

Iran and the NPT

SUMMARY

- Since the disclosure in 2002 of its clandestine nuclear program, Iran has been repeatedly found in breach of its NPT Safeguards Agreement and Subsidiary Arrangements, by conducting nuclear activities which it had not declared to the IAEA and by failing to declare the construction of nuclear facilities.
- The IAEA Board and the UN Security Council have both required Iran to take steps to restore confidence in its nuclear program. Some progress was achieved in the first years of the crisis. But since 2006 Iran has ignored these calls, despite proposals for a long-term arrangement and enforcement measures taken by the Security Council.
- The Iranian program represents a major challenge to the NPT as the IAEA has reported "consistent and credible" information on its possible military dimensions. A further deterioration of this situation (including risks that other countries engage in similar activities or that Iran withdraws from the NPT) would deeply weaken the treaty.
- The Review Conference cannot ignore the issues raised by the Iranian crisis. But discussions on this topic will be particularly complex, given the links to larger questions such as Article IV rights and the Middle East nuclear-weapon-free zone.

DEVELOPMENT OF A CLANDESTINE NUCLEAR PROGRAM (MID-1980s-2002)

Iran was among the original signatories of the Nuclear Non-Proliferation Treaty (NPT), which it ratified in 1970, and it concluded a Safeguards Agreement with the IAEA which entered into force in 1974. In the mid 1970s, the country planned a major nuclear power program, and started the construction of two nuclear power plants at Bushehr. This program was suspended after the revolution in 1979, and resumed in the early 1990s. Iran signed an agreement with the Russian Federation in 1992 for the completion of one reactor. The Bushehr power plant, which is projected to start operating in summer 2010, remains today the only ongoing nuclear power

plant project in Iran.⁵⁸

In August 2002, the existence of a clandestine program of nuclear fuel enrichment and reprocessing was revealed by an Iranian opposition group in exile. In February 2003, the IAEA visited the fuel enrichment facilities at Natanz (a pilot plant near completion and a large commercial-scale plant under construction). Iran declared these facilities for the first time to the Agency during that visit, and confirmed the construction of a heavy-water production plant in Arak. The IAEA inquired about the importing of natural uranium to Iran and the processing of such material, which also had not been declared to the Agency.

The director-general of the IAEA reported to the board in June 2003 that Iran had "failed to meet its obligations under its Safeguards Agreement," and noted that, although the quantities of nuclear material involved were not large, the number of failures by Iran was a matter of concern.⁵⁹ Following further investigation, the IAEA reported in November 2003 that Iran acknowledged that it had been developing, for eighteen years, a uranium centrifuge enrichment program, and, for twelve years, a laser enrichment program. Dr. ElBaradei noted "Iran's policy of concealment," and he expressed his "serious concern" at the fact that Iranian breaches dealt with the "most sensitive aspects of the nuclear fuel cycle."⁶⁰

These two elements, Iran's lack of transparency and its involvement in the sensitive parts of the nuclear fuel cycle, are at the heart of the Iranian nuclear issue. Their combination raised doubts about the purposes of Iran's activities. After the disclosure of Iran's enrichment and conversion activities, it appeared that there was no economic justification for Iran to process and to enrich nuclear fuel: the country had only one nuclear power plant under completion at Bushehr, for which Russia had committed to supply fuel during the full life of the reactor. Given Iran's lack of

58 IAEA, "Iran: Nuclear Power Profile," 2004, available at www-pub.iaea.org/MTCD/publications/PDF/cnpp2004/CNPP_Webpage/pages/countryprofiles.htm.

59 IAEA, *Report by the Director General*, Doc. GOV/2003/40, June 6, 2003.

60 IAEA, *Report by the Director General*, Doc. GOV/2003/75, November 10, 2003.

transparency, the question was then raised, and remains, of the risk that Iran could also conduct fuel enrichment in non-declared facilities with a goal of producing weapon-grade nuclear material.

