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Nuclear Negotiations with Iran: A Reality Check

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Introduction

Nuclear development in Iran has been an issue of great concern, not only to its neighbours in West Asia, but also for the global powers, in the interests of regional and global stability. At present, efforts are being made to find a solution to the crisis. The interim nuclear deal signed between Iran and P5+1 (China, France, Russia, the United Kingdom, the United States and Germany) on 24 November 2013, and the complementary Framework for Cooperation signed between Iran and the IAEA on 11 November 2013 have been recognised as bold measures in addressing the otherwise worsening situation. This Issue Brief examines the developments made so far in both of these negotiations and highlights the issues that remain to be resolved. The Brief concludes by assessing the prospects of successful conclusion of these negotiations.

Path towards Resolution

Driven by a number of factors, including the change of regime in Tehran and the impact of sanctions on the Iranian economy, Iran's approach towards the nuclear issue has changed dramatically. In fact, it was Hassan Rouhani's call for constructive engagement with the international community over its nuclear programme and of reversing its international isolation that got him the mandate of President of Iran in the June 2013 elections.¹ The change in Iran's approach was reflected in the growing diplomatic exchanges that it had with major powers, including China, France, Germany, Russia, the UK and the US. Iran also started engaging with the IAEA. In November 2013, two major milestones were reached when Iran signed an interim nuclear deal with P5+1 and established a separate but complementary Framework for Cooperation with the IAEA, with the final agenda of arriving at a comprehensive nuclear deal that addresses all matters pertaining to the Iranian nuclear programme. The paper will now examine the progress that has been made so far in these two negotiations.

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(a) Iran – P5+1 Nuclear Deal

An interim nuclear deal was signed on 24 November 2013 when Iran and P5+1 signed the Joint Plan of Action (JPA),² wherein Iran and P5+1, referred in the document as EU3+3, agreed on an initial phase of reciprocal compromises with the aim of arriving at a “mutually-agreeable long-term comprehensive solution which would ensure that Iran's nuclear programme remains exclusively peaceful.”³ The initial phase of the deal was implemented successfully on 20 January, whereby Iran agreed to halt the construction of the Arak reactor and decided not to pursue the construction of a reprocessing facility in exchange for decreased economic sanctions imposed on Iran.⁴ It is crucial here to highlight that the JPA describes the first six months, renewable by mutual consent, as the period for the completion of simply the “first step” of the negotiation process. As for the final step of a comprehensive solution, the JPA defines a period of no more than one year from the day the action plan is implemented (which was on 20 January 2014).⁵ The joint plan also mentions certain additional steps concerning greater cooperation between Iran and the IAEA which will be examined in the following section.

Of the issues to be addressed in the first step of the JPA, much progress has already been made on several points. First has been in the case of the heavy water production plant at Arak. The initial design Iran had been pursuing at the Arak site until November 2013 included the construction of a reactor capable of generating enough plutonium to create two bombs per year.⁶ While a decision to halt the construction was therefore made during the initial phase of the negotiation process on 20 January 2014, the Atomic Energy Organisation of Iran proposed a new design for the reactor that would cut the plutonium production to one-fifth and simultaneously allow Iran to produce isotopes for medical purposes.⁷ The new design was accepted by P5+1 on 19 April.⁸ It is also important to highlight here that Iran at present does not have a reprocessing facility and committed to not construct one during the adoption of the JPA on 20 January, without which it remains incapable of extracting weapons-grade plutonium from the spent fuel of the Arak reactor.⁹

The second important action which Iran has completed is the dilution of its stock of twenty percent enriched uranium. As agreed in the JPA, Iran is to dilute half of the twenty percent enriched uranium to levels no more than five percent and the other half of uranium is to be converted to uranium oxide powder as working stock for fabricating fuel for the Tehran Research Reactor.¹⁰ The April report of the IAEA confirmed that Iran had successfully diluted half of its twenty percent enriched uranium stock to levels below five percent.¹¹ The third major task completed so far has been the provision of daily and unannounced access to the IAEA inspectors to the uranium enrichment facilities at Fordow and Nantanz.¹² Additionally, Iran has also given the IAEA access to the centrifuge assembly workshops, centrifuge rotor production facility, uranium storage facilities and uranium mines and mills, as agreed to under the JPA.¹³

