980s, in the midst of the Iran-Iraq War, and again during the 1990s, but several IAEA inspections failed to uncover evidence of any weapons-related work. In 1992, for instance, after media reports about undeclared nuclear facilities, Iran invited IAEA inspectors and allowed them to visit all the sites they chose. The IAEA reported that all of what it had seen was consistent with the peaceful use of nuclear power. Long delayed, Iran's first nuclear power plant, the Bushehr I reactor, was finally completed with Russian assistance and officially opened in September 2011. There are apparently no plans to complete a second.

This relatively happy state of affairs changed dramatically in August 2002, when a dissident group, the National Council of Resistance of Iran, publicly revealed the existence of two new and undisclosed nuclear sites—a uranium enrichment facility at Natanz and a heavy-water production

a. The text of that agreement is available at https://www.iaea.org/sites/default/files/publications/documents/infcircs/1974/infcirc214.pdf.

facility at Arak. At the time, Iran's agreement with the IAEA only required new nuclear facilities to be disclosed six months before nuclear materials were introduced into them. In March 2003, the Institute for Science and International Security (ISIS) released an analysis, based on commercial satellite imagery, of ongoing construction at the Natanz site, which in the institute's assessment included two large underground "cascade halls" for the enrichment of uranium.[4] In June, the IAEA issued a report that stated:

> *Iran has failed to meet its obligations under its Safeguards Agreement with respect to the reporting of nuclear material, the subsequent processing and use of that material and the declaration of facilities where the material was stored and processed.*[5]

In September, the IAEA followed up with a resolution that demanded that Iran

> *remedy all failures identified by the Agency and cooperate fully with the Agency to ensure verification of compliance with Iran's safeguards agreement by taking all necessary actions by the end of October 2003.*[6]

In October 2003, Iran struck a deal with the so-called EU-3—France, Germany and Britain—agreeing to cooperate with the IAEA, suspend enrichment, and sign and implement an additional protocol as a confidence-building measure. In return, the Europeans affirmed Iran's right under the NPT to pursue a civilian nuclear program. However, in November 2003, the IAEA charged that Iran had "failed in a number of instances over an extended period of time to meet its obligations under its Safeguards Agreement with respect to the reporting of nuclear material and its processing and use, as well as the declaration of facilities where such material has been processed and stored." The report also indicated, though, that there was "no evidence" that the previously undeclared nuclear material and activities were related to a "nuclear weapons programme."[7]

On 18 December 2003, Iran and the IAEA signed the additional protocol to Iran's NPT safeguards agreement, granting IAEA inspectors greater authority in verifying the country's nuclear program.[8] Iran agreed to act as if the protocol were in force, making the required reports and allowing the required access, pending Iran's ratification of the protocol. In fact, Iran never ratified the protocol, but did observe its terms for about two years until suspending it in October 2005. In November 2004, the IAEA published a comprehensive list of Iran's specific breaches of its safeguards agreement, which it said amounted to a "pattern of concealment."[9] According to the 2007 NIE, it was sometime in "fall 2003" that Iran "halted its nuclear weapon program."

Assembling, and Reassembling, the NIE

The decision, made in late 2006, to write an NIE on Iran's nuclear weapons program stemmed from several motivations. One was simple housekeeping: the NIC felt it needed to update its assessment of Iran's progress as Tehran continued to move forward with its uranium enrichment program. As Thomas Fingar, the chair of the NIC and the deputy director of national intelligence for analysis, put it: "The combination of Iranian progress and intransigence naturally led to questions of the 'How long before Iran gets the bomb?' variety," which made it timely to update the assessment, all the more so since some of the information on which it was based was by then several years old.[a]

Moreover, Fingar was confident that the NIC was, as he put it,

> *ready for the "prime time" scrutiny the estimate was certain to receive. Changes that we had implemented over the preceding eighteen months were taking hold, and I had been quite*

a. This and the next quotation are from Thomas Fingar, *Reducing Uncertainty* (Stanford University Press, 2011), 116.

pleased by the tradecraft and quality of other products prepared under the auspices of the NIOs [national intelligence officers] for weapons of mass destruction and for the Middle East.

The final motivation came later. As members of Congress became concerned that the administration was preparing to go to war with Iran, they begin to call for NIEs, and the requirement for a "comprehensive National Intelligence Estimate on Iran" was included as part of the FY 2007 Defense Authorization Act. To make the congressionally mandated task more manageable, the NIC agreed to do a series of three Iran estimates, instead of a single, comprehensive one.

NIEs are produced through a painstaking—and sometimes painful—interagency process. That process begins with a request, sometimes, as in this case, from a senior policymaker or from Congress but other times generated by the NIC itself. One or sometimes two NIOs lead the process, preparing terms of reference for the document. Those terms typically are subjected to peer reviews within the NIC and also passed to the various other agencies for comment. With terms of reference agreed upon, the drafting begins. Sometimes the drafting is done within the NIC itself, but often an analyst is temporarily assigned to the NIC by another agency—most often the CIA—to do the drafting. The draft is reviewed within the NIC, and then subjected to what is called, perhaps with some euphemism, "coordination."[a] Each agency participating in the NIE reviews the draft independently, and then the agency representatives assemble to go over the draft line by line. In this case, there were several rounds of formal coordination, each one lasting several days.

The backdrop for the Iran estimate was the fiasco of the 2002 estimate on Iraq. In October 2002 the White House publicly released a CIAprepared "white paper" based on the NIE covering Iraq's WMD programs; it also declassified the KJs of the estimate.[10] The paper supported the administration's claim that Saddam had reconstituted a substantial WMD capability and thus became a central argument, especially directed at reluctant Democrats, in the congressional debate about going to war. When the allies found no WMD, the NIE's findings became searingly controversial. A bipartisan presidential commission that assessed the Intelligence Community's performance in the run-up to the Iraq war concluded that the Intelligence Community was "dead wrong in almost all of its pre-war judgments about Iraq's weapons of mass destruction . . . a major intelligence failure."[11] Another study, by the Senate Select Committee on Intelligence, accused the CIA's leadership of "succumbing to 'groupthink,' of being too cautious to slip spies into Iraq and of failing to tell policymakers how weak their information really was." It "did not encourage analysts to challenge their assumptions, fully consider alternative arguments, accurately characterize the intelligence reporting, or counsel analysts who lost their objectivity."[12]

The Iraq NIE impelled the NIC to make "fundamental changes in the way the IC prepares and presents analytical findings."[13] Accordingly, the 2007 Iran estimate contained a box that carefully explained what the NIC meant by such words as "likely" or "probably" or "almost certainly," as well as judgments like "high confidence." In 2002, different intelligence agencies had given different weights to the various sources. As a result, beyond more clarity in language, the NIC also sought to introduce more rigor into the process, in particular by requiring the major intelligence collectors to formally review any of their sources that were included in the estimate. Critically, since much of controversy over the Iraq NIE had focused on the white paper, the NIC was determined not to repeat that experience. The estimate and KJs would stand on their own. The 2007 NIE on Iran's nuclear program was the highest-profile product of that reform to emerge from the community at the time.

a. At one such session in the 1990s, a NIC editor was present at a coordination session. In the heat of debate, the representative of one of the agencies present turned on him, saying: "Why are you here? Who do you represent?" His response: "I represent the English language." And so he did.

