

BY KELSEY DAVENPORT

JANUARY 9, 2013

Options for a Diplomatic Solution to the Iranian Nuclear Challenge

Analysis from the "Solving the Iranian Nuclear Puzzle" Briefing Series

C ince President Barack Obama took office four years ago, diplomats from the P5+1 group Of states (China, France, Russia, the United Kingdom, the United States and Germany) and Iran have engaged in renewed but intermittent discussions aimed at resolving concerns about Iran's nuclear program. So far, however, the two sides have been unable to reach an agreement that would bridge the differences between the proposals¹ that have been exchanged during the talks.

With high-level political negotiations between Iran and the P5+1 likely to resume soon, negotiators will need to consider new variations on their earlier diplomatic proposals if they are to make progress to resolve the concerns about Iran's growing nuclear capabilities and nuclear weapons potential.

There is still time for diplomacy, but both sides need to move with greater urgency toward a lasting solution. Iran apparently has not made a strategic decision to pursue nuclear weapons and does not yet have the necessary ingredients for an effective nuclear bomb. However, as the latest International Atomic Energy Agency (IAEA) quarterly report makes clear, its uranium enrichment capabilities are improving and it stockpile of enriched uranium is growing.² Negotiators cannot afford to rely only on proposals that failed to gain traction during the three rounds of talks held last year.

HIGHLIGHTS

• There is still time for Iran and the P5+1 to negotiate a resolution to disputes over Iran's controversial nuclear program, but both sides must exercise greater flexibility.

• A number of alternative options, including short-term confidence-building measures and more comprehensive approaches, could break the current impasse:

o Measures that address the most urgent concerns-particularly Iran's accumulation of 20% enriched uranium-would build trust and buy time.

o A compromise package could be developed based on the existing proposals presented by both sides during the 2012 negotiations and past efforts to negotiate a resolution.

o Iran and the P5+1 could negotiate a resolution to the nuclear crisis within a larger set of issues.

 Iranian cooperation with the IAEA investigation on the possible military dimensions of Tehran's nuclear activities would accelerate progress in the P5+1 talks.

• Neither sanctions nor a military strike can prevent Iran from obtaining a nuclear weapon; only a diplomacycentered approach can resolve international concerns over Iran's nuclear program.

Current Positions and Proposals

During the first round of the high-level political negotiations in April 2012 in Istanbul, the two sides agreed to pursue negotiations based on a step-by-step approach with reciprocal actions. Further high-level meetings were held in Baghdad in May and in Moscow in June. A technical experts meeting was held in July in Istanbul.

Both Iran and the P5+1 presented proposals that were discussed over the course of the talks. In June, the EU's High Representative Catherine Ashton said that "significant gaps" remained between the two sides, but she also said that the talks addressed "substance" and "critical issues."

While there are a number of common elements in the respective proposals, there are significant differences regarding the sequence of actions, the scope of issues to be addressed, and the timing of sanctions relief.

Nevertheless, if each side provides slightly more flexibility and creativity, it may be possible to bridge the gaps and reach a resolution that addresses the most urgent proliferation risks posed by Iran's nuclear program, as well as Iran's desire to continue some nuclear activities and begin to remove elements of the severe sanctions regime that has been put in place.

In the coming months, both sides must consider alternative proposals that can break the current impasse and build momentum toward a mutually acceptable and sustainable resolution to the crisis.

There are a number of options for both shortterm confidence building measures and the long-term actions that can lead to a mutually acceptable "endgame" for all sides. Drawn from a variety of experts, the following options take into account key elements of the proposals put forward by Iran and the P5+1 last year, as well as the statements of senior government officials.

The options listed here are by no means exhaustive, but are intended to illustrate how negotiators might achieve progress toward a meaningful diplomatic solution in the coming year.

Confidence-Building Measures

One strategy for making progress in the talks is to

2012 PROPOSALS FROM IRAN AND THE P5+1

Iranian 5-Step Proposal

STEP 1 - Guidelines

Iran emphasizes commitments under the NPT and its opposition to nuclear weapons based on the Supreme Leader's fatwa against nuclear weapons.
P5+1 recognizes and openly announces Iran's nuclear rights, particularly its enrichment activities, based on Article IV of the NPT.