Reciprocating Iranian compliance so far, its oil revenues worth \$ 4.2 billion frozen abroad are to be released in a step-by-step process, out of which Tehran has already received \$3.1 billion.¹⁴ The P5+1

nations have also begun the suspension of sanctions on Iran's petrochemical exports, imports of gold and other precious metals, imports of goods and services of its automotive manufacturing sector.¹⁵ They have also agreed to license the supply of spare parts and services for safety of flight for Iranian civil aviation.¹⁶

Iran and P5+1 have so far met six times in Vienna – 18-20 February, 17-19 March and 7-9 April, 13-16 May, 16-20 June and in July up to the deadline for the first step of the JPA – to assess progress made so far and to negotiate pending issues that will have to be resolved in order for the comprehensive nuclear deal to get through. However, now that Iran and P5+1 have begun addressing the big bones of contention, which the initial phase of the JPA did not address, the negotiations have become painfully slow. As a result, the negotiating parties failed to arrive at a deal by the deadline of 20 July.

One of the issues being negotiated is the number of centrifuges which Iran will be allowed to continue operating. While Iran wants to retain all of its 19,000 centrifuges in operational state and has expressed the intent to expand the stock further, the P5+1 is looking at restricting the numbers to 4,000.¹⁷ Suggestions have been made to resolve this matter by reducing the number of operating machines and keeping the rest disassembled for spare parts.¹⁸ The parties, however, are yet to converge over a solution. A second issue is that of the time span in which the comprehensive deal would remain in force. The third issue being negotiated currently is the suspension of the UNSC sanctions. The JPA has mentioned the task of lifting these sanctions, along with other multilateral and national nuclear-related sanctions, under the category of the final step, but no progress has been made so far in drawing up a blueprint for the gradual, step-by-step suspension of these sanctions – a demand that Iran has been making constantly. Various aspects of these pending issues have been explained in detail in the subsequent sections.

(b) Iran-IAEA: Framework for Cooperation

Iran simultaneously began the process of re-engagement with the IAEA in the last quarter of 2013. A Framework for Cooperation was agreed upon on 11 November 2013, wherein Iran voluntarily agreed to complete certain actions which would enable the IAEA to better monitor Iranian nuclear facilities.¹⁹ These actions, seen complementary to the Iranian nuclear deal with P5+1, are aimed at allowing the IAEA to investigate Iran's past nuclear activities, alleged to have military dimensions, and help clarify the UN nuclear watchdog's unresolved concerns about the nature of Iran's nuclear programme, consequentially alleviating international suspicion.

The joint statement signed during the initiation of the framework laid out a step-by-step process for the completion of the required actions by Iran.²⁰ The first step, as described in the annexure, mentioned a set of six actions that “Iran and the IAEA mutually agreed to complete within three months from the date of the statement.”²¹ These actions include providing relevant sensitive information along with access to uranium mines, the heavy water production plant, other research reactors, the sixteen sites designated for the construction of new nuclear power plants, and a

clarification from Iran on its announcements on additional enrichment facilities and laser enrichment technology.²² The IAEA report of 20 February confirmed the completion of these six actions by the set deadline of 11 February 2014.²³

With successful implementation of the first step, Iran and the IAEA negotiated the second set of actions whose deadline was kept for 15 May. These actions included provision of access to the uranium mines of Saghand to IAEA inspectors; provision of relevant information, along with access to the Ardakan yellowcake production plant; submission of the new design for the heavy water production plant at the Arak site; and the conclusion of a Safeguards Approach for the Arak Reactor with the IAEA.²⁴ On 20 May, Iran and the IAEA held a technical meeting, wherein the parties confirmed the good progress that Iran had made towards the completion of the seven actions it had undertaken in February 2014.²⁵ The IAEA released a report on 23 May recognising the completion of all seven practical measures by Iran.²⁶

Continuing the process of negotiation, during the 20 May technical meeting Iran and the IAEA also agreed upon another five practical measures that Iran would undertake as the next step under the framework and complete by the deadline of 25 August 2014.²⁷ These measures include provision of relevant information and access to the centrifuge research and development centre as well as to the centrifuge assembly workshop, and the conclusion of safeguard approach for the 40 MW-heavy water reactor located near Arak (also referred to as IR-40).²⁸

Obstacles that Remain

Amidst heated debates and arguments over various facets, undercurrents and consequences of the ongoing nuclear talks with Iran, significant progress has been made under both the negotiations, as explained above. Certain critical issues of contention and concern, however, remain to be resolved, without which a “comprehensive” deal cannot be reached.

