

Dr. Gary Samore, Vice President, Director of Studies, Council on Foreign Relations

I have been asked me to speak about the technical significance of the recently released National Intelligence Estimate (NIE) on Iran and its implications for diplomatic efforts to prevent or delay Iran from acquiring a nuclear weapons capability or nuclear weapons option. Note when I talk about a nuclear weapons “capability or option,” I mean the ability to produce sufficient quantities of highly enriched uranium (HEU) to support a nuclear weapons program, assuming that approximately 20-25 kilograms of HEU is required for a simple nuclear weapon. As we all know, the production or acquisition of sufficient weapons grade nuclear material is the most difficult technical barrier to producing nuclear weapons.

The most important technical conclusion of the NIE is that Iran is probably a few years away from being able to produce enough HEU for a single weapon from its centrifuge enrichment program, which Iran resumed in January 2006. In part, this is because of technical difficulties in operating centrifuge machines effectively. The P-1 centrifuges that Iran acquired from Pakistan are notoriously tricky to operate at high speeds, and high speeds are essential for efficient operation. According to the latest International Atomic Energy Agency (IAEA) report, Iran has completed a pilot scale enrichment facility of about 3,000 centrifuge machines, but it is only operating the facility at less than 30 percent capacity in terms of production of low enriched uranium. Most likely, this poor performance is due to a variety of flaws in the production of components, assembly of entire centrifuge machines, and operation of machines in groups known as cascades. Rather than resolve all of these problems overnight, Iran is likely to make incremental progress as it gradually identifies and corrects individual flaws.

As a result, it is very difficult to estimate how long it will take Iran before Iran is able to operate its centrifuge facility at high efficiency. Accordingly, the NIE gives a broad range, judging with “moderate confidence” that Iran will probably be technically capable of producing enough HEU for a weapon sometime between 2010 and 2015. As long as the IAEA continues to have access to the enrichment facility, we will have some means to monitor Iran’s progress in overcoming technical problems and therefore we can adjust the time frame as new information becomes available.

I think it is important to keep in mind that the technical capability to produce enough HEU for a single weapon is not the same as a credible nuclear weapons option. For example, even if Iran resolves all of its technical problems, a pilot scale facility of 3,000 centrifuge machines would still require a full year of operation to produce enough weapons grade uranium for a single bomb if Iran starts with natural uranium feed or at least a few months of operation if Iran starts with low enriched uranium feed. During that period, Iran would be highly exposed to international pressure or military attack. In contrast, Iran might choose to wait until it has completed a much larger enrichment facility before producing HEU for a more substantial nuclear arsenal. For example, an industrial scale facility of some 50,000 centrifuge machines could produce enough HEU for a bomb within a few weeks or days of operation, which would make Iran less vulnerable to military intervention before break out was achieved.

To complicate matters, as the NIE points out, Iran could use covert facilities rather than declared enrichment plants, to produce HEU for nuclear weapons, which would mean no advance warning if the covert facilities were not detected. The NIE judges that Iran has “probably” not restarted covert enrichment activities through at least mid-2007, but this is obviously an area of great uncertainty. For example, Iran has still not addressed the IAEA’s questions about possible research and development of a more advanced centrifuge machine type, the P-2, that Iran also acquired from Pakistan. The P-2 is more efficient and in some ways easier to operate than the P-1 so it would be an ideal machine for a covert enrichment program. Furthermore, as Iran develops and expands its declared enrichment facilities, it would be easier to divert materials and equipment to a smaller clandestine facility in the future.

From a technical standpoint, the NIE's assessment of Iran's enrichment program is far more important than the judgment with "high confidence" that Iran halted its nuclear weapons design and weaponization research in 2003. As many people have pointed out, Iran can afford to delay work on weaponization until the more important piece—fissile material production—is in place. By halting weaponization research and focusing on developing its enrichment program, Iran is in a stronger position to claim that its nuclear program is purely peaceful and that Iran has abandoned efforts to acquire nuclear weapons. At the same time, Iran retains the option in the future to revive its weaponization program once it has attained its enrichment objectives. Furthermore, weaponization is inherently difficult to detect because it involves a relatively small number of personnel conducting research activities that are relatively easy to conceal.