The penultimate draft of the estimate was delivered to Fingar in early June 2007. According to him, "Its judgments were essentially the same as those found in a 2005 Memorandum to Holders [and] essentially reconfirmed, albeit with somewhat greater clarity, the judgments of the 2005 update."[a, 14] The conclusion of the 2005 memorandum, confirmed in the 2007 draft, was: "Iran conducted a clandestine uranium enrichment program for nearly two decades in violation of its IAEA safeguards agreement, and despite its claims to the contrary, we assess that Iran seeks nuclear weapons."[15] The 2007 draft was ready for the last step in the NIE process—consideration and approval by the heads of the intelligence agencies, the National Intelligence Board (NIB)—when new information called for a halt in the process.

According to Fingar, "The years-long effort to acquire additional intelligence began to produce significant new streams of information in the first half of 2007. At first, we did not know exactly what we had because the new information had not yet been evaluated and cross-checked to determine whether it was reliable."[16] The NIE team went back and reevaluated its work in light of this new information, which entailed some delay. In Fingar's words, "Those who had demanded and were expecting a new estimate on Iran's nuclear capabilities were not happy when told that we would have to delay completion until we had evaluated and, as appropriate, incorporated the new information."[17] Fingar and the lead NIO for the estimate, NIO for Weapons of Mass Destruction Vann Van Diepen, met over the next several weeks with several members of Congress, some of them more than once.

The new information required another zero-based scrub of information and assessments. New information was assessed in light of old, and old assessments revisited in light of new information. One special concern was that the new information might be Iranian disinformation. That information was checked and rechecked. In keeping with the new procedures, the estimate, which ran to 140 pages and 1,500 source notes, included an annex with alternative hypotheses about what the new information might mean for Iranian intentions and capabilities. As a final check before the NIB meeting, Fingar asked his Analytic Integrity and Standards Staff to independently review the draft.

The director of national intelligence, Michael McConnell, had promised Congress the estimate by the end of November, and the NIB met on 27 November. The meeting began with an explicit decision not to declassify and release either the estimate or its KJs. An October memorandum from DNI McConnell had set as policy that KJs should not be declassified, and he had made that point in speaking to journalists two weeks before the NIB meeting.[b, 18] Thus, the meeting proceeded on the assumption that what was being reviewed was not a public document but rather a classified one intended for senior policymakers who understood the issues well.

On the whole, the NIB regarded the draft estimate as reconfirming previous estimates—with one very significant exception. That exception was the halt in the weaponization program in 2003. The board felt that judgment was so important that it should be the lead sentence, followed immediately by the companion judgment that, at a minimum, Iran was keeping its options open to develop nuclear weapons. Calling attention to a changed assessment was also consistent with the new requirements spelled out in Intelligence Community Directive 203: Analytic Standards.[c]

The approved estimate was briefed to the president on 28 November and delivered to the executive branch and to Congress on Saturday, 1 December.

a. A "Memorandum to Holders" is an update of a previous estimate, one that takes into account new information but does not attempt a complete reassessment of all previous intelligence and assessments on the subject.

b. The McConnell memorandum is "Guidance on Declassification of National Intelligence Estimate Key Judgments," dated 24 October 2007, and is available at http://www.fas.org/irp/dni/nie-declass.pdf. For McConnell's quote to the press, see Shane Harris, "The Other About-Face on Iran," *National Journal* 39, no. 50–52 (15 December 2007): 54–55. Also available on author's website at http://shaneharris.com/magazinestories/other-about-face-on-iran.

c. That directive, effective 21 June 2007, is available at http://www.fas.org/irp/dni/icd/icd-203.pdf.

The Firestorm

Notwithstanding McConnell's October memo and the NIB decision, the president decided over the weekend to declassify the key judgments. From Fingar's perspective, there were two grounds for that decision: One could be summarized as it was "the right thing to do."[19] Because the United States had for years used intelligence assessments in seeking to persuade other nations to act to prevent Iran from getting the bomb, it had some responsibility to tell others that it had changed its assessment about one key part of Iran's nuclear program.

The other was less high-minded and more low-down Washington. In the president's words, "As much as I disliked the idea, I decided to declassify the key findings so that we could shape the news stories with the facts."[20] Translated, that meant "The KJs may leak anyway, so let's try to control the damage." Or as Vice President Cheney put it to *Politico* on 5 December, "There was a general belief—that we all shared—that it was important to put it out, that it was not likely to stay classified for long, anyway. Everything leaks."[21] From the perspective of Stephen Hadley, the president's national security advisor, the "2005 NIE and its conclusions were on the public record. Even if the new estimate didn't immediately leak, members of Congress were bound to compare it with the 2005 version, provoking charges that the administration was 'withholding information.'"[22] The declassified KJs were released on Monday, the 3rd.

In the ensuing public debate, the first clause of the KJs dominated everything else, and people tailored it to fit their particular cloth. Iran's president, Mahmoud Ahmadinejad, was jubilant and immediately called the NIE a "great victory" for his country.[23] President Bush noted that momentum for fresh sanctions faded among the Europeans, Russians, and Chinese, and he quoted New York Times journalist David Sanger about the paradox of the estimate:

> *The new intelligence estimate relieved the international pressure on Iran—the same pressure that the document itself claimed had successfully forced the country to suspend its weapons ambitions.*[24]

Administration critics seized on the estimate as evidence the administration had hyped the Iranian threat, just as it had the Iraqi threat in the run-up to war.[25] The president summed up his own puzzlement:

> *I don't know why the NIE was written the way it was. I wonder if the intelligence community was trying so hard to avoid repeating its mistake on Iraq that it had underestimated the threat from Iran. I certainly hoped intelligence analysts weren't trying to influence policy. Whatever the explanation, the NIE had a big impact—and not a good one.*[26]

Supporters of the administration ranged from puzzled to angry. Michael Hayden, the CIA director, colorfully describes one reaction:

> *I had* [Douglas] *Feith* [the undersecretary of defense for policy] *and two or three others after me . . . They were blaming Vann Van Diepen for writing it and Tom Fingar. I said, "There's two guys who wrote it for me and I know them very well because I had their asses in my office for several complete afternoons… playing stump the dummy . . . saying, 'Prove it!' And they did."*[27]

For other supporters the NIE was both politicized and distorted. In the words of John Bolton, former Bush ambassador to the UN,

> *This was a sin either of commission or omission. If the intelligence community intended the NIE's first judgment to have policy ramifications—in particular to dissuade the Bush administration from a more forceful policy against Iran—then it was out of line, a sin of commission. If, on the other hand, Mr. Mc-*

Connell and others missed the NIE's explosive nature, then this is at best a sin of omission. . . Does he believe in fact that the first sentence is the NIE's single most important point? If not, why was it the first sentence?[28]

At a minimum, the quick release of the KJs left the administration little time to "shape the news stories with the facts," as the president had put it. Any plan for a careful rollout was left in tatters. Moreover, with the original KJs already released in their classified form, there was little scope to do something different in a public version, for to do so would only have been to repeat the debacle of the 2002 white paper. "Weeks before the estimate was finalized," Fingar recalled, "senior officials in [the administration and Congress] were told that…the IC might change its judgment . . . on the weaponization portion of the program. Not many people in either branch were told this, but all who were briefed were told the same thing."[29] From Hadley's perspective, however, the NIE's conclusions regarding the status of Iran's weaponization program were only finalized a week before the estimate's release.[30]