Concerns over possible military dimensions of Iran's nuclear activities were reinforced later, in 2005, when the IAEA reported on Iran's contacts in the mid-1980s with a "foreign intermediary" (i.e., the A. Q. Khan network) and indicated that Iran had in its possession a document on the production of uranium metal hemispheres, "a process which is related to the fabrication of nuclear weapons components."⁶¹

INITIAL ATTEMPTS TO FIND A NEGOTIATED SOLUTION (2003-2006)

In June 2003, the board of governors of the IAEA reacted to the report of the director-general by encouraging Iran not to introduce nuclear material at the Pilot Fuel Enrichment Plant at Natanz and by urging Iran to conclude and implement an Additional Protocol with the Agency, in order to enhance the Agency's ability to "provide credible assurances regarding the peaceful nature of Iran's nuclear activities."⁶²

The initial reaction of the IAEA board in June 2003 and its first resolution⁶³ in September 2003 thus defined the two main steps that the board (and subsequently the Security Council) has been constantly requiring from Iran since 2003:

- suspend all enrichment-related activities and reprocessing activities,
- provide full transparency on its nuclear activities and cooperate with the IAEA, and in particular sign and fully implement the Additional Protocol.

Both steps were conceived as confidence-building measures to restore trust between Iran and the international community. During the two and a half years that followed the first discussion on Iran by the IAEA board in June 2003, some progress was made at times, but neither of these two steps was fully implemented.

In the very first months of the crisis, as the IAEA

was identifying a number of additional failures by Iran to comply with its Safeguards Agreement, the option of reporting these failures to the Security Council was considered.⁶⁴ The IAEA board alluded to this possibility in its November 2003 resolution.⁶⁵ But rather than doing so, preference was given to the search for a negotiated solution with Iran.

In October 2003, Dr. ElBaradei held discussions in Tehran with Dr. Rohani, Secretary of the Supreme National Security Council of Iran, on the conclusion of an Additional Protocol. Shortly after, the Foreign Ministers of France, Germany and the United Kingdom (the "E3") met in Tehran with Dr. Rohani, and Iran agreed to cooperate fully with the IAEA, to sign and implement the IAEA Additional Protocol, and to suspend enrichment and reprocessing related activities. Iran signed the Additional Protocol in December 2003, and indicated it would implement it pending ratification.

A second agreement was concluded in Paris in November 2004 between Iran and the "E3" with the support of the High Representative of the European Union. The Paris agreement⁶⁶ launched a negotiating process with a view of reaching "long-term arrangements" between Iran and the E3/EU, including cooperation in three areas: political and security issues, economy and technology, and nuclear issues. Iran reiterated that it would implement the Additional Protocol pending ratification. Iran also agreed to "continue and extend its suspension to include all enrichment-related and reprocessing activities (...) and all tests or production at any uranium conversion installation." The agreement was followed at the end of 2004 and during the first half of 2005 by a series of meetings between European and Iranian experts to prepare a long-term arrangement.

The search for a negotiated solution was not an easy one, however, as on numerous occasions Iran took steps contrary to the Tehran and Paris agreements and to the resolutions of the IAEA board:

61 IAEA, *Resolution adopted by the Board of Governors*, Doc. OV/2006/14, February 4, 2006.

62 IAEA, *Report by the Director General*, Doc. GOV/2003/63, August 26, 2003.

63 IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, Doc. GOV/2003/69, September 12, 2003.

64 Article XII.C of the statute of the IAEA stipulates that the board shall report to the Security Council the noncompliance of a state with its Safeguards Agreement.

65 IAEA, *Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran*, Doc. GOV/2003/81, November 26, 2003.

66 IAEA, *Communication Dated 26 November 2004 Received from the Permanent Representatives of France, Germany, the Islamic Republic of Iran and the United Kingdom Concerning the Agreement Signed in Paris on 15 November 2004*, Doc. INF/CIRC/637, November 26, 2004.

- In spring 2004, Iran started uranium conversion activities at its Isfahan facility (which it agreed to suspend in November 2004), and launched the construction of a research reactor moderated by heavy water in Arak.
- In June 2004, Iran resumed the manufacturing of centrifuge components and the assembling and testing of centrifuges (which it also agreed to suspend in November 2004).
- In May 2005, Iran announced it would resume conversion activities, but agreed to hold off pending communication by the E3 of their proposal for a long-term arrangement.