STEP 2 - Transparency Measures

• Iran continues broad cooperation with IAEA and will transparently cooperate with the IAEA on "possible military dimensions."

• P5+1 will end unilateral and multilateral sanctions against Iran outside of the UNSC resolutions.

STEP 3 - Confidence Building Steps

• Beyond continuous IAEA monitoring of enrichment activities for TRR (TRR) fuel, Iran will cooperate with P5+1 to provide enriched fuel needed for TRR. • P5+1 will terminate the UN sanctions and remove Iran's nuclear file from UNSC agenda.

STEP 4 - Strengthening Cooperation on Mutual Interests

• Parties will start and boost cooperation on: designing and building nuclear power plants and research reactors (Iran's priorities), and light water research reactors, nuclear safety and security, nuclear fusion (P5+1 priorities).

STEP 5 - Strengthening Joint Cooperation

• Parties will start cooperating on: regional issues, especially Syria and Bahrain (Iran's priorities), and combating piracy and countering narcotics activities (P5+1 priorities).

P5+1 Proposal

Iranian Actions:

Iran halts all 20 percent enrichment

activities.

- Iran transfers all 20 percent enriched uranium to a third country under IAEA custody.
- Iran shuts down the Fordow facility.

P5+1 Actions:

• P5+1 will provide fuel assemblies for the Tehran Research Reactor.

• P5+1 will support IAEA technical cooperation to modernize and maintain the safety of the TRR.

• P5+1 could review the IAEA technical cooperation projects and recommend to the IAEA Board restarting some of them.

• P5+1 have put together a detailed package to provide medical isotopes for cancer patients in Iran.

• United States is prepared to permit safety-related inspection and repair in Iran for Iranian commercial aircraft and provide spare parts.

• The P5+1 will cooperate in acquiring a light water research reactor to produce medical isotopes.

implement confidence-building steps that would prevent the situation from worsening in the shortterm, while a more comprehensive proposal for the "end-game" can be negotiated. Given the current trust deficit and the fractured Iranian political leadership, as well as the differences between the proposals offered by Tehran and the P5+1, this approach may be the most feasible method of making progress toward an ultimate solution.

For these short-term measures to be meaningful, however, they still must address the core concerns of both sides and build trust between the parties. In the near-term, the P5+1 have made it clear they want to halt the continued growth of Iran's stockpile of uranium enriched to 20 percent and otherwise ensure that an Iranian "breakout" is not imminent. Iran appears to be interested in confidence building measures that include acknowledgement of its right to enrich under certain conditions, guarantees that further sanctions would not be imposed, and assurances that Iran will not be subjected to a military attack.

Suspension for Recognition

In an October 8, 2012 interview with *Der Spiegel*, Iranian Foreign Minister Ali Akbar Salehi said that Iran is prepared to "offer an exchange" in which Tehran would voluntarily limit "the extent of our enrichment program" in return for a guaranteed supply of fuel rods and a recognition that Iran has the right to enrich.³

One of the attractions of this proposal is that it gives Iran a view of the "end-game." Recognition of the right to enrich ensures Tehran that a negotiated settlement will respect future enrichment under certain guidelines. Moreover, it is not inconsistent with the current position of the P5+1.

The United States, for instance, already has recognized Iran's right to enrich uranium if it is in compliance with its safeguards obligations. In March 1, 2011 testimony to the House Foreign Affairs Committee, U.S. Secretary of State Hillary Clinton said that "under very strict conditions" and having "responded to the international community's concerns" and "irreversibly" shut down any nuclear weapons program, Iran would have the right to enrich under IAEA inspections.⁴ Clinton also said she thought that this was the position of the international community. Over the course of the past year, the United States' negotiating partners in the P5+1 have made similar statements.

This offer also addresses the principal immediate concern of the international community, namely preventing any further increase in Iran's stockpile of 20 percent enriched uranium.

Suspension for Suspension

Another possible interim measure is pursing a "suspension for suspension" agreement, whereby Iran agrees to suspend enrichment to 20 percent and the P5+1 agrees to suspend the imposition of any future sanctions. A number of experts, including former U.S. Special Envoy to Afghanistan James Dobbins,⁵ have argued that this option would be in line with the agreement in April 2012 to pursue a step-by-step process with reciprocal actions.