Probably that first clause was simply too arresting. Fingar and others at the NIC felt hung out to dry. Proud of the tradecraft that had gone into the estimate, Fingar observed that despite the preventive strategy, "For the next several months [following the release of the key judgments], spin and fantasy replaced displaced serious discussions of the NIE's findings or tradecraft."[31] On Monday, the 3rd, McConnell was out of town on a long-planned trip, so his deputy, Donald Kerr, briefed the press in the afternoon, accompanied by Fingar, Van Diepen, and CIA Director Hayden, who had asked to be there because of the large role that CIA analysts had played in the process.[32] Later that same afternoon, National Security Advisor Hadley briefed.[33]

Fingar outlined what he expected to be the focus of the briefing. It would highlight

the NIE's higher level of confidence that Iran had conducted a secret program; had lied about the program to the International Atomic Energy Agency, the U.N. Security Council, and the so-called EU-3 negotiators…; and was still capable of producing enough highly enriched uranium for a nuclear device within the same time frame . . . as had been assessed in previous estimates[a] *. . . even though the Intelligence Community now assessed that Iran had halted the weaponization program in 2003, it had not changed the timeline for when Iran would be capable of producing enough highly enriched uranium for a nuclear device. This was the pacing element in Iran's program.*[34]

And indeed Hadley did start his description of the NIE with the covert program. The questions, however, went straight to why the government had been wrong for two years and why the president had hyped the threat from Iran. That "eye-popping declaration" the president had described simply dominated the public reaction.

From Hadley's perspective, the affair was

a Greek tragedy, one that couldn't be avoided. The document was not written to be public. So Mike [McConnell] comes in with the estimate and the change of view from 2005. He says this can't be made public. But the problem was that the 2005 conclusion was on the public record, so when the estimate went to the Hill, there were bound to be cries that the administration was withholding evidence, that it was again trying to manipulate public opinion.

So the key judgments have to be made public. Mike takes the document away and comes back with very minor changes, the proverbial "happy changed to glad"' because the NIE was approved as written. Then it comes to me. I'm caught. I can't rewrite it because then Congress would compare the public version with the classified one, and the manipulation charge would be raised again. But if the KJs had

a. The timeline was perhaps as early as 2009, more likely the first half of the next decade.

been written from the beginning as a public document, they would have been written very differently.[35]

Other flaps over the estimate were minor by comparison to that eye popper first clause. The assessment's conclusion that Tehran had halted its weapons program "in response to international pressure" sparked some controversy. Henry Kissinger, among others, pointed to the timing of the program's suspension as suggesting another possible motivation for Iranian caution in 2003:

When Iran halted its weapons program and suspended efforts at enriching uranium in February 2003, America had already occupied Afghanistan and was on the verge of invading Iraq, both of which border Iran. The United States justified its Iraq policy by the need to remove weapons of mass destruction from the region. By the fall of 2003, when Iran voluntarily joined the Additional Protocol for Nuclear Non-Proliferation, Saddam Hussein had just been overthrown. Is it unreasonable to assume that the ayatollahs concluded that restraint had become imperative?[36]

The reversibility of Tehran's purported decision to suspend its weapons program was also a point of criticism. If suspending the program was Tehran's response to "the fear engendered by the swift US conquest of Iraq in the wake of our swift victory in Afghanistan," how might the situation in 2008—"with our military forces bogged down in both Iraq and Afghanistan and the President a lame duck who has lost control of Congress"—figure into Iranian decisionmaking?[37] If it took the community four years to detect that the program had gone into hiatus, how long would it take to learn of its resumption? Indeed, the NIC was not sure it would quickly detect a restarted weapons program.

The estimate also came in for criticism for failing to mention Iran's ballistic missile programs, which, it was argued, only made sense if the products were ultimately to be tipped with nuclear warheads.[a]

a. See, for instance, James Phillips, "The Iran National Intelligence Estimate: A Comprehensive Guide to What Is Wrong with the NIE," Heritage Foundation Backgrounder No. 2098 (11 January 2008).

Lessons for the Future

In retrospect, Bolton's critique is overheated but not wrong: "Does [the NIC] believe in fact that the first sentence is the NIE's single most important point? If not, why was it the first sentence?" It was there because of the NIC's own rules, its revised requirements of tradecraft. In retrospect, it is hard to believe that those responsible for the estimate did not anticipate the effect of that first clause—on Congress if not the general public, and even if the KJs were not declassified. Hadley is right: the NIE had become a "Greek tragedy." But that was only true once the NIE had been released, not before. Despite the continued reaffirmations of the NIE's specific conclusion, Kissinger was also on the mark when he wrote of "the extraordinary spectacle of the president's national security advisor obliged to defend the president's Iran policy against a National Intelligence Estimate."[38] What can the Intelligence Community do differently to avoid the kind of reception that greeted the 2007 Iran NIE?

Context is Critical

Then-DNI McConnell drew two lessons from the experience of the 2007 NIE:

> *One, always try not to have unclassified key judgments, and [two], when you write the story, because you may have unclassified key judgments when you're in the situation, write it with full context. Don't allow the press or the political rhetoric to take it out of context. From that day on, I instructed, "When we do key judgments, it has to tell the whole story in context."*[39]

Fingar agrees, noting that there were worries that "the key judgment would leak and that its interpretations would be distorted if it were not put in the context of the other judgments contained in the estimate."[40] Despite these concerns, the context provided for the most important key judgment, the one reflecting the biggest change in the IC's understanding of the Iranian nuclear problem, was clearly not enough—surely not for readers not steeped in the issues—to clearly explain what the revised assessment both meant and did not mean. This shortfall may best be seen in the failure of the NIE's key judgments to anywhere articulate the key fact that it was the accumulation of fissile material that would determine the speed at which Iran could achieve a nuclear capability, and not the well-understood engineering chore of designing the weapon itself.

With the benefit of hindsight, if the NIE were not a comprehensive one about all of Iran's nuclear activities, then at least the scope note reproduced in the KJs should have opened with a flashing light warning of what the estimate was not about—Iran's "civil" nuclear programs that had earned it censure from the IAEA and sanctions from the United Nations. Instead, while the note detailed the time frame and questions for its subject—Iran's nuclear weaponization and related enrichment—it left itself open to a broader interpretation by advertising itself as an "assessment of Iranian nuclear intentions

and capabilities." The fourth major point of the KJs does refer directly to "Iran's uranium enrichment program," noting that "Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons, if a decision is made to do so."

For a time in the 1990s, the KJs were called the "president's summary." The name was mostly marketing, on the theory that if the president didn't read the summary, at least assistant secretaries might think they should. However, the summary was not produced through the usual coordination; rather the NIC vice chairman and his immediate analytic staff wrote it. They promised that the summary would be entirely faithful to the estimate but might not precisely parallel it in structure. Then, the purpose was to craft the summary so it might better catch the interests and attention of senior policy officials. That purpose might, however, be extended to providing more context for less specialized readers—perhaps including the public.