The failure of the negotiating process became clear in summer 2005. Iran remained determined to resume its fuel-cycle activities (which it considers an inalienable right under the NPT), and had only accepted suspension as a short-term concession until the conclusion of long-term arrangements. On their part, the Europeans considered that suspension was necessary as long as the international community would not receive credible assurances of the peaceful nature of Iran's nuclear program. In their eyes, confidence-building would require an "extensive period".

At the beginning of August 2005, Iran announced its intention to resume conversion activities in Isfahan. The E3/EU requested Iran to continue to hold off, and they transmitted to Iran their framework proposal for a long-term agreement.⁶⁷ The E3/EU proposed to support Iran's civil nuclear program (including fuel supply assurances), to cooperate in the areas of regional security, and to develop economic, trade and technological cooperation. In exchange, Iran would commit not to withdraw from the NPT, and to ratify and fully implement its Additional Protocol. It would also "make a binding commitment not to pursue fuel cycle activities other than the construction and operation of light water power and research reactors." It was proposed that this commitment would be reviewed jointly every ten years.

Iran rejected the European proposal three days after receiving it, and resumed conversion activities in Isfahan. A meeting in New York in September between the E3/EU Foreign Ministers and

President Ahmadinejad (elected in June) confirmed the end of the negotiating process. Meanwhile the IAEA Board found that Iran's breaches of its obligations under its NPT Safeguards Agreement constituted "non-compliance" in the context of Article XII.C of the Statute of the IAEA, and agreed in principle to report the issue to the Security Council but without deciding a date.⁶⁸ As a last attempt, Russia tried in November 2005 to renew the dialogue with Iran by proposing a "joint venture" for enrichment in Russia. But Iran did not respond positively.

After the announcement by Iran in January 2006 that it would soon resume its enrichment activities in Natanz, the board of governors of the IAEA then decided to refer the issue to the Security Council.⁶⁹ The board recalled that "after nearly three years of intensive verification activity, the IAEA was not yet in a position to clarify some important issues relating to Iran's nuclear program or to conclude that there were no undeclared nuclear material or activities in Iran."

The day after the board resolution, Iran decided to end implementing the Additional Protocol and to resume fuel enrichment in Natanz.

THE SECURITY COUNCIL AND THE DUAL TRACK APPROACH (SINCE 2006)

The action of the Security Council in dealing with the Iranian crisis was meant to reinforce the authority of the IAEA process. With the adoption in July 2006 of Resolution 1696, the immediate effect of the involvement of the Security Council was to give force of law to the requests of the IAEA board of governors addressed to Iran, and in particular:

- the suspension of all enrichment-related and reprocessing activities;
- the ratification and implementation of the Additional Protocol and of all transparency measures required by the IAEA.

The principal requirements for a solution to the crisis remained the same, but became mandatory. The Security Council also endorsed the way forward initially proposed by the E3/EU, which was to offer to Iran the perspective of a long-term agreement.

67 IAEA, *Communication Dated 8 August 2005 Received from the Resident Representatives of France, Germany, and the United Kingdom to the Agency*, Doc. INF/CIRC/651, August 8, 2005.

68 IAEA, *Resolution Adopted by the Board on 24 September 2005*, Doc. GOV/2005/77, September 24, 2005.

69 IAEA, *Resolution Adopted by the Board of Governors on 4 February 2006*, Doc. GOV/2006/14, February 4, 2006.

In the first half of 2006, the three European foreign ministers and Mr. Solana intensified their coordination with their counterparts in China, Russia and the United States. In June 2006, the Six reached an agreement in Vienna on “a set of far-reaching proposals as a basis of discussion with Iran”. They also made clear that they would propose to adopt sanctions in the Security Council, should Iran refuse to engage in negotiations. This defined the basis of the “dual track approach,” which has since been followed by the Security Council. At the same time, the group formed by the Six (the three Europeans with the support of the EU high representative, China, Russia, and the US) became the leading format in dealing with Iran and in preparing Security Council’s actions.

The elements of a long-term agreement proposed by the Six built on the framework proposal presented to Iran by the E3/EU the year before. This package carried more weight as it had been endorsed by China, Russia and the United States, and, in particular, included for the first time since 1979 the perspective of the lifting of American sanctions against Iran.

