

# Neither Small Step Nor Giant Leap

The Geneva “First Step Agreement” provides a historic opportunity to end the Iranian nuclear crisis by diplomatic means. However, it is too early to be overly optimistic. Any comprehensive solution will have to include provisions that are difficult for Tehran to accept.

by Oliver Thränert

Rightfully heralded as a breakthrough, the agreement between France, Great Britain and Germany (the E3) as well as Russia, China and the US (E3+3 or P5+1) and Iran, signed on November 24, 2013, represents an important step in the decade-long negotiations about Iran’s nuclear programme. The accord freezes most components of Tehran’s nuclear programme, while at the same time causing some of the sanctions against Iran to be relieved. Yet, scepticism remains in order, as similar negotiations with North Korea during the 1990s have shown. After all, in 1994, North Korea also agreed to end its nuclear activities, but did not comply with the respective agreements. Today, after three more or less successful nuclear tests, Pyongyang is able to produce at least crude nuclear devices.

Hence, the six-month period agreed upon in Geneva should be used to hammer out a deal that unequivocally prevents Iran from getting its hands on a nuclear bomb. At the same time, Tehran should have a chance to save face and keep some essentials of its nuclear programme for civilian purposes only. On the final page of the “Joint Plan of Action” (JPA)<sup>1</sup>, the parties sketch out possible elements of such an agreement that merit closer scrutiny. The JPA will only lead to a successful long-term agreement if, firstly, Iran significantly curbs its activities with regard to the enrichment of uranium as well as its heavy water projects that could give Iran access to weap-

ons-grade plutonium; secondly, as opposed to what was agreed upon in Geneva, verification measures go beyond the Additional Protocol to the safeguards agreement between Iran and the IAEA; and thirdly, if the final agreement does not have a specified long-term duration, but instead a contract period to be defined in accordance with a special review process.

## Long history of distrust

Publicly portrayed and perceived as negotiations between equals with legitimate interests, the E3+3 talks were no

## KEY POINTS

- In the Geneva agreement, Iran agrees to halt most of its uranium enrichment and heavy water activities. At the same time, the E3+3 will lift some of their sanctions
- These temporary constraints on Iranian nuclear activities should also be an integral part of any long-term agreement
- Yet, merely implementing the Additional Protocol will not suffice. The UN Security Council should adopt a stricter regime that allows inspectors access to non-declared sites
- A final agreement will also have to include a clear review process, ensuring that Iran would be freed from constraints only after having earned back international confidence

**KEY FACTS**

The JPA of November 24, 2013, was negotiated by the E3+3, the European Union (EU) and Iran. In a nutshell, the JPA rests on a fundamental trade-off: For at least the next six months, Iran will significantly constrain its nuclear programme; in turn, the E3/EU+3 will begin to lift some of the international sanctions. The core components of the JPA are that:

- Iran agrees to halt all enrichment above 5% and to dismantle the technical connections required to enrich above 5%. Moreover, Tehran agreed to dilute its entire stockpile of near 20% enriched uranium, or convert it to a form not suitable for further enrichment.
- Iran will continue 5% enrichment, but convert the newly enriched uranium to oxide. It will also not build new enrichment or reprocessing facilities.
- Iran accepts enhanced monitoring activities including daily inspector access.
- The E3+3 refrain from new sanctions and suspend those with regard to oil and gold trade.
- Within a year, the parties aim to negotiate a comprehensive agreement, whose main elements are sketched out on the last page of the JPA.

classical arms control negotiations between two sides looking for a compromise. The JPA cannot be understood without the main development of the last ten years: That Iran, as a non-nuclear member state to the Nuclear Nonproliferation Treaty (NPT), lost international confidence in its treaty compliance. In 2002, it became publicly known that Iran was building a uranium enrichment plant in Natanz and a heavy water reactor in Arak. Both facilities under construction were not declared by Iran despite an obligation under its safeguards agreement with the IAEA to do so. In 2009 it became known that Iran had not declared a second uranium enrichment facility, the one at Fordow. In both cases, Iran's efforts were covert, and the world only learned about these projects due to the findings of international intelligence services. All these three facilities at Natanz, Fordow and Arak rang alarm bells not only in Western capitals but also elsewhere, because they are well suited to produce weapons grade fissile material – either highly enriched uranium or plutonium.

