

## **Prospects for the Iran Nuclear Negotiations**

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I'd like to brief you on the state of play in the P5+1 nuclear negotiations with Iran. What are the main issues that need to be resolved to achieve a comprehensive agreement and how far apart are the two sides? Keep in mind that the details of the negotiations have not been made public – which is a good sign that the two sides are making a genuine effort to reach agreement – so I'm giving you an assessment as an outside observer.

The good news is that the interim agreement, or Joint Plan of Action, which went into effect on January 20, 2014, is performing as expected. Under the agreement, Iran has frozen or capped key elements of its nuclear program, which has limited further development of Iran's capacity to produce fissile materials for nuclear weapons. According to the most recent report by the International Atomic Energy Agency (IAEA), Iran has diluted or converted most of its stockpile of 20% enriched uranium, ceased any additional enrichment above 5%, halted installation of additional centrifuges, and suspended major construction at the Arak heavy water research reactor. A new facility is near completion to covert low enriched uranium from hexafluoride to

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oxide, which cannot be further enriched unless it is converted back to hexafluoride. It's true that Iran is allowed to continue centrifuge research and development under the Joint Plan of Action, but this is unlikely to significantly improve Iran's capabilities unless more powerful machines are actually installed and begin enriching in large numbers, which is currently frozen under the Joint Plan of Action.

In exchange for Iran's nuclear constraints, the U.S. and EU have eased some trade sanctions and released some frozen funds from Iran's oil exports. Despite concerns from critics of the interim agreement, however, the overall sanctions regime has remained intact, mainly because the Washington and the EU governments have actively warned companies and other governments not to take actions that would erode sanctions. To reinforce the message, Washington has continued to impose sanctions against companies that have violated the existing sanctions even while the interim agreement is in effect. It's true that Iranian oil exports have averaged about 1.2 million barrels per day (MB/D) since January – slightly higher than the 1 MB/D that U.S. officials estimated when the Joint Plan of Action was negotiated – but not enough to make a huge difference to the Iranian economy, especially because financial sanctions restricting Iranian access to its oil revenues remain in place. In short, the U.S. and the EU have demonstrated that they can manipulate and fine tune sanctions relief as a powerful bargaining tool.

So, on balance, the decision by the P5+1 to pursue an interim agreement as a first step towards a comprehensive agreement has been successful. In fact, the status quo is probably more acceptable to the P5+1 than it is to Iran because they are essentially freezing Iran's nuclear program without giving up very much in sanctions leverage. The question now is whether conditions are ripe to complete a comprehensive agreement by July 20, 2014, the near term deadline set by the Joint Plan of Action.

On one hand, the P5+1 and Iran seem to have agreed – at least in principle - to modify the 40 MW Arak heavy water research reactor (which is still under construction) to reduce the power level and alter the reactor core and fuel type so that it cannot produce a significant amount of plutonium. The details of these modifications still need to be determined – in particular how extensive and how reversible the changes will be – but this seems to be a bridgeable set of issues. In fact, Iran is more willing to trade away Arak because its pathway to produce plutonium for nuclear weapons is much more challenging and distant than its uranium enrichment program.

On the other hand, the negotiators seem far apart on at least two crucial issues. The first issue is physical constraints on Iran's enrichment program. Currently, Iran has installed about 19,000 IR-1 (first generation) centrifuge machines of which about 10,000 are actually enriching. In

addition, Iran has installed about 1,000 more powerful IR-2 (second generation) centrifuges that are not yet operational. The P5+1 are demanding that Iran significantly scale back the numbers and types of centrifuges, reduce its stockpile of low enriched uranium, halt further enrichment above 5%, limit research and development of more advanced centrifuges, and close or convert the Fordow enrichment facility. Presumably, the P5+1 want surplus centrifuges to be removed, disassembled and stored under IAEA supervision. Excess low enriched uranium could be converted to oxide and exported for fabrication into fuel elements for the Bushehr nuclear power plant. The Fordow enrichment facility could be closed or converted to non-nuclear uses. Finally, P5+1 are demanding that these restrictions on Iran's enrichment program remain in place for more than a decade.

These constraints on Iran's enrichment program are designed to increase so-called "break out time" – the time required for Iran to produce enough weapons grade uranium for a single bomb from its known enrichment sites under IAEA inspections. I think break out time is somewhat artificial and arbitrary way to measure a nuclear deal because Iran is very unlikely to dash towards nuclear weapons from its declared facilities. The IAEA would quickly detect such an attempt, and the facilities would be highly vulnerable to military attack before break out could be completed. Much more likely, Iran will try again (as it has twice before) to build a covert enrichment plant and produce a small arsenal of nuclear weapons in secret before revealing its capability.