Think in Advance about Declassification

The Greek tragedy of this case stemmed from the eleventh-hour decision to declassify the KJs after the estimate had been written, coordinated, and approved on the understanding that it would be a classified document, one intended for senior policymakers who knew the issues well. For that reason, tradecraft—leading with what had changed in the community's assessment—trumped context. Yet Cheney was probably right: policy toward Iran was controversial enough, and the opening clause eye-popping enough, that the clause almost surely would have leaked in any case. If that had happened, then the main effect of continued classification would have been to shackle the administration and the community in trying to clarify what was meant. Only if the KJs had been written from the start in the expectation that they would become public could the drafters have been sensitive to language and context as it would be understood by nonspecialists and those with axes to grind.

The dilemma over whether to declassify will continue. The precedents for declassifying have been set, and NIEs are handy intelligence products for members of Congress to request (if not necessarily read), so their audience is wider. Moreover, as painstakingly prepared statements of where the intelligence agencies agree and disagree, they are "the government's" assessment of major issues. They thus acquire a kind of document-for-the-record quality. For all these reasons, the safest bet is to assume the KJs will be made public, in one way or another, and to write them accordingly. This is not an argument for pulling punches or sugarcoating bad news, only for making sure there is enough context so that KJs cannot be too easily abused.

Experiment with Ways of Tying Judgments of Uncertainty to Consequences

In reflecting on the 2007 NIE, Steven Hadley made the intriguing suggestion that the NIC might reconsider its approach to expressing certainty and uncertainty, especially for the most important and uncertain issues a president faces.[41] Instead of expressions like "we judge with medium confidence," Hadley recommended linking assessments of analytical confidence to the relative consequences of the issues being assessed to the United States (or whatever context, e.g., global economy).

To illustrate, Hadley suggested the use of a pie chart that represented all the United States would like to know about an issue, with each slice sized according to the topic's relative importance or relative impact on US concerns. In this case, the "Is Iran weaponizing?" slice would have been significant but smaller than the "Is Iran enriching?" slice . . . And the slices might show clearly all the IC did or did not know. Another approach might be the use of a scattergram in which the Y axis would shown likelihood of an event and the X axis would show the importance of the event.[a]

a. The suggestion calls to mind the distinctions in thinking between two European thinkers about wafare, Carl von Clausewitz and Antoine-Henri, Baron de Jomini. The former believed that, in making strategy, uncertainty could only be assessed but not eliminated. The latter believed that strategy constituted a series

Avoid Surprising Administrations

Intelligence rightly cherishes its independence from administrations in power. It is there to support policy, and so is part of the team but not "on the team" in a political sense. Yet rightly or wrongly, the Bush administration felt blindsided in this case. In this case, the administration surely would have preferred no estimate to the one it got, and it might have preferred no estimate at all. The congressional requirement, though, ensured that there would be an estimate. The case underscores the need for some consistent channel—perhaps between the DNI or NIC chair and the national security advisor—to give administrations warning of what subjects are being assessed and what assessments are emerging. Administrations have no claim to tell intelligence what to write, but they do have more legitimacy in influencing what intelligence writes about. After all, NIEs, like other intelligence products, are meant to support policy officials who have to take actions and make decisions.

Formal depictions of the intelligence cycle always imply that intelligence is an input for later policy deliberations. In fact, though, the processes occur in parallel: policy officials frame and debate policy, while intelligence builds and improves its estimates. In those circumstances, the policy debate should be constantly informed by intelligence (and intelligence should have windows into what is being discussed and thus what intelligence might be relevant). The fact that the DNI is now responsible for the President's Daily Brief and the NIC is involved at least means that there is a channel for giving senior officials, including the president, word about what is in the estimates pipeline and for getting their suggestions for what topics should be explored. In this case, the congressional requirement for an estimate required the NIC and the White House to consult. Surely the NIE conclusions should come as no surprise.

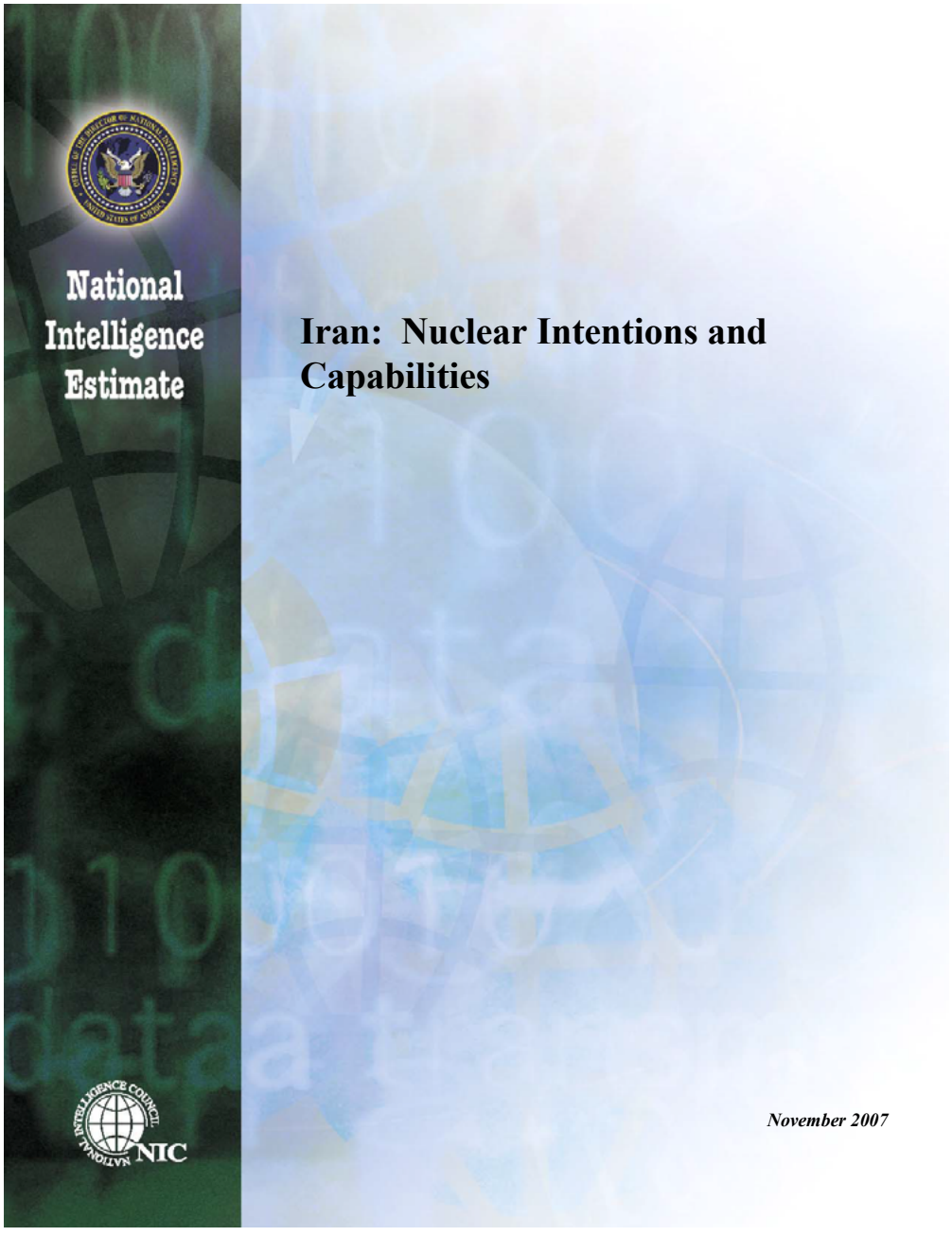
In the end, for better or for worse, the nation is living in one of the most politically divided and partisan eras in American history; this was true in 2007 and is even more so today. Politics hardly ends at the water's edge any more, and there is little evidence to suggest that this is likely to change any time soon. This state of affairs makes the Intelligence Community's job all the more challenging. Any intelligence findings, leaked or deliberately released, will be scrutinized by readers whose interest is not to better understand the subject matter but rather to identify opportunities for taking political advantage of what is discussed.