During the last ten years, diplomatic efforts by either the E3 Foreign Ministers or, since 2006, the E3+3, failed to reach an agreement that satisfied Tehran and at the same time constituted a credible prevention of Iran acquiring nuclear weapons. The E3+3 met on several occasions with Iranian authorities, confronting them with a clear alternative: Either Iran would undertake steps to regain international confidence and accept constraints on its nuclear programme, or it would face ever more biting sanctions. As Iran was not ready for a compromise, in four UN Security Council resolutions, sanctions were adopted. In

addition, unilateral US sanctions were implemented, as well as by American allies. These sanctions arguably brought Tehran under newly-elected President Hassan Rouhani to the negotiating table, where Iran was under intense pressure to deliver on its obligations and build trust and confidence.

**After the first step: Curbing Iran's Nuclear Capabilities**

The overwhelming majority of states that operate light-water reactors for electricity production do not at the same time produce enriched uranium (up to about 5%) to be used as fuel in these reactors. Rather, most countries import enriched uranium. Moreover, in order to guarantee the supply of enriched uranium, the IAEA is about to establish a fuel bank in Kazakhstan. This is part of a larger debate within the IAEA to reform the nuclear fuel cycle, aiming to convince states to produce energy using imported enriched uranium so as to avoid proliferating uranium enrichment technology to ever more countries. This is important because enrichment of uranium is a classical dual-use technology: It is only a minor technical step from a 5% enrichment that is needed for light-water reactors to a 90% enrichment, which would constitute the source material for nuclear bombs.

Plus, the economic justification for Iran's enrichment activities is flimsy at best. The country today already receives the fuel for its only light-water reactor at Bushehr, from Russia. Furthermore, Iran argues that it uses uranium enriched to almost 20% for the production of isotopes in its Tehran Research Reactor, which are used in medical treatment. However, the quantity of 20% uranium already produced by Iran is far larger than the Tehran Research Reactor can realistically consume.

As a core element of the Geneva JPA, Iran agreed to substantially limit its uranium enrichment (see Key Facts Box). This would have to be a pillar of every long-term agreement. In addition, Iran would have to agree, as it also already did in Geneva, to refrain from building new enrichment facilities or from installing any additional centrifuges of any type, and to leave most of its already installed centrifuges at Natanz inoperable. Plus, Iran would have to mothball its second enrichment facility at Fordow. This facility had caused international concern because it was protected against air strikes by layers of rock and used to enrich uranium up to almost 20% – which brings the country very close to the capacity to enrich up to 90%, a grade needed for nuclear weapons.

With such agreements in place, and provided the intensity of inspections (see below) would be increased, the

likelihood of Iran misusing its enrichment facilities for military purposes would be minimized. At the same time, Iran could save face for it would not be required to abandon its enrichment programme altogether. Furthermore, it would keep its option open to enrich uranium to be potentially used to build new light-water reactors.

However, there is another potential route for Tehran towards a nuclear weapon: Plutonium. Iran is still constructing a so-called heavy water reactor at the city of Arak that causes international concern because such reactors are ideally suited to produce plutonium usable for nuclear weapons. Hence, the overwhelming majority of nuclear reactors used in civilian programmes today are of the light-water type, which are more proliferation resistant. At Geneva, Iran agreed to halt most activities at Arak. According to estimates, the reactor, once operational, would produce enough irradiated fuel to be reprocessed into plutonium for one nuclear weapon every year. Therefore, ideally, in a long-term agreement, Iran should abandon the Arak reactor. To provide Tehran with an attractive alternative, the E3+3, supported where appropriate by other countries, should provide Iran with a light-water reactor.

In case Iran insists on operating the Arak reactor, it would need at a minimum to accept continuous on-site inspections. In the JPA, Iran promises to provide long-sought design information for the reactor. The implementation of this agreement is an indispensable pre-condition for the establishment of an effective inspection regime. Furthermore, as has already been agreed to by Iran, the

country would renounce all reprocessing activities, such that it would not have the capacity to extract weapons-grade plutonium from the fuel rods used in Arak.

### Ensuring effective verification and transparency

The success of every long term agreement stands and falls with an effective and credible verification regime. Beyond the enrichment programme, Iran's suspected military activities related to the nuclear program must not be forgotten. The IAEA regularly expresses concern that the Iranian nuclear programme involves a military dimension. The agency in November 2011 argued that according to information available to it, Iran had carried out activities relevant to the development of a nuclear explosive device and that some activities may still be ongoing.<sup>2</sup> Hence, intrusive verification and transparency will have to have a broad focus. The JPA already includes provisions for more intensive inspections as well as the establishment of a Joint Commission consisting of Iran and the E3+3 with the aim of monitoring implementation and addressing issues that may arise. These arrangements constitute an important step, but much more needs to be done.