The Six proposed to Iran:⁷⁰ to cooperate in the development of its civil nuclear power program (including supporting the construction of light water power reactors in Iran and giving assurances of fuel supply), to support a new conference to promote dialogue and cooperation on regional security issues, and to cooperate in the areas of trade, investment, energy, high technology and agriculture, including the possible removal of US restrictions on exports of civil aircraft and on telecommunication infrastructure. On its part, Iran was required to suspend all enrichment-related and reprocessing activities, to fully cooperate with the IAEA and to resume the implementation of the Additional Protocol. The Six also proposed that the long-term agreement would be reviewed following confirmation by the IAEA of the resolution of all outstanding issues and of the absence of undeclared nuclear activities or materials in Iran.

The proposal was presented to the Iranians by the EU High Representative on behalf of the Six. Mr. Solana met with the Iranians before and after the adoption of Resolution 1696 by the Security

Council, but the continuing disagreement with Iran on the issue of suspension prevented further progress. The offer of the Six has since remained on the table, and has been regularly reiterated, including by the Security Council in its subsequent resolutions.

As the director-general of the IAEA reported that Iran continued to refuse to take the steps required by the IAEA board and by the Security Council, the Council proceeded with the adoption of sanctions aimed at persuading Iran to comply with its resolutions and at constraining Iran’s development of sensitive technologies in support of its nuclear and missile programs. Between December 2006 and March 2008, the Council adopted three resolutions (1737, 1747, and 1803) imposing sanctions on Iran.

The field of the measures adopted by the Security Council has been progressively extended to include the following:

- a ban on exports to and imports from Iran of equipment and technology related to proliferation-sensitive nuclear activities (enrichment-related, reprocessing or heavy-water related activities) and nuclear-weapon delivery systems, and on financial and technical assistance related to these activities;
- vigilance and restrictions on travel by individuals engaged in these activities in Iran, including individuals listed by the Council;
- a freeze of funds and assets owned or controlled by persons and entities involved in the Iranian nuclear and ballistic missile programs and listed by the Council (such as the Atomic Energy Organisation of Iran, the Aerospace Industries Organisation, and Bank Sepah), and by Iran Revolutionary Guard Corps persons and entities also listed by the Council;
- a ban on imports of arms and related materials from Iran and vigilance and restraints in the supply of categories of conventional arms to Iran;
- a call on all states to inspect cargoes to and from Iran operated by Iran Air Cargo and Islamic Republic of Iran Shipping Lines when they are suspected of transporting prohibited goods;
- a call upon states and international financial institutions not to enter into new commitments for grants and financial assistance to Iran, except for humanitarian and developmental purposes, and to exercise vigilance in entering into new commit-

⁷⁰ IAEA, *Letter Dated 13 July 2006 from the Permanent Representative of France to the United Nations Addressed to the President of the Security Council*, Doc. S/2006/521, July 13, 2006.

ments for public financial support to trade;

- a call on all states to exercise vigilance over the activities with all banks domiciled in Iran, in particular Bank Melli and Bank Saderat, suspected to be involved in proliferation activities.

In adopting these measures, the Council noted that sanctions would be suspended if Iran suspended all its enrichment-related and reprocessing activities (suspension for suspension), and they would be terminated if the Council determined that Iran had complied with its obligations under the relevant resolutions of the Council.

Drawing lessons from the Iraq crisis, the Security Council was careful to design targeted sanctions, focused on proliferation-sensitive activities and on persons or entities involved in them. The emphasis was also put on the political dimension of the Security Council process. The main goal has remained to keep the Security Council united in addressing the Iranian issue. In this regard, the actual content of the sanctions has been considered less of a priority than the continued unity of the Six, despite diverging views among them.

In parallel to the Security Council process and the continuation by the IAEA of its investigations of Iran's nuclear activities, dialogue between Iran and the Six episodically resumed during the period. In 2008, the Six prepared a new version of the package of incentives that they had proposed two years before. The new package was presented to Iran in July 2008 at a meeting in which, for the first time, a US representative was present. But no real discussion ensued.

In October 2009, the Six met again with Iran. The meeting took place after the disclosure of a clandestine fuel enrichment facility near Qom. Discussions were more substantial, and opened the way to a proposal, presented by the IAEA, that Iran would export its stockpile of low-enriched uranium to be further enriched in Russia, converted into fuel rods in France, and later returned to Iran for use in a medical reactor. Iran initially agreed with the proposal, but retracted its agreement, and announced in February 2010 that it would start on its own territory the process of enrichment of UF_6 up to 20 percent of U_{235} .