So, the good news from the NIE is that we appear to have more time to play out our diplomatic hand before Iran acquires a nuclear weapons capability. Unfortunately, we've been playing a losing hand the last two years. Iran has continued to develop its enrichment program in the face of mounting international pressure and sanctions, including two United Nations Security Council (UNSC) resolutions demanding that Iran suspend its enrichment program as a condition for beginning multilateral nuclear negotiations with the five permanent members of the Security Council plus Germany. Even before the NIE, I think our chances of creating sufficient pressure to persuade Iran to accept UNSC demands were poor. The NIE has obviously weakened our position even further because it provides an excuse for Russia and China and other countries to oppose stronger sanctions—whether informal or mandated through the UN—because they can argue that the threat is not urgent. Even if a third Security Council resolution is passed early next year, my understanding is that it will not significantly increase existing sanctions. Furthermore, the NIE reinforces an underlying disagreement among the big powers. The United States, France, and Britain argue that Iran should not have any enrichment capacity even under IAEA safeguards, while Russia and China seem more willing to tolerate a safeguarded enrichment facility in Iran as long as "confidence" is restored in Iran's nuclear program. The NIE can be used to support the argument that Iran will be content to achieve a latent nuclear weapons option without actually building nuclear weapons—which is exactly what Iranian officials privately claim is their objective. Finally, the NIE has undercut the rationale for the United States to use military force against Iran's nuclear facilities, at least in the near term. To the extent that the perceived threat of force motivated countries to support economic sanctions and political pressure as an alternative to war, weakening the military option will make it more difficult to build support for stronger international measures. Whatever the wisdom of actually using military force, a credible threat is an important diplomatic tool, and Tehran is likely to see the reaction to the NIE as further proof that they can proceed with little risk of a US military attack for the time being.

So, in conclusion, I think our current diplomatic strategy of pressuring Iran to accept suspension of enrichment as a condition for multilateral negotiations was already failing before the NIE, and the NIE has weakened that strategy even further. Assuming that the strategy continues to fail, I think it's inevitable that the United States will eventually try an alternative approach of negotiating directly with Iran without condition on a broad range of issues, including nuclear, terrorism, regional security, peace process etc. As you know, all the major Democratic candidates for President have advocated this approach, as have a number of Republicans such as Senator Hagel.

We have to play this card very carefully for three reasons. First, no matter how you package it, it will be seen in Tehran as a huge concession, which will validate the hard line policies of President Mahmoud Ahmadinejad and therefore make it less likely that Iran would agree to significant limits or delays on its enrichment program. Because the Iranians could continue to develop their enrichment capabilities during the negotiations, they would have every incentive to drag out the talks with hints of concessions and misdirection, which they are expert in doing.

Second, we will have to manage the negative reaction from our allies in Europe and the Middle East, who will be upset that we have dropped the suspension condition and that we are pursuing bilateral rather than multilateral talks with Iran. The Gulf Arabs, for example, are already paranoid

that the United States is willing to accept Iran as a nuclear power in exchange for Iranian help to extricate the United States from Iraq. Israel will certainly see the new approach as a weakening of U.S. determination to deny Iran an enrichment capacity. The strong cooperation we have built with our European allies will be damaged, amid fresh charges of American unilateralism.

Third, and most important, I doubt the current Iranian leadership is prepared to agree to a nuclear deal that would be acceptable to the United States. Basically, we have irreconcilable positions— Iran wants to develop a nuclear weapons option in the form of a large safeguarded enrichment plant, while we want to deny Iran's acquisition of a break out capability by halting or at least limiting and delaying their enrichment program. Any technical solution that might be acceptable to the United States, for example a limited enrichment capability under strict international monitoring, is not likely to be acceptable to Tehran. And, the incentives we have to offer (security assurances, political normalization, lifting economic sanctions) are not likely to be attractive enough to the current Iranian leadership to justify foregoing achievement of a nuclear weapons option.

So before we enter into such talks with Iran, we will need to try to reach agreement with other countries, such as Russia, China, and the European powers, that the United States is offering reasonable terms and that the failure to reach an agreement is Iran's fault, in order to justify subsequent steps, such as serious sanctions or, as a last resort, military force. Whether we can reach such prior agreement on a new negotiating strategy and how to respond if U.S.-Iranian talks fail is very unclear. As I suggested earlier, Russia and China are much more willing than the United States to accept safeguarded enrichment facilities in Iran and much less willing to impose serious economic sanctions. Outside of the United States and Israel, there is no serious consideration of using military force if diplomacy fails. As a result, there will be great pressure on the United States not to set time limits or declare the talks a failure, and Iranian negotiators will have every incentive to drag out the talks, while Iran continues to build enrichment facts on the ground.

Given these difficulties, it probably makes sense to wait for the next U.S. administration before launching this new approach. A new administration would be in a better position to portray the policy change as a new initiative towards Iran rather than a failure of existing policy, and a new administration, starting afresh, might be more able to reach agreement with other countries on a common diplomatic strategy.