A suspension-for-suspension agreement would be a win-win on both sides because Iran would be spared the suffering resulting from the imposition of more draconian sanctions, while the P5+1 would be given the assurance that Iran's enrichment to the 20 percent level would stop short of the amount needed to rapidly enrich to one bomb's worth of fissile material. It would also build trust, reduce growing tensions, and widen the window of opportunity for negotiating a long-term settlement.

Conversion of the 20% Stockpile of Enriched Uranium Another possible option, outlined by former Iranian nuclear negotiator Hussein Mousavian, is conversion of Iran's 20 percent stockpile of enriched uranium hexafluoride gas to the solid form of uranium oxide, which is used in the manufacturing of fuel plates for the Tehran Research Reactor (TRR).⁶ Uranium oxide poses less of a threat for a rapid nuclear breakout, since it would have to first be converted back to a gaseous form before enrichment to weapons-grade and any conversion efforts would likely be detected by the IAEA.

As of November 2012, Iran slated 96 kilograms of 20 percent enriched material for conversion, of which 82 kilograms already have been fed into the process, leaving its actual stockpile of uranium hexafluoride gas at about 134 kilograms.

If this "zero 20 percent uranium hexafluoride stockpile" option were pursued, it would address the most acute P5+1 concerns and demonstrate Iran's commitment to its claim that it is not producing uranium at this enrichment level for weapons purposes. Israeli Defense Minister Ehud Barak recently indicated that the conversion mitigates some concern over Iran's possible movement toward a break-out capability.⁷

In the long-term, however, continued conversion of uranium hexafluoride to uranium oxide is not a solution for two reasons. First, such conversion does not remove the enriched uranium from potential weapons uses because the solid form can be converted back to hexafluoride gas. Doing so would, however, add another step to the breakout process and any reversal would be quickly noticed by the IAEA. Second, Iran's continued stockpiling of uranium oxide well in excess of its needs for the TRR⁸ will perpetuate suspicions that Iran is producing 20 percent enriched uranium for possible military purposes.

Mutual Recognitions

Another confidence building measure Mousavian suggested is that a new round of high-level political talks begin with an exchange of recognitions that address critical concerns raised by each side.

He recommends the following:⁹

- Iran recognizes that the international community's concerns over the development of its nuclear program are legitimate and do need to be addressed by Tehran; and
- the P5+1 recognize that Iran has a right to pursue uranium enrichment to a limited level for peaceful purposes.

These "mutual recognitions" could then provide a basis for further confidence-building measures by the parties acknowledging that each side has legitimate concerns and that negotiations must occur within a framework palatable to both sides. It also gives a view of the essential characteristics of a negotiated settlement: the P5+1 concerns will be addressed and Iran's right to enrich uranium for peaceful purposes preserved. These recognitions would also allow each side to claim an initial victory, sustaining domestic support for the difficult negotiations that would follow.

Realigning the Existing Proposals

While there are substantial differences between the formal proposals advanced by Iran and the P5+1, there is considerable common ground between the two proposals. With adjustments, a compromise package

could be forged that would address the key concerns of both side and allow each to claim 'victory.'

For example, the P5+1 proposal could be enhanced by more clearly recognizing that at a future date Iran will be allowed to enrich under certain circumstances, such as fully meeting its IAEA safeguards obligations. The P5+1 also should consider requiring that Fordow be shut on a temporary, rather than permanent basis, with the option for re-opening the facility in the future if increased monitoring and verification measures, such as implementation of the IAEA Additional Protocol, are in place. Suspending some types of international sanctions, and/or guaranteeing that no further sanctions will be imposed, would also help balance the demands made by the P5+1.

Similarly, the current Iranian proposal could be improved with a pledge to provide immediate and full cooperation with the IAEA's ongoing investigation of Iran's program, and a prompt halt in the accumulation of 20% enriched uranium material. Iran could also improve its proposal by recognizing that cooperation with the IAEA's investigations does not warrant full sanctions relief from unilateral or multilateral sanctions. Accepting IAEA monitoring of enrichment and assistance from the P5+1 on fuel fabrication for the TRR is also not sufficient to terminate UN Security Council sanctions and remove Iran from that body's agenda. Suspending specific measures or halting the imposition of new sanctions is a more feasible, balanced approach for what Iran is offering.

