İRAM

Center for Iranian Studies in Ankara

THE INTERNATIONAL ATOMIC ENERGY AGENCY'S ACUTE CHALLENGES TO ENFORCE THE NUCLEAR AGREEMENT (JCPOA) ON IRAN

Farhad REZAEI

Analysis

May 2017

Center for Iranian Studies in Ankara

Copyright

For electronic copies of this report, visit www. iramcenter.org.

Center for Iranian Studies in Ankara

Oğuzlar, 1397. St, 06520, Çankaya
Ankara, Türkiye
Tel : +90 (312) 284 55 02-03
Faks : +90 (312) 284 55 04
e-posta : info@iramcenter.org
www.iramcenter.org

Cover design by İRAM

İRAM
Center for Iranian Studies in Ankara

Analysis

The IAEA's Acute Challenges to Enforce the Nuclear Agreement (JCPOA) on Iran

About the Author:

Ferhat REZAEI

Dr. Farhad Rezaei is the author of Iran's *Nuclear Program: A Study in Proliferation and Rollback* (New York: Palgrave Macmillan, 2016). A prolific writer, Farhad is the author of numerous articles on Iran's politics published in the National Interest, *Middle East Policy, British Journal of Middle Eastern Studies, Journal of International Affairs, Insight* Turkey and Asian Affairs among others. His forthcoming book is Iran, Israel, and the United States: The Politics of Counterproliferation. Dr. Rezaei can speak English, Farsi and Kurdish.

May 2017

Özet

14 Haziran 2015 tarihinde İran ile P5+1 ülkeleri arasındaki nükleer anlaşma, İran'ın nükleer kazanımlarının çoğunu ortadan kaldırmıştır. Bununla birlikte anlaşmanın başarısı, tam şeffaflık, titiz doğrulama ve kendi içinde birtakım riskler barındıran on yıllarca sürecek nükleer programın denetlenmesi gibi birçok faktöre bağlıdır.

İran, 'ek protokolleri' onaylamakla yükümlüdür fakat Tahran'ın nükleer anlaşmayı onaylaması için belirli bir zaman çizelgesinin olmaması ve en azından yakın gelecekte İran'ın protokolü onaylamayabileceğini işaret eden anlaşma üzerindeki güç mücadelesi gibi büyük sorunlar vardır. Hatta 'ek protokolleri' onaylamak, ihlal etmesi durumunda İran'ın yakalanabileceğini yüzde yüz garanti edemeyebilir. Bu ihtimali önlemek ve sıkı bir yayılma karşıtı sistemi garantilemek için UAEK üye devletlerinin istihbarat çalışmaları yapmaları gereklidir.

Anlaşmanın etkin bir şekilde uygulanması, üye devletlerin denetim masraflarının karşılanması için sürekli fonlama yapmaları gerekmektedir. Anlaşmanın uygulanması için diğer hayati bir adım da kurumun mevcut uzman sayısının yeterli olmamasından dolayı daha fazla uzmanın ve kalifiye denetimcinin UAEK tarafından eğitilmesidir. Yeteri kadar uzmanın olmaması, kurumun ihlalleri tespit etmesini fazlasıyla zorlaştırmanın yanı sıra kurumun koruyucu faaliyetlerini riske atabilir ve denetimlerin kalitesini düşürebilir.

Anahtar Kelimeler: IAEA, Nükleer Anlaşma, Ambargolar, UAEK, P5+1

Summary

The nuclear agreement that was reached on July 14, 2015, between Iran and P5+1 wiped out most of the achievements of the Iran's nuclear endeavor. However, success of the deal depends on a number of factors including full transparency, vigorous verification and monitoring of the nuclear program over the next several decades, an approach which has its own risks.

Iran is obliged to ratify the Additional Protocol but there are major challenges namely lack of a specific timeline for Tehran's ratification in the JCPOA and the power struggle in Tehran over the deal which indicate that Iran may not ratify the protocol at least in the foreseeable future. Even ratifying the Additional Protocol may not provide a 100 percent guarantee that Iran would be caught if it cheated. To prevent that possibility, vigorous intelligence efforts are required by the IAEA member states to ensure a rigorous counter-proliferation regime.