Intelligence analysts and managers cannot change this reality, but it requires them to pay attention to how their conclusions are written, argued, and structured and the context in which they will appear so as to reduce as much as possible the potential for partisan manipulation of thier conclusions. There is no way to bulletproof an estimate, particularly one on a controversial subject, but the lessons of this case suggest some things can legitimately be done prevent unwanted consequences. In one sense, the conclusion of the 2007 NIE was not painful; it was welcome. But because of the collateral damage it caused, it was not welcomed.

❖ ❖ ❖

of problems with definite solutions derived with mathematical logic. A fuller discussion of the distinction and its implications for US intelligence can be found in Appendix B.

Appendix A
Unclassified Key Judgments



OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE

The Director of National Intelligence serves as the head of the Intelligence Community (IC), overseeing and directing the implementation of the National Intelligence Program and acting as the principal advisor to the President, the National Security Council, and the Homeland Security Council for intelligence matters.

The Office of the Director of National Intelligence is charged with:

- Integrating the domestic and foreign dimensions of US intelligence so that there are no gaps in our understanding of threats to our national security;
- Bringing more depth and accuracy to intelligence analysis; and
- Ensuring that US intelligence resources generate future capabilities as well as present results.

NATIONAL INTELLIGENCE COUNCIL

Since its formation in 1973, the National Intelligence Council (NIC) has served as a bridge between the intelligence and policy communities, a source of deep substantive expertise on critical national security issues, and as a focal point for Intelligence Community collaboration. The NIC's key goal is to provide policymakers with the best, unvarnished, and unbiased information—regardless of whether analytic judgments conform to US policy. Its primary functions are to:

- Support the DNI in his role as Principal Intelligence Advisor to the President and other senior policymakers.
- Lead the Intelligence Community's effort to produce National Intelligence Estimates (NIEs) and other NIC products that address key national security concerns.
- Provide a focal point for policymakers, warfighters, and Congressional leaders to task the Intelligence Community for answers to important questions.
- Reach out to nongovernment experts in academia and the private sector—and use alternative analyses and new analytic tools—to broaden and deepen the Intelligence Community's perspective.

NATIONAL INTELLIGENCE ESTIMATES AND THE NIE PROCESS

National Intelligence Estimates (NIEs) are the Intelligence Community's (IC) most authoritative written judgments on national security issues and designed to help US civilian and military leaders develop policies to protect US national security interests. NIEs usually provide information on the current state of play but are primarily "estimative"—that is, they make judgments about the likely course of future events and identify the implications for US policy.

The NIEs are typically requested by senior civilian and military policymakers, Congressional leaders and at times are initiated by the National Intelligence Council (NIC). Before a NIE is drafted, the relevant NIO is responsible for producing a concept paper or terms of reference (TOR) and circulates it throughout the Intelligence Community for comment. The TOR defines the key estimative questions, determines drafting responsibilities, and sets the drafting and publication schedule. One or more IC analysts are usually assigned to produce the initial text. The NIC then meets to critique the draft before it is circulated to the broader IC. Representatives from the relevant IC agencies meet to hone and coordinate line-by-line the full text of the NIE. Working with their Agencies, reps also assign the level of confidence they have in each key judgment. IC reps discuss the quality of sources with collectors, and the National Clandestine Service vets the sources used to ensure the draft does not include any that have been recalled or otherwise seriously questioned.

All NIEs are reviewed by National Intelligence Board, which is chaired by the DNI and is composed of the heads of relevant IC agencies. Once approved by the NIB, NIEs are briefed to the President and senior policymakers. The whole process of producing NIEs normally takes at least several months.

The NIC has undertaken a number of steps to improve the NIE process under the DNI. These steps are in accordance with the goals and recommendations set out in the SSCI and WMD Commission reports and the 2004 Intelligence Reform and Prevention of Terrorism Act. Most notably, over the last year and a half, the IC has:

- ***Created new procedures to integrate formal reviews of source reporting and technical judgments.*** The Directors of the National Clandestine Service, NSA, NGA, and DIA and the Assistant Secretary/INR are now required to submit formal assessments that highlight the strengths, weaknesses, and overall credibility of their sources used in developing the critical judgments of the NIE.

- ***Applied more rigorous standards***. A textbox is incorporated into all NIEs that explains what we mean by such terms as "we judge" and that clarifies the difference between judgments of likelihood and confidence levels. We have made a concerted effort to not only highlight differences among agencies but to explain the reasons for such differences and to prominently display them in the Key Judgments.

Scope Note

This National Intelligence Estimate (NIE) assesses the status of Iran's nuclear program, and the program's outlook over the next 10 years. This time frame is more appropriate for estimating capabilities than intentions and foreign reactions, which are more difficult to estimate over a decade. In presenting the Intelligence Community's assessment of Iranian nuclear intentions and capabilities, the NIE thoroughly reviews all available information on these questions, examines the range of reasonable scenarios consistent with this information, and describes the key factors we judge would drive or impede nuclear progress in Iran. This NIE is an extensive reexamination of the issues in the May 2005 assessment.

This Estimate focuses on the following key questions:

- What are Iran's intentions toward developing nuclear weapons?
- What domestic factors affect Iran's decisionmaking on whether to develop nuclear weapons?
- What external factors affect Iran's decisionmaking on whether to develop nuclear weapons?
- What is the range of potential Iranian actions concerning the development of nuclear weapons, and the decisive factors that would lead Iran to choose one course of action over another?
- What is Iran's current and projected capability to develop nuclear weapons? What are our key assumptions, and Iran's key chokepoints/vulnerabilities?

This NIE does *not* assume that Iran intends to acquire nuclear weapons. Rather, it examines the intelligence to assess Iran's capability and intent (or lack thereof) to acquire nuclear weapons, taking full account of Iran's dual-use uranium fuel cycle and those nuclear activities that are at least partly civil in nature.

This Estimate does assume that the strategic goals and basic structure of Iran's senior leadership and government will remain similar to those that have endured since the death of Ayatollah Khomeini in 1989. We acknowledge the potential for these to change during the time frame of the Estimate, but are unable to confidently predict such changes or their implications. This Estimate does not assess how Iran may conduct future negotiations with the West on the nuclear issue.