To begin with, as envisioned in the JPA, Iran needs to implement the Additional Protocol to its safeguards agreement with the IAEA. Most NPT states with a significant nuclear infrastructure already implement such verification provisions. As a result, these states accept more complex declaration obligations on all activities related to their nuclear programmes, and also much more intrusive inspection procedures. However, these measures should not be confused with an "anytime, anywhere" approach. After all, the Additional Protocol is meant for "normal" state parties of the NPT.

Even under the Additional Protocol, the inspectors can only visit sites openly declared by the inspected state. The inspectors may, however, ask for access to non-declared facilities on declared sites, giving advanced notice of less than two hours. In addition, inspectors may take environmental samples at any place they choose. This provision is important because it could help inspectors to detect for instance, non-declared uranium facilities. But, given that Iran at this juncture is not a normal state party to the NPT, implementing the Additional Protocol would not be enough.

Thus, in any comprehensive agreement, a special verification regime for Iran needs to be established. The main aim would be to prevent Iran from building clandestine facilities as part of a possible bomb programme. Most importantly, international inspectors would need to

### FURTHER READING

#### **Iran's Nuclear Odyssey: Costs and Risks** *Ali Vaez / Krim Sadjadpour (Carnegie Endowment for International Peace 2013)*

A careful analysis of the history of the Iranian nuclear program from its inception under the Shah until today. The authors make it clear that the official economic legitimization for the programme was always questionable.

#### **The Iranian Nuclear Crisis: Avoiding Worst-Case Outcomes**

*Mark Fitzpatrick (IISS Adelphi Paper 398, 2008)*

This paper explains how Iran developed its nuclear programme to the point where it threatens to achieve a weapons capability within a short time frame, and analyses Western policy responses aimed at forestalling that capability.

#### **A Single Roll of the Dice. Obama's Diplomacy with Iran** *Trita Parsi (Yale University Press 2012)*

A thoughtful and balanced study on Iran diplomacy in the first years under President Obama vis-à-vis the turmoil of the "green revolution" and hardliners on both sides. At the same time, Parsi presents convincing arguments for daring a "second role of the dice".

have access to non-declared sites. Such a provision would exceed Additional Protocol procedures. To make sure that Iran keeps its rights to protect military as well as other highly confidential information, managed access procedures would apply. The respective verification provisions could be prepared by the IAEA safeguards division and subsequently adopted by the UN Security Council.

### Establishing a thorough review process

In their elements of the final step of a comprehensive solution, the parties argue that such an agreement should have a specified long-term duration. However, rather than giving Iran a chance to simply wait until the treaty period is over so that it then becomes a normal NPT state party free to undertake any nuclear programme of its choosing under a less intrusive verification regime (even the Additional Protocol is voluntary for normal NPT members), it would be better to combine the duration of the agreement with a special review process.

Iran and the E3 + 3 should meet for such reviews on an annual basis. If Iran would be in compliance, further sanctions should be lifted. After ten years, a review conference could decide that Iran was successful in re-building confidence. In addition to the further lifting of sanctions, the conference could agree to substantially soften the verification regime in place in Iran and oblige Tehran to only implement the Additional Protocol. The conference may also decide to soften regulations on enrichment and heavy water projects. But this may also be left to further review conferences to take place every five years. At the end of such a process, Iran may become a normal member to the NPT again. However, if Iran would not deliver, sanctions would be tightened.

A diplomatic solution to the Iran crisis would clearly be preferable to any other possible outcome: Either Iran becoming a nuclear weapon state or the US and/or Israel trying to keep Iran from this threshold by attacking

its nuclear installations. However, negotiators should be careful in the weeks and months ahead not to let Tehran off the hook too early: An agreement without a special verification regime and without making sure that Iran would only be freed from constraints on its nuclear programme after international confidence had been rebuilt would not be worth it.

### SELECTED SOURCES

1. Joint Plan of Action, Geneva, 24 November 2013 [http://eeas.europa.eu/statements/docs/2013/131124\\_03\\_en.pdf](http://eeas.europa.eu/statements/docs/2013/131124_03_en.pdf)
2. IAEA Board of Governors, Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran, 8 November 2011, p. 10.

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