RECENT DEVELOPMENTS

The handling of the Iranian crisis by the IAEA and the Security Council is today at a critical point.

Iran has kept developing its fuel enrichment program despite the injunctions addressed to it by the Security Council. According to the IAEA:⁷¹

- Iran has produced 371 tons of uranium in the form of UF_6 since March 2004 at its conversion facility in Isfahan.
- It has enriched 2065kg of UF_6 (with an enrichment level of 3.47 percent U_{235}) since February 2007 at the Fuel Enrichment Facility in Natanz.
- It has started to produce UF_6 enriched up to 20 percent U_{235} since February 2010 at its Pilot Fuel Enrichment Plant in Natanz.

Iran allows the IAEA to verify the non-diversion of declared nuclear material. The IAEA has, for instance, conducted thirty-five unannounced inspections at the Fuel Enrichment Facility in Natanz since March 2007.⁷² But questions remain on activities conducted in undeclared facilities, as was illustrated last September with the revelation of the enrichment plant near Qom (the Fordow Fuel Enrichment Plant).

The IAEA considers that Iran does not provide the necessary cooperation to permit it to confirm that all nuclear material in Iran is intended for peaceful activities. The IAEA continues to request the implementation of the Additional Protocol and of other transparency measures (endorsed by the board and the Security Council) in support of its ongoing investigations, including access to all relevant individuals, documentation, equipment, and sites.

Important questions remain on the purpose of Iran's nuclear activities, and on their possible military dimensions. The IAEA has been trying to clarify three main sets of issues:

- the circumstances of the acquisition by Iran in the mid-1980s of a document on the production of uranium metal hemispheres, a process which is related to the fabrication of nuclear-weapons components;
- the issue of "alleged studies," on the basis of documentation provided to the Agency by other member states, relating to the production of UF_4 ,

71 IAEA, *Report by the Director General* dated 18 February 2010, Doc. GOV/2010/10, February 18, 2010.

72 Ibid.

the testing of high explosive, detonators and systems that could be applicable to a nuclear device, and the design of a missile re-entry vehicle to accommodate a nuclear warhead.

- the procurement and R&D activities of military-related institutes as well as the production of nuclear-related equipment by companies belonging to the defense industries.

In particular, the director-general noted in his most recent report his concerns “about the possible existence in Iran of past and current undisclosed activities related to the development of a nuclear payload for a missile.”⁷³ He also mentioned that activities related to nuclear explosives and other projects seemed to have continued beyond 2004.

IRAN AND THE NPT REVIEW CONFERENCE

NPT issues

Contrary to the North Korean case, the Iranian nuclear program has, so far, clearly remained an issue within the NPT. Despite occasional threats of withdrawal, Iran has continuously reiterated its commitment to the treaty. It has continued to allow the Agency to conduct its verification activities in declared facilities, even if its cooperation with the Agency remains insufficient to clarify the outstanding issues.

At the same time, the Iranian crisis represents a major challenge to the NPT on several different levels:

Verification of the fulfillment of Non-Proliferation Treaty obligations. Iran has, repeatedly in recent years, been found in breach of its NPT Safeguards Agreement and Subsidiary Arrangements, by conducting nuclear activities that it had not declared to the Agency and by failing to declare in a timely manner the construction of nuclear facilities. Such failures were, for instance, exposed in 2003 with the disclosure of the two fuel enrichment plants in Natanz, as well as more recently with the revelation of a third enrichment plant near Qom in September 2009.

Possible existence of activities violating the treaty. After seven years of investigation, the IAEA is still unable to confirm that all nuclear material in

Iran is in “peaceful activities”. On the contrary, the Agency has reported information, which it considers “consistent and credible”, on possible military dimensions to Iran’s nuclear program.⁷⁴ Whether or not Iran has actually decided to build a bomb, available information suggests that it is, most probably, seeking the capability to do so, in contradiction to its NPT commitment.