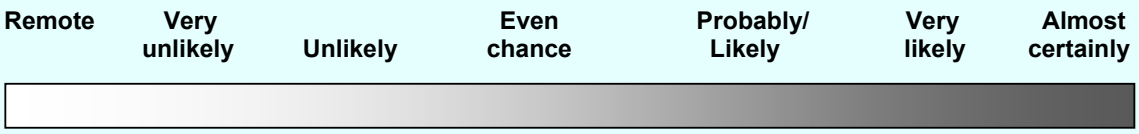
This Estimate incorporates intelligence reporting available as of 31 October 2007.

What We Mean When We Say: An Explanation of Estimative Language

We use phrases such as *we judge, we assess,* and *we estimate*—and probabilistic terms such as *probably* and *likely*—to convey analytical assessments and judgments. Such statements are not facts, proof, or knowledge. These assessments and judgments generally are based on collected information, which often is incomplete or fragmentary. Some assessments are built on previous judgments. In all cases, assessments and judgments are not intended to imply that we have "proof" that shows something to be a fact or that definitively links two items or issues.

In addition to conveying judgments rather than certainty, our estimative language also often conveys 1) our assessed likelihood or probability of an event; and 2) the level of confidence we ascribe to the judgment.

Estimates of Likelihood. Because analytical judgments are not certain, we use probabilistic language to reflect the Community's estimates of the likelihood of developments or events. Terms such as *probably*, *likely, very likely,* or *almost certainly* indicate a greater than even chance. The terms *unlikely* and *remote* indicate a less then even chance that an event will occur; they do not imply that an event will not occur. Terms such as *might* or *may* reflect situations in which we are unable to assess the likelihood, generally because relevant information is unavailable, sketchy, or fragmented. Terms such as *we cannot dismiss, we cannot rule out,* or *we cannot discount* reflect an unlikely, improbable, or remote event whose consequences are such that it warrants mentioning. The chart provides a rough idea of the relationship of some of these terms to each other.



Confidence in Assessments. Our assessments and estimates are supported by information that varies in scope, quality and sourcing. Consequently, we ascribe *high*, *moderate*, or *low* levels of confidence to our assessments, as follows:

- *High confidence* generally indicates that our judgments are based on high-quality information, and/or that the nature of the issue makes it possible to render a solid judgment. A "high confidence" judgment is not a fact or a certainty, however, and such judgments still carry a risk of being wrong.
- *Moderate confidence* generally means that the information is credibly sourced and plausible but not of sufficient quality or corroborated sufficiently to warrant a higher level of confidence.
- *Low confidence* generally means that the information's credibility and/or plausibility is questionable, or that the information is too fragmented or poorly corroborated to make solid analytic inferences, or that we have significant concerns or problems with the sources.

Key Judgments

A. We judge with high confidence that in fall 2003, Tehran halted its nuclear weapons program[1]; we also assess with moderate-to-high confidence that Tehran at a minimum is keeping open the option to develop nuclear weapons. We judge with high confidence that the halt, and Tehran's announcement of its decision to suspend its declared uranium enrichment program and sign an Additional Protocol to its Nuclear Non-Proliferation Treaty Safeguards Agreement, was directed primarily in response to increasing international scrutiny and pressure resulting from exposure of Iran's previously undeclared nuclear work.

- We assess with high confidence that until fall 2003, Iranian military entities were working under government direction to develop nuclear weapons.

- We judge with high confidence that the halt lasted at least several years. (Because of intelligence gaps discussed elsewhere in this Estimate, however, DOE and the NIC assess with only moderate confidence that the halt to those activities represents a halt to Iran's entire nuclear weapons program.)

- We assess with moderate confidence Tehran had not restarted its nuclear weapons program as of mid-2007, but we do not know whether it currently intends to develop nuclear weapons.

- We continue to assess with moderate-to-high confidence that Iran does not currently have a nuclear weapon.

- Tehran's decision to halt its nuclear weapons program suggests it is less determined to develop nuclear weapons than we have been judging since 2005. Our assessment that the program probably was halted primarily in response to international pressure suggests Iran may be more vulnerable to influence on the issue than we judged previously.

B. We continue to assess with low confidence that Iran probably has imported at least some weapons-usable fissile material, but still judge with moderate-to-high confidence it has not obtained enough for a nuclear weapon. We cannot rule out that Iran has acquired from abroad—or will acquire in the future—a nuclear weapon or enough fissile material for a weapon. Barring such acquisitions, if Iran wants to have nuclear weapons it would need to produce sufficient amounts of fissile material indigenously—which we judge with high confidence it has not yet done.

C. We assess centrifuge enrichment is how Iran probably could first produce enough fissile material for a weapon, if it decides to do so. Iran resumed its declared centrifuge

[1] For the purposes of this Estimate, by "nuclear weapons program" we mean Iran's nuclear weapon design and weaponization work and covert uranium conversion-related and uranium enrichment-related work; we do not mean Iran's declared civil work related to uranium conversion and enrichment.

enrichment activities in January 2006, despite the continued halt in the nuclear weapons program. Iran made significant progress in 2007 installing centrifuges at Natanz, but we judge with moderate confidence it still faces significant technical problems operating them.

- We judge with moderate confidence that the earliest possible date Iran would be technically capable of producing enough HEU for a weapon is late 2009, but that this is very unlikely.

- We judge with moderate confidence Iran probably would be technically capable of producing enough HEU for a weapon sometime during the 2010-2015 time frame. (INR judges Iran is unlikely to achieve this capability before 2013 because of foreseeable technical and programmatic problems.) All agencies recognize the possibility that this capability may not be attained until *after* 2015.

D. Iranian entities are continuing to develop a range of technical capabilities that could be applied to producing nuclear weapons, if a decision is made to do so. For example, Iran's civilian uranium enrichment program is continuing. We also assess with high confidence that since fall 2003, Iran has been conducting research and development projects with commercial and conventional military applications—some of which would also be of limited use for nuclear weapons.

E. We do not have sufficient intelligence to judge confidently whether Tehran is willing to maintain the halt of its nuclear weapons program indefinitely while it weighs its options, or whether it will or already has set specific deadlines or criteria that will prompt it to restart the program.

- Our assessment that Iran halted the program in 2003 primarily in response to international pressure indicates Tehran's decisions are guided by a cost-benefit approach rather than a rush to a weapon irrespective of the political, economic, and military costs. This, in turn, suggests that some combination of threats of intensified international scrutiny and pressures, along with opportunities for Iran to achieve its security, prestige, and goals for regional influence in other ways, might—if perceived by Iran's leaders as credible—prompt Tehran to extend the current halt to its nuclear weapons program. It is difficult to specify what such a combination might be.

- We assess with moderate confidence that convincing the Iranian leadership to forgo the eventual development of nuclear weapons will be difficult given the linkage many within the leadership probably see between nuclear weapons development and Iran's key national security and foreign policy objectives, and given Iran's considerable effort from at least the late 1980s to 2003 to develop such weapons. In our judgment, only an Iranian political decision to abandon a nuclear weapons objective would plausibly keep Iran from eventually producing nuclear weapons—and such a decision is inherently reversible.

F. We assess with moderate confidence that Iran probably would use covert facilities—rather than its declared nuclear sites—for the production of highly enriched uranium for a weapon. A growing amount of intelligence indicates Iran was engaged in covert uranium conversion and uranium enrichment activity, but we judge that these efforts probably were halted in response to the fall 2003 halt, and that these efforts probably had not been restarted through at least mid-2007.