Medium-for-Medium

Some experts, however, caution that pursuing confidence-building measures, particularly those centered around the issue of 20 percent enriched uranium, is insufficient and that a more ambitious "medium-for-medium" deal should be pursued. MIT senior fellow James Walsh says that by focusing on short-term confidence-building steps, the negotiators would only "push the can down the road." Additionally, he says it shrinks the negotiation space to the point where, if there are disagreements, it is difficult to reach an agreement because there are no other issues to trade against.¹⁰

Others argue that, because Iran has already rejected the most recent P5+1 proposal to halt 20 percent uranium enrichment operation (arguing that the P5+1 did not offer sanctions relief during the 2012 talks),



Saeed Jalili, Iran's lead nuclear negotiator, meets with EU foreign policy chief Catherine Ashton at the Iranian consulate in Istanbul on September 18.

a more ambitious "medium-for-medium" proposal might be more suitable for both sides. While these proposals would not necessarily resolve the "end-game," they would at least address the most urgent issues of both parties and would prevent the situation from worsening.

Former administration officials have suggested that a medium-for-medium deal should require more of Iran for limited sanctions relief than is called for in the existing P5+1 proposal, but offers less relief than Iran has requested in its own proposal. Such an approach might involve the following steps:

Iran:

- stop 20 percent enrichment
- move all 20 percent enriched material out of

the country

- shut Fordow
- oxidize or remove a substantial portion of the
- 3.5 percent enriched uranium stockpile
- implement the Additional Protocol

P5+1:

- suspend implementation of certain sanctions for a renewable period
- freeze new sanctions initiatives
- provide Iran with fuel rods for the TRR

The suspension of existing sanctions could be automatically revoked if Iran violated its commitments under such an agreement.

The former Head of the UN Special Commission on

6

Iraq, Ambassador Rolf Ekeus, also has spoken in favor of limited and gradual sanctions relief in return for a more "intrusive, permanent monitoring system, including an early warning system."¹¹

A Revised Fuel Swap

Another variation on the medium-for-medium approach could be based on the October 2009 fuel swap proposal and a revised version that was outlined in the May 2010 Tehran Declaration, which was brokered by Brazil and Turkey and agreed to by Iran.

At an October 2009 meeting with the United States, France, Russia, and the IAEA, Iran agreed in principle to export 1,200 kilograms of its 1,600 kilogram stockpile of uranium enriched to 3.5 percent to Russia for further enrichment to 20 percent (Iran was not yet enriching uranium to 20 percent at the time). France would then fabricate the 20 percent enriched uranium into fuel rods for the TRR. Additionally, the United States would work with the IAEA to improve safety at the TRR.

However, Iran never officially accepted the proposal. Prominent Iranian officials voiced their opposition to the terms of the agreement, and suggested alternatives that undermined the proposed deal. The opposition was likely motivated in part by opponents' dislike of President Mahmoud Ahmadinejad, who supported the fuel swap.

During the spring of 2010 Brazil and Turkey attempted to revive the fuel swap deal. Under the terms of the revised fuel swap deal, Iran would transfer 1,200 kilograms of uranium enriched to 3.5 percent out of the country and receive in return fuel plates for the TRR. Iran began enriching to 20 percent in February 2010, for the reported purpose of fabricating its own fuel plates, but this was not addressed in the document. The declaration also recognized the Iran's right to develop and use nuclear energy, including enrichment, for peaceful purposes.

The United States, France, and Russia rejected this deal, citing concerns that it did not address Iran's ability to produce uranium enriched to 20 percent or to accumulate excessive amounts of 3.5 percent enriched uranium. In addition, the Tehran Declaration did not take into account the growth of the stockpile since the Oct. 2009 fuel swap was negotiated. It only required Iran to ship 1,200 kilograms.

Iran's ongoing technical difficulties with fuel fabrication for the TRR suggest that its leaders may still have an interest in such an arrangement. A revised TRR fuel swap package could include the following actions:

Iran:

- accepts limits to is stockpile of 3.5 percent enriched uranium;
- ships out its stockpile of 20 percent enriched uranium;
- agrees to forgo enrichment beyond 3.5 percent.

P5+1:

- agree to provide fuel plates for the TRR and for any future medical isotope production;
- suspend the imposition of further sanctions during the interval of the swap and begin to dismantle sanctions after the verification that 20 production is suspended and the stockpile shipped out;
- provide technical cooperation for Iran's development of a light water research reactor.