To begin with, how the Arak heavy water reactor is dealt with remains unclear. As already discussed, Iran has done much to resolve the issue by proposing to redesign the reactor that would use enriched uranium instead of natural uranium as fuel, and as a consequence would cut the production of weapons-grade plutonium to one-fifth and simultaneously drop the power output from 40MW to levels below 10MW.²⁹ Also, by providing assurance that it will not construct a spent fuel pre-processing plant, essential for the extraction of weapons-grade plutonium, Iran has attempted to impart a positive momentum into the negotiations. Realisation of the proposed design on ground, however, is yet to take place and will undoubtedly be observed with great attention by nations in the region as well as around the world.

Another critical question is that of the number of operational centrifuges that Iran will be allowed to retain. Iran at present has around 19,000 centrifuges, out of which 10,000 IR-1 centrifuges are operational at Nantanz and Fordow.³⁰ The number of centrifuges is critically linked with the break-out

capacity of Iran. The phrase “break-out capacity” refers to the time it would take for Iran to produce sufficient amount of weapons-grade uranium to build a nuclear bomb from the point when it decides to build one and rejects all restrictions, terminates safeguards and thus lets it be known what it intends to do in defiance. With 10,000 IR-1 operational centrifuges and the low-levels of enriched uranium, the break-out capacity for Iran is currently estimated to be around two months.³¹ Concerns have been raised that even though the time has increased from what it was before Iran diluted its uranium stockpiles to levels below five percent, the period of two months is still too short.

In an attempt to prolong this period to at least nine months, officials from the Obama administration have hinted at allowing Iran to operate 4,000 centrifuges.³² The current approximation of break-out capacity of two months as given by Secretary of State John Kerry, however, is not a correct estimate of the time it would take for Iran to acquire an operational nuclear weapon.³³ In a recently released foreign policy article, Greg Thielmann and Robert Wright have argued that with 10,000 operational centrifuges and the current low-levels of enrichment of the uranium stockpile, two months will only be enough time for Iran to produce sufficient weapons-grade uranium hexafluoride (UF₆) gas for one bomb. There will, however, be the need for Iran to convert the UF₆ to powder form, fabricate the metallic core of the weapon from that powder, and develop and assemble other components in order to finally integrate the weapons package into a delivery vehicle. This entire process can take up to a year to complete.³⁴ Thus, so far, the debate over the number of centrifuges and Iran's consequential break-out capacity continues and much deliberation will be required to arrive at a mutually agreeable number.

Another key issue impeding the negotiations is the status of Iran's underground Fordow uranium enrichment plant. Under the Joint Plan of Action, enrichment activities have continued at Fordow, but the operating centrifuges at the facility were converted to produce 3.5 percent enriched uranium from 20 percent enrichment levels. The problem is that the facility is buried deep inside a mountain outside of the city of Qom and is therefore less vulnerable to an airstrike. In the initial stages of talks, the P5+1 had indicated the closure of the enrichment facility as the solution, since the facility was seen as giving Iran a suitable break-out option if the negotiations failed. Iran, however, publicly stated that it will not accept closure of any of its nuclear facilities in a final deal. Keeping in mind the expressed apprehensions, the P5+1 will continue opposing any production-scale enrichment at the facility. In a bid to resolve the issue quickly, the head of the Atomic Energy Organisation of Iran (AEOI), Ali Akbar Salehi, on 8 July, mentioned that the facility at Fordow “could be repurposed for research and development, as a back-up site for Natanz facility.”³⁵

The question of the initial period of time for which the comprehensive deal would remain in force too remains unresolved. On the one hand, the P5+1 is looking to cover a period of 10-15 years, while Iran, on the other hand, is looking at only a few years for the comprehensive deal to remain in force. Trita Parsi, President of the National Iranian American Council, explained the Iranian argument, saying that “Iran will likely reject a deal that lasts beyond 10 to 15 years, not just because of the mistrust that exists between the two sides, but also because of the legitimate uncertainty that exists about the intentions and orientations of future leaders in Washington and Tehran.”³⁶