Enforcement of the treaty. In a way which is similar to the North Korean case, the Iranian crisis raises the question of the ability of the multilateral system to enforce the NPT. The IAEA Board and the Security Council have both required Iran to take steps to restore confidence in its nuclear program. Some progress was achieved in the first years of the crisis, but since 2006 Iran has ignored these calls despite enforcement measures taken by the Security Council.

Further risks of erosion of the nonproliferation norm. In the absence of a negotiated solution, the NPT risks being deeply weakened by the crisis with Iran. A military strike against Iran’s nuclear sites would mark the failure of the multilateral institutions to enforce the treaty peacefully. A continuation of Iran’s suspected activities could incite other countries in the region to emulate it and develop, under cover of the treaty, a capability to build a weapon. On its part Iran, if it achieves the enrichment of weapon-grade uranium, might decide at some point to break out of the treaty and test a weapon.

Context at the Conference

For all these reasons, the Iranian crisis is not an issue that can be ignored by the Review Conference. Indeed, several topics that the Conference will consider have already taken on an enhanced importance in the context of the Iranian nuclear program. This is in particular the case with issues such as the fuel supply assurances, the need to strengthen the authority of the IAEA to conduct its verification activities, and the reflection on how the international community should react to cases of Article X withdrawal from the treaty. An agreement at the Conference on these topics could help efforts to avoid further deterioration of the Iranian crisis and prevent the emergence of other ones.

⁷³ Ibid.

⁷⁴ IAEA, *Report of the Director General of 18 February 2010*, Doc. GOV/2010/10, February 18, 2010.

The question remains open on how the Review Conference could directly discuss the challenges posed by the Iranian program. Other proliferation crises were previously debated within the review process, and in 2000 the Conference adopted considerations on Iraq as well as on North Korea in its final document. In a similar way, the 2010 Conference could address the Iranian nuclear crisis and stress the importance of the issue for the NPT.

As with other major questions facing the nonproliferation regime, a discussion on Iran's nuclear program would be a difficult one. There are real divergences among states on how to tackle the Iranian crisis. Some see it as a clear priority that has to be addressed. Others emphasize the complexity of the issue and the need also to address other priorities.

Article IV. The complexity of the Iranian case comes from the fact that it raises the issue of the right to nuclear energy. Some states point out that fuel-enrichment activities, which are at the center of the Iranian crisis, are not forbidden by the NPT, and should be considered as part of the "inalienable right" stated by Article IV of the treaty.⁷⁵ Others propose another reading of Article IV which puts the emphasis on the need to demonstrate the "peaceful purposes" of nuclear activities, which the IAEA cannot confirm for Iran's nuclear program.

Nuclear-Weapon-Free Zone in the Middle East. Another source of divergence among NPT members comes from the specific difficulties in dealing with nuclear issues in the Middle East given that Israel remains outside the NPT. Many states are frustrated at the lack of progress in the implemen-

tation of the resolution, adopted by the 1995 Review Conference, on a "Middle East zone free of nuclear weapons as well as other weapons of mass destruction." They consider that efforts should not focus on Iran, but should embrace the situation in the region as a whole. Others point out that if progress in implementing the 1995 resolution is needed, this cannot become a condition for addressing the Iranian crisis. Indeed the emergence of a nuclear Iran could only complicate progress toward a nuclear-weapon-free zone in the Middle East.

Both debates over Article IV and over the Middle East are sensitive issues for the NPT review process, with deep divides among the membership, and positions that are quite entrenched. There are real risks that a discussion at the Review Conference about the Iranian nuclear crisis could become a hostage to these issues. The experience of the 2005 Review Conference shows that the issues at stake have the potential to derail the session.

In order to address in a meaningful way the challenges posed to the NPT by the Iranian nuclear program participants at the Conference will have to navigate through the sensitivities about these larger questions. At a minimum, the Conference could call on a negotiated solution to the crisis that would guarantee that Iran's nuclear activities are exclusively for peaceful purposes, and it could invite Iran to take the steps required by the board of the IAEA and to fully cooperate with the Agency. The review process may not be the place to resolve the current Iranian crisis, but it could make a useful contribution to efforts toward a peaceful solution.

⁷⁵ Article IV of the NPT states that "Nothing in this Treaty shall be interpreted as affecting the inalienable right of all the parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination and in conformity with Articles I and II of this Treaty."