G. We judge with high confidence that Iran will not be technically capable of producing and reprocessing enough plutonium for a weapon before about 2015.

H. We assess with high confidence that Iran has the scientific, technical and industrial capacity eventually to produce nuclear weapons if it decides to do so.

Key Differences Between the Key Judgments of This Estimate on Iran's Nuclear Program and the May 2005 Assessment

2005 IC Estimate	2007 National Intelligence Estimate
Assess with high confidence that Iran currently is determined to develop nuclear weapons despite its international obligations and international pressure, but we do not assess that Iran is immovable.	Judge with high confidence that in fall 2003, Tehran halted its nuclear weapons program. Judge with high confidence that the halt lasted at least several years. (DOE and the NIC have moderate confidence that the halt to those activities represents a halt to Iran's entire nuclear weapons program.) Assess with moderate confidence Tehran had not restarted its nuclear weapons program as of mid-2007, but we do not know whether it currently intends to develop nuclear weapons. Judge with high confidence that the halt was directed primarily in response to increasing international scrutiny and pressure resulting from exposure of Iran's previously undeclared nuclear work. Assess with moderate-to-high confidence that Tehran at a minimum is keeping open the option to develop nuclear weapons.
We have moderate confidence in projecting when Iran is likely to make a nuclear weapon; we assess that it is unlikely before early-to-mid next decade.	We judge with moderate confidence that the earliest possible date Iran would be technically capable of producing enough highly enriched uranium (HEU) for a weapon is late 2009, but that this is very unlikely. We judge with moderate confidence Iran probably would be technically capable of producing enough HEU for a weapon sometime during the 2010-2015 time frame. (INR judges that Iran is unlikely to achieve this capability before 2013 because of foreseeable technical and programmatic problems.)
Iran could produce enough fissile material for a weapon by the end of this decade if it were to make more rapid and successful progress than we have seen to date.	We judge with moderate confidence that the earliest possible date Iran would be technically capable of producing enough highly enriched uranium (HEU) for a weapon is late 2009, but that this is very unlikely.

Appendix B Conveying Uncertainty: Two Schools of Thought

National estimates often are the exemplar of intelligence analysis dealing with more strategic and forward-looking mysteries, one for which the analysis begins where the information ends and uncertainty is inescapable.

In framing the task of doing, then communicating such estimates, it is useful to compare Carl von Clausewitz with his lesser-known contemporary strategist, Antoine-Henri, Baron de Jomini.[42] A true child of the Enlightenment, Jomini saw strategy as a series of problems with definite solutions. He believed that mathematical logic could derive "fundamental principles" of strategy, which if followed should mean for the sovereign that "nothing very unexpected can befall him and cause his ruin."[43]

By contrast, Clausewitz believed that unpredictable events were inevitable in war and that combat involved some irreducible uncertainty (or "friction"). He characterized war as involving "an interplay of possibilities, probabilities, good luck and bad" and argued that "in the whole range of human activities, war most closely resembles a game of cards."[44]

Intelligence, perhaps especially in the United States, talks in Clausewitzian terms, arguing that uncertainty, hence risk, can only be managed, not eliminated. Yet the shadow of Jomini is a long one over both war and intelligence. In fact, intelligence is still non-Clausewitzian in implying that uncertainty can be reduced, perhaps eliminated.

The theme runs back to Roberta Wohlstetter's classic *Pearl Harbor: Warning and Decision* (Palo Alto, CA, 1962), which paints a picture of "systemic malfunctions." There were plenty of indications of an impending attack, but a combination of secrecy procedures and divided organizations kept them from being assembled, examined together to form a clear warning. Had that happened, the attack might have been predicted.

So, too, the US report on 9/11 imposes a kind of Wohlstetter template, searching for signals that were present but not put together.[45] That they might have been is suggested in George Tenet's testimony to the 9/11 Commission that "in his world [intelligence] the system was blinking red."[46]

The table below summarizes the differences between the Jominian and Clausewitzian approaches:

Jominian	Clausewitzian
Goal is to eliminate uncertainty.	Goal is to assess uncertainty.
There is a "right" answer.	"Fog of war" is inescapable.
More information and better concepts narrow uncertainty.	Single-point, high-probability predictions are both unhelpful and inaccurate.
Large uncertainty indicates shortcomings in analysis.	Better analysis may identify more possible outcomes.

The Jominian approach pervades how analysis is done and taught. Most assessments, like NIEs, provide a "best" estimate or "key judgments." They may then set our alternatives or excursions, but the process tends to privilege probability over consequences, when in fact it is the combination of the two together that matters to policy. This emphasis on "best bets" also runs through familiar analytic techniques, like analysis of competing hypotheses (ACH). But "competition for what?" The usual answer is likelihood. Indeed, in his now-classic *The Psychology of Intelligence Analysis* (Washington DC, 1999), Richards Heuer explains that the original goal was to determine "Which of several possible explanations is the correct one? Which of several possible outcomes is the most likely one?" (95)

A true Clausewitzian approach would rest, instead, on three principles:

1. Confidence and probability are different, thus there is no reason not to be explicit about probabilities, even with low confidence.

2. Content of information matters as much as reliability, so, again, important information should not be excluded simply because it is deemed not reliable.

3. Perhaps most important, consequence matters, in evaluating information and in constructing alternatives, thus consequential possibilities should not be relegated to the sidelines because they are judged unlikely.

The resulting product would lay out, in effect, a probability distribution, not multiple answers but rather a single distribution. If consequence were deemed as important as likelihood, intelligence would produce a probability distribution in which consequential outcomes would receive attention not just as excursions, even if their probability was low or could not be assessed very clearly.

In looking at 379 declassified US NIEs, Friedman and Zeckhauser found but one example of this style of analysis. A 1990 NIE, *The Deepening Crisis in the USSR*, laid out on a single page four different "scenarios for the next year" in a simple figure.[47] Each was explained in several bullets, and then assigned a "rough probability." The scenario deemed most likely was presented first but not given any more discussion than the others. The NIE thus neglected neither probability nor consequence. It conveyed no sense that one scenario should be thought of as "best" or "correct." Nor did it require readers to parse the meaning of concepts like "significant," "serious," or "important" (even if those were elaborated in a glossary, as is now the practice for NIEs). In the end, it allowed readers to decide for themselves which possibilities deserved pride of place.

Will Policymakers Accept a Different Approach?

Yet the question of whether busy senior policymakers would sit still for a Clausewitzian approach is a fair one. The easy answer would be to try it as an experiment, for a handful of estimates on issues that are both important and very uncertain. Stephen Hadley's suggestion that the Intelligence Community consider alternative approaches for presenting uncertainty and for linking probabilities to consequences (see discussion on page 12) implies that policymakers would accept the approach.

Hadley's specific suggestion of using a pie chart to correlate the importance (or the seriousness of potential consequences of a development's actual occurrence) with confidence in a judgment about that issue, might have shown more clearly how much US intelligence knew about the key issues. It would have shown that the IC was relatively confident that weaponization had stopped, but it also would have shown that the IC knew less about and had less confidence in its judgment about the more consequential question concerning the status of enrichment.

Puzzles vs. Mysteries

In effect, in the case of the 2007 NIE, new information about weaponization provided the solution to a puzzle—where does Iran's weaponization program stand, or at least where did it stand circa 2003?