Another issue which was being brought up was the shortage of time and the deadline of 20 July for the nuclear deal. Concern about the shortage of time was raised mostly due to domestic opposition in the US as well as in Iran to the nuclear deal. Paul Pillar, a former CIA and National Intelligence Council officer, speaking at a briefing hosted by National Iranian American Council (NIAC) for Congressional staff, captured the sentiment by saying that “one reason I think it would be good to complete things by July 20th is because the politics of opposition [to a deal] would be prevalent otherwise.”³⁷ On chances of missing the deadline of 20 July for the completion of the first step, George Perkovich, director of Carnegie's Nuclear Policy Program, says that opponents to nuclear diplomacy in both countries will likely try to leverage the missed deadline to derail the process.³⁸

A detailed examination of the JPA, however, highlights that the self-imposed deadline of 20 July was only for the completion of the first step. The JPA also included the provision for the extension of this deadline by mutual agreement. This provision was utilised on 19 July, when the negotiating parties agreed to extend the talks till 24 November.³⁹ Iran agreed to continue complying with the interim deal and the steps it has taken so far in exchange for access to \$2.8 billion of frozen cash assets. The parties will continue negotiating on pending issues, along with the additional steps prescribed in the JPA, with regard to the considerations of the UN Security Council, in order to arrive at a comprehensive nuclear deal before the completion of one year from the date the JPA was signed.

While these issues, among others, remain to be resolved, any attempt of drafting a final comprehensive deal now will only be a futile exercise to pursue, as was observed in the Vienna meetings of May, June and July this year. The meetings were supposed to begin the process of drafting the comprehensive deal but the parties were reported to not have arrived at a point to initiate the process.⁴⁰ The engaging parties have decided to tackle the language over these difficult issues only after they are resolved.

Conclusion

Be it due to the change of regime in Tehran, or the overall impact of sanctions on Iran's economy, its approach towards its nuclear development has changed dramatically since late 2013. Two major processes of negotiations were initiated with P5+1 (or EU3+3) and with the IAEA in November 2013. The change in Iran's attitude can be reflected from the significant progress it has made so far in its negotiations with P5+1 under the Joint Plan of Action. Iran agreed to halt the construction of the Arak heavy water reactor and decided not to pursue the construction of a reprocessing facility. It also completed the dilution of half of its stockpile of 20 percent enriched uranium to levels below 5 percent and is currently in the process of converting the other half in powder form for its research reactor.

Another measure of Iran's change in attitude is its approach towards the IAEA. It has established a substantial level of cooperation with the Agency under the Framework for Cooperation so far. Iran now provides daily and unannounced access to IAEA inspectors to the uranium enrichment facilities

at Fordow and Nantanz. It has also given the IAEA access to the centrifuge assembly workshops, centrifuge rotor production facilities, uranium mines, the heavy water production plant, other research reactors, and the sixteen sites designated for the construction of new nuclear power plants. The latest IAEA Director General's report issued on 23 May confirmed Iran's full cooperation.⁴¹ This growth in the levels of cooperation between Iran and the IAEA has been recognised to play a key role in the successful completion of the comprehensive nuclear deal.

But whether this change in attitude will help materialise the deal is yet to be seen, especially when certain sensitive and critical issues remain unresolved. Though P5+1 has accepted the Iranian proposal to redesign the Arak reactor in the latest Vienna meeting, realisation of the proposed redesign for the Arak reactor on ground, for instance, is yet to take place and will have to be carefully pursued. The number of operational centrifuges that Iran will be allowed to retain and its break-out capacity too remains unresolved. The initial time span for which the comprehensive deal would remain in force is yet to be decided as well, and the shortage of time for the conclusion of the deal will also create problems for the negotiating parties. It also remains unclear, thus far, as to how the process of the suspension of UNSC resolutions against Iran will unfold.

The negotiating parties failed to resolve all of these issues by the self-imposed deadline of 20 July 2014.⁴² Yet, negotiators were not seen taking a maximalist position and showed intent of resolving pending concerns during the sixth Vienna meetings in July 2014. While successful negotiations of the comprehensive deal would benefit Iran and the region, negotiating parties had already accepted that arriving at any deal, which simultaneously addresses all of the issues related to the Iranian nuclear programme, anytime soon, would be extremely difficult. The odds of arriving at a deal by the newly set deadline of 24 November 2014, however, are substantial. But they too will remain subject to how the pending sensitive contentions are managed. Critical will be the continuation of the process of negotiations and dialogues on such issues; ill-intended attempts at derailing the process must, therefore, be discouraged.

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