Nonetheless, as a political fact of life, any nuclear agreement with Iran will be measured in terms of break out time. No matter how artificial, this is a relatively concrete and simple yard stick which both opponents and proponents of any deal can cite in the inevitable political debates that will follow an agreement. On paper, Iran's current break out time – if it used all of its available centrifuges and stock pile of low enriched uranium - is about two to three months. Based on conversations I've had with knowledgeable Congressional staffers, a deal which pushes break out time back to a year or more and remains in place for a decade or more is politically defensible. In this case, Iran would not have a "threshold capacity" to produce nuclear weapons.

As far as I can tell, however, this is far more than Iran is willing to concede at this point. President Rouhani has publicly rejected any dismantlement of its current enrichment program and any long term constraints on the size of enrichment program. Instead, I understand that Iran is willing to consider short term constraints on the size of its enrichment program, such as freezing at the current level of operating IR-1s for a few years before gradually expanding to an industrial scale of as many as 150,000 IR-1 centrifuge machines or an equivalent number of more advanced machines as they become available.

Iran claims it needs an industrial scale enrichment plant to produce low enriched uranium to fuel the Bushehr nuclear power plant if Russia reneges on its commitment to provide fresh fuel. However, such a facility would also give Iran a more credible break out option to quickly produce high enriched uranium for nuclear weapons in a matter of weeks not months. In addition, an industrial scale enrichment infrastructure would also make it easier for Iran to divert manpower and material to a smaller covert enrichment facility.

The second big sticking point is the pace and scope of sanctions relief. In my conversations with Iranians, they insist that the existing nuclear-related sanctions be repealed – not just waived by Presidential authority – because they don't want to accept long term nuclear restraints without more confidence that sanctions relief will be permanent. Of course, repealing sanctions would require a positive act by a majority of both houses in Congress, which seems implausible in today's political climate in Washington, especially if the nuclear deal allows Iran to retain even a limited enrichment capacity. In addition, U.S. sanctions against Iran are a thicket of many different laws, which mix nuclear-related sanctions with sanctions imposed on Iran for terrorism or human rights reasons, and it would be extremely difficult and contentious to craft legislation that would lift some sanctions and retain others in place.

Given the big differences on these two related issues, I assume the P5+1 negotiators will propose some kind of phased resolution: a staged draw down of Iran's enrichment program in exchange for a staged removal of sanctions leading ultimately to the repeal of international and national nuclear-related sanctions once Iran has reduced its enrichment program to a new baseline. The problem with this approach is that Iran wants large scale sanctions relief up front in exchange for a gradual build up of centrifuges while the P5+1 are offering large scale sanctions relief down the road in exchange for a gradual build down of centrifuges.

In addition to these twin central issues of enrichment and sanctions, a final agreement will also need to address several other important issues, such as monitoring and verification arrangements beyond the Additional Protocol, resolution of questions about Iran's previous weaponization program, and restrictions on Iran's ballistic missile program. Iran seems relatively open to accepting additional monitoring arrangements as part of an overall deal, but it will probably not agree to intrusive challenge inspections like those imposed on Iraq after the Gulf War. Iran also refuses to admit that it was conducting a program to design nuclear weapons before 2003 (which the IAEA euphemistically calls the "Possible Military Dimension" of Iran's nuclear program).

Given all of these complex and contentious issues, I think it will be very difficult to reach a comprehensive deal by July. Nonetheless, both sides have a strong interest to keep the diplomatic process alive because neither wants to return to previous cycle of escalation of

increased sanctions and increased nuclear activities with an increased risk of war. And, both sides will be able to make a good case that sufficient progress is being made in the negotiations even a final agreement has not been reached. Therefore, if a comprehensive agreement is not reached, I expected that the two sides will agree to implement the provision of the Joint Plan of Action to extend the interim agreement for an additional six months until January 2015.

Whether a comprehensive deal can be reached by January 2015 – or another interim deal - I can't say at this point. The critical factor is whether the Supreme Leader judges that the economic pressure poses a sufficient threat to political stability to require significant nuclear concessions. In this case, Tehran might be willing to reduce its enrichment program in order to lift sanctions and restore the economy, while still preserving its option in the future to cheat or renege on the deal if decides to resume its nuclear weapons program. I think everybody understands that such an agreement would represent a tactical retreat rather than a strategic shift away from nuclear weapons. As a result, even if a comprehensive agreement is achieved, the U.S. and its allies will need to maintain a high priority on intelligence efforts to detect cheating as well as contingency plans to re-impose sanctions or use military force in the event that the deal break down.

To conclude, I think the dual track strategy of diplomacy and sanctions that President Bush began in his second term and President Obama then intensified and expanded is paying off - at least in terms of slowing down Iran's nuclear clock in exchange for limited sanctions relief. Whether Iran will agree to substantial long term constraints on its nuclear program in exchange for more comprehensive sanctions relief is less certain, but I could imagine a series of interim or partial agreements that continues to slow down Iran's nuclear activities, without sacrificing our main sanctions leverage. In other words, we can still buy time – and that may be the best that diplomacy can achieve while the current Iranian leadership remains in power.