The state of Iran's enrichment program included both puzzles and mysteries.[48] The technical aspects could be thought of as puzzles: how many centrifuges with what capacity and so on? Yet the critical questions were mysteries: what did Iran intend with its enrichment program? What were the critical determinants of decisions about it? And, critically, how would Iran respond to various sticks and carrots offered by the international community?

With regard to weaponization, the NIE's solution to the "weaponization puzzle" inferred a conclusion to the mystery of the last question above: Iran's leaders had stopped, at least partly in response to international pressure.

Turning mysteries into puzzles is a temptation in analytic tradecraft. That was a conspicuous feature of the October 2002 NIE on Iraq. The question had narrowed to a puzzle: does Saddam have weapons of mass destruction or not? There was not much "Iraq" in the NIE; even the dissents turned on technical matters, like aluminum tubes.

A Clausewitzian approach can hardly eradicate that temptation, but it might help analysts more clearly distinguish between puzzles and mysteries in the issue they are assessing and serve as a check on neglecting important mysteries simply because we don't know much about them.

Endnotes

1. George W. Bush, *Decision Points* (Crown Publishers, 2010), 418.

2. Ibid., 419.

3. Prospects for Further Proliferation of Nuclear Weapons, SNIE 4-1-74, 23 August 1974. Available at http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB240/snie.pdf.

4. David Albright and Corey Hinderstein, "The Iranian Gas Centrifuge Uranium Enrichment Plant at Natanz: Drawing from Commercial Satellite Images," Institute for Science and International Security, 14 March 2003. Available at http://isis-online.org/publications/iran/natanz03_02.html.

5. International Atomic Energy Agency (IAEA), "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," 6 June 2003. Available at https://www.iaea.org/sites/default/files/gov2003-63.pdf.

6. IAEA, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran—Resolution Adopted by the Board on 12 September 2003." Available at https://www.iaea.org/sites/default/files/gov2003-69.pdf.

7. IAEA, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," 10 November 2003, 9–10. Available at http://www.iaea.org/Publications/Documents/Board/2003/gov2003-75.pdf.

8. IAEA, "Iran Signs Additional Protocol on Nuclear Safeguards," 18 December 2003. Available at https://www.iaea.org/newscenter/news/iran-signs-additional-protocol-nuclear-safeguards.

9. IAEA, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," 15 November 2004, 24. Available at https://www.iaea.org/sites/default/files/gov2004-83.pdf.

10. Director of Central Intelligence, *Iraq's Weapons of Mass Destruction Programs*, October 2002. Available at https://www.cia.gov/library/reports/general-reports-1/iraq_wmd/Iraq_Oct_2002.htm.

11. The Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, Report to the President of the United States, 31 March 2005.

12. This language is quoted from the DNI's annual threat briefing to Congress. See John D. Negroponte, Director of National Intelligence, *Threats, Challenges, and Opportunities for the U.S.—Annual Threat Assessment to the Senate Armed Services Committee*, 28 February 2006. Available online at http://2001-2009.state.gov/s/inr/rls/62787.htm.

13. Fingar, *Reducing Uncertainty*, 106.

14. Ibid., 116–17.

15. John D. Negroponte, Director of National Intelligence, *Threats, Challenges, and Opportunities for the U.S.—Annual Threat Assessment to the Senate Select Committee on Intelligence*, 2 February 2006. Available online at http://2001-2009.state.gov/s/inr/rls/61920.htm.

16. Fingar, *Reducing Uncertainty*, 117.

17. Ibid.

18. Ibid., 120.

19. Fingar, *Reducing Uncertainty*, 121.

20. Bush, *Decision Points*, 419.

21. Shane Harris, "The Other About-Face on Iran," *National Journal* 39, no. 50–52 (15 December 2007): 54–55.

22. Author interview with Stephen Hadley, 10 April 2012.

23. As quoted in "As the Enrichment Machines Spin on—Iran's Nuclear Programme," *The Economist* 386, no. 8565 (Feb 02, 2008): 30.

24. Bush, *Decision Points*, 419. The Sanger quote is also reproduced in David E. Sanger, *The Inheritance: The World Obama Confronts and The Challenges to American Power* (Random House, 2010), 24.

25. Robert S. Litwak, "Living with Ambiguity: Nuclear Deals with Iran and North Korea," *Survival* 50, no. 1 (2008).

26. Bush, *Decision Points*, 419.

27. Author interview with Michael Hayden, 14 October 2009.

28. John R. Bolton, "Our Politicized Intelligence Services," *Wall Street Journal*, 5 February 2008.

29. Fingar, *Reducing Uncertainty*, 120–21.

30. George W. Bush: "Press Briefing by National Security Advisor Stephen Hadley," 3 December 2007. Online by Gerhard Peters and John T. Woolley,*The American Presidency Project*. Available at http://www.presidency.ucsb.edu/ws/?pid=76098.

31. Fingar, *Reducing Uncertainty*, 123.

32. Donald M. Kerr, "Statement by the Principal Deputy Director of National Intelligence," 3 December 2007. Available at https://fas.org/irp/news/2007/12/ddni120307.pdf.

33. Hadley Press Briefing, 3 December 2007.

34. Fingar, *Reducing Uncertainty*, 122.

35. Author interview with Stephen Hadley, 10 April 2012.

36. Henry Kissinger, "Misreading the Iran Report," *Real Clear Politics*, 13 December 2007. Available at http://www.realclearpolitics.com/articles/2007/12/misreading_the_iran_report.html.

37. John McCreary and Richard A. Posner, "The Latest Intelligence Crisis," *Intelligence and National Security* 23, no. 3 (June 2008): 371–380.

38. Kissinger, "*Misreading the Iran Report*."

39. Author interview with Michael McConnell, 27 March 2009.

40. Fingar, *Reducing Uncertainty*, 221.

41. Hadley interview.

42. This discussion owes much to Jeffrey A. Friedman and Richard Zeckhauser, "Assessing Uncertainty in Intelligence," *Intelligence and National Security* 27, no.8 (1 December 2012) 824–47.

43. Antoine-Henri de Jomini, *The Art of War*, trans. C. G. Mendell and W. P. Craighill (Dover, 2007), 250.

44. Carl von Clausewitz, *On War*, trans. Michael Howard and Peter Paret (Princeton University Press, 1976), Book 1, chap. 7. For a nice comparison of Clausewitz and Jomini, see Mark T. Calhoun, "Clausewitz and Jomini: Contrasting Intellectual Frameworks in Military Theory," *Army History* 80 (December 2011): 22–37.

45. Formally, the National Commission on Terrorist Attacks Upon the United States, The 9/11 Commission Report (Washington, 2004), available at http://www.9-11commission.gov.

46. Ibid., 259.

47. Friedman and Zeckhauser, "*Assessing Uncertainty*," 832.

48. On the distinction between puzzles and mysteries, see Gregory F. Treverton, "Estimating Beyond the Cold War," *Defense Intelligence Journal* 3, no. 2 (Fall 1994); and Joseph S. Nye, Jr., "Peering into the Future," *Foreign Affairs* 77, no. 4 (July/August 1994): 82–93. For a popular version, see Treverton, "Risks and Riddles," *Smithsonian*, June 2007.