"Big-for-Big" Approach

Another potential option is a "big-for-big" approach that definitively would resolve the Iranian nuclear question and take steps to improve the broader relationship between Iran and the P5+1. Under this approach, other areas of contention between the parties would be addressed and measures implemented to strengthen the economic and civil society ties.

A key part of such an approach would be the resolution of the IAEA's outstanding concerns regarding the possible military dimensions of Iran's nuclear program, which the Agency is currently negotiating with Iran on a separate track, and more intrusive IAEA inspections under the terms of the code 3.1 version of comprehensive safeguards and the IAEA Additional Protocol.

A number of experts, including former National Security Council Advisor Stephen Hadley, have argued for a more comprehensive approach. ¹² According to Hadley and others such an approach would require that Iran:

- agree not to enrich uranium above 3.5 percent;
- accept a stockpile limit of 3.5 percent enriched uranium based on calculations of what

is needed for civilian power production;

• agree not to pursue or attempt to purchase a nuclear weapon (operationalize the fatwa against nuclear weapons);

• forego any intention of nuclear reprocessing or plutonium production;

• shut down and dismantle Fordow;

• accept and implement the IAEA Additional Protocol;

• address IAEA concerns about past weapons activities; and

• agree to end support for terrorist activities and non-state actors, such as Hezbollah.

Hadley and others suggest that the P5+1 could then agree to:

- provide support for Iran's civilian nuclear power program;
- phase out sanctions;
- revive Iran's economy, including investment in oil and gas and technology transfers;
- encourage organizations, businesses, and foundations to establish training centers in Iran;
- establish exchange programs for students, business and civil society leaders;
- reestablish diplomatic relations;
- establish a regional international nuclear reprocessing and enrichment center with Iran as a partner, but not possessor of critical technology;
- accept enrichment to 3.5 percent at Natanz;
- limit Iran's total stockpile of uranium; enriched to 3.5 percent to 800 kilograms (not including fuel rods); and
- clearly renounce any acts of sabotage or acts of violence against Iranian citizens and facilities.

These provisions could be implemented on a onefor-one reciprocal basis over a timeframe agreed to by the parties and laid out in the proposal.

Advocates of this approach suggest that there should be a mechanism that automatically reestablishes sanctions and/or authorizes military force in the event of a violation of the agreement by Iran. Such an agreement could be further strengthened through an endorsement in a UN Security Council Resolution that also lays out what constitutes a violation and the reciprocal consequences.

The Iran-IAEA Track

In addition to the P5+1 talks with Iran, Iran and the IAEA are engaged in talks that began in early 2012 to address Iran's alleged weapons-related activities, which were detailed in the Agency's November 2011 report to the Board of Governors and include the following concerns:

- High-explosives experiments with nuclear weapons implications;
- Neutron initiation and detonator development;
- Work to fit a nuclear warhead on a missile, along with arming, firing and fusing mechanisms; and
- Iranian procurement activities related to its alleged warhead work.

The IAEA presented a proposal to Iran in February 2012 outlining the actions that Iran must take in order to addresses the unresolved issues and ensure the agency that there is no ongoing warhead development work.¹³

Despite multiple consultations over the past year, the parties have yet to agree on a so-called "structured approach" based on the February 20, 2012 document that addresses the outstanding nuclear concerns documented by the agency. In response to the impasse, the IAEA Board of Governors approved a resolution on September 13, 2012 faulting Iran for failing to address UN Security Council demands that it suspend uranium enrichment activities and cooperate with the agency's investigations.

Iran and the IAEA agreed to meet again on January 16, 2013 to continue negotiating a framework for moving forward. To move its investigation forward, the IAEA should clarify that the goal of the investigation is to ensure that no weapons related activities are currently underway.

For its part, Iran must also drop demands that delay the agency's investigations or compromise its ability to follow-through on its investigation. In its initial response to the IAEA's February 2012 work plan, Iran rejected the possibility of parallel investigations on suspected activities, which would speed up the agency's work.

Iran also proposed striking language that would allow for follow-up investigations if further issues

arise for Tehran to clarify during the process. These limitations could prevent the IAEA from adequately following up on information that could be uncovered during its investigation.

Iran's leaders must also recognize that concrete progress toward concluding the IAEA's investigation would bolster its assertion that its program is only for peaceful purposes and would accelerate progress in the high-level political talks between Tehran and the P5+1 group.

Conclusion

International sanctions have slowed Iran's nuclear program and increased pressure on Tehran to respond more favorably to P5+1 overtures. Yet these sanctions, even if tightened further, cannot stop Iran's nuclear pursuits.

The use of military force against Iran's extensive and highly dispersed nuclear infrastructure, short of a complete military occupation of the country, can only temporarily set back Iran's program and would likely prompt Iran to eject the IAEA inspectors and actively pursue nuclear weapons. Consequently, the military option would be counterproductive and costly, and would foreclose diplomatic options, erode international support for sanctions, lessen Iran's isolation, and possibly trigger a regional war leading to enormous civilian casualties and human suffering

President Obama and other leaders must redouble efforts to engage Iran in serious, sustained negotiations on arrangements that guard against a nuclear-armed Iran.

To do so, it is essential that Iran agree to halt its accumulation of 20 percent enriched uranium and restrict its enrichment operations and stockpiles to normal power reactor-grade levels and other civilian, peaceful needs. To verify and monitor Iran's commitments, the IAEA must be allowed to conduct more intrusive monitoring and it must be able to ascertain that any past weapons-related work by Iran has been discontinued. In exchange, there should be an appropriate and proportional paring back of international sanctions on Iran and P5+1 recognition that Iran has a legitimate claim to pursue the peaceful used of nuclear energy.

A diplomacy-centered approach is the only option that can prevent an Iranian nuclear weapon. Pursuing such a course is difficult, but it is the best option on the table.

ENDNOTES

1. "History of Official Proposals on the Iranian Nuclear Issue," Arms Control Association Fact Sheet, updated January 2013, http://www.armscontrol.org/factsheets/Iran_Nuclear_Proposals.

2. Kelsey Davenport, Daryl G. Kimball, and Greg Thielmann, "The November 2012 IAEA Report on Iran and its Implications," Arms Control Association *Iran Nuclear Brief*, Nov. 16, 2012, http://www. armscontrol.org/Iran-Nuclear-Brief/The-November-2012-IAEA-Report-on-Iran-and-Its-Implications.

3. Interview with Ali Akbar Salehi, Der Speigel, October 8, 2012.

4. Hillary Rodham Clinton, testimony before the House Foreign Affairs Committee, March 1, 2011.

5. Email correspondence with author. Oct. 18, 2012.

6. Amb. Hossein Mousavian, Panel on Preventing a Nuclear-Armed Iran, Arm Control Association Annual Meeting, June 4, 2012. http://www.armscontrol.org/events/Join-ACA-June-4-Our-Annual-Meeting%20#panel

7. Rick Gladstone, "Israeli Defense Chief Says Iran Postponed Nuclear Ambitions," *The New York Times*, Oct. 30, 2012.

8. William C. Witt, Christina Walrond, David Albright, and Houston Wood, "Iran's Evolving Breakout Potential," Institute for Science and International Security, October 8, 2012.

9. Interview with Amb. Hossein Mousavian, October 16, 2012.

10. James Walsh, Remarks at "Iran 2013: Making Diplomacy Work" conference sponsored by ACA and NIAC, Nov. 26, 2012.

11. Rolf Ekeus, Remarks at "Iran 2013: Making Diplomacy Work" conference sponsored by ACA and NIAC, Nov. 26, 2012.

12. Stephen Hadley, "Eight Ways to Deal with Iran," *Foreign Policy*, September 26, 2012. http://www.foreignpolicy.com/articles/2012/09/26/eight_ways_to_deal_with_iran

13. Peter Crail, "The IAEA Outlines a Path for Iran to Come Clean, But is Tehran Ready?," Arms Control Association *Issue Brief*, Vol. 3, No. 2, March 7, 2012.

The Arms Control Association (ACA) is an independent, membership-based organization dedicated to providing authoriative information and practical policy solutions to address the dangers posed by the world's most dangerous weapons. The "Solving the Iranian Nuclear Puzzle" briefing series is made possible with the support of the Ploughshares Fund and contributions from individual ACA members. For more information, visit www.armscontrol.org.