Effective implementation of the JCPOA requires a sustained funding from the IAEA member states to cover the costs of inspections. Another crucial step for effectively implementing of the deal is to train more experts and qualified inspectors by the IAEA as the current number of the agency experts are not sufficient, which may put the agency's safeguard activities at risk and degrade the quality of safeguard inspections as well as making it extremely difficult for the IAEA to detect noncompliance.

Keywords: IAEA, Iran's Nuclear Agreement, JCPOA, Additional Protocol, Iran's Compliance, Monitoring

خلاصه

توافقنامۀ هسته ای که در ۱۴ ژوئیه ۲۰۱۵ بین ایران و کشورهای ۱+۵ به امضا رسیده بود، موجب از بین رفتن بسیاری از دستاوردهای هسته ای ایران شد. با این حال توافق خطراتی را در بر دارد و موفقیت آن به عوامل متعددی از جمله شفافیت کامل، تأیید قطعی و نظارت بر برنامۀ هسته ای ایران در چند دهۀ بعدی بستگی دارد.

هرچند در این توافقنامه، ایران موظف به تصویب پروتکل الحاقی است، اما وجود برخی چالشهای عمده از جمله نبود جدول زمانی مشخص در برجام جهت تصویب این پروتکل الحاقی توسط ایران و نیز وجود اختلاف میان مراکز قدرت در تهران در زمینۀ این توافقنامه، این امکان را فراهم می سازد که تهران در آیندۀ نزدیك نتواند پروتکل الحاقی را به تصویب برساند. احتمالا تصویب پروتکلهای اضافی هم تضمین ۱۰۰ درصدی برای رو شدن دست ایران در صورت فریبکاری نمی دهد. برای جلوگیری از وقوع این احتمال، کشورهای عضو آژانس بین المللی انرژی اتمی به تلاشهای اطلاعاتی قوی برای تضمین اجرای یک برنامۀ دقیق عدم گسترش سلاح نیاز دارند.

اجرای مؤثر برجام نیازمند حمایت مالی مداوم کشورهای عضو آژانس بین المللی انرژی اتمی برای پوشش هزینه های بازرسی می باشد. یکی دیگر از گامهای حیاتی برای اجرای مؤثر توافقنامه، آموزش کارشناسان و بازرسان واجد شرایط بیشتر توسط آژانس است. در حال حاضر تعداد کارشناسان آژانس در این زمینه کافی نیست، که این امر ممکن است فعالیتهای پادمان آژانس را در معرض خطر قرار داده و با تنزل کیفیت بازرسی آن، آژانس را در تشخیص عدم تبعیت ایران از توافقنامۀ هسته ای به شدت با مشکل روبرو سازد.

کلمه‌های کلیدی:توافق هسته ای, تحریم ها, آژانس بین‌المللی انرژی اتمی (IAEA), گروه ۱+۵

Introduction: The IAEA's Acute Challenges to Enforce the Nuclear Agreement (JCPOA) on Iran

The nuclear accord known as the Joint Comprehensive Plan of Action (JCPOA) that was reached on July 14, 2015, between Iran and six world powers (the United States, Russia, France, China, Great Britain plus Germany) wiped out most of the achievements of the Iran's decades-long nuclear endeavor. In December 2015, the International Atomic Energy Agency (IAEA) certified Iran in compliance with the agreement, thus paving the way to implement the deal. The IAEA promised stringent oversight of Iran's remaining civil program for the 15 years' duration of the agreement.

However, to the success of the JCPOA and to ensure that Iran's nuclear program remains peaceful, a continued commitment from Iran is required. The success of the deal depends on a number of factors including full transparency, vigorous verification and monitoring of the nuclear program over the next several decades. Nonetheless, this approach has its own risks due to the fact that Iran now is a nuclear-threshold state and any step taken beyond that, would be a threat to global security and led to a chain of reaction in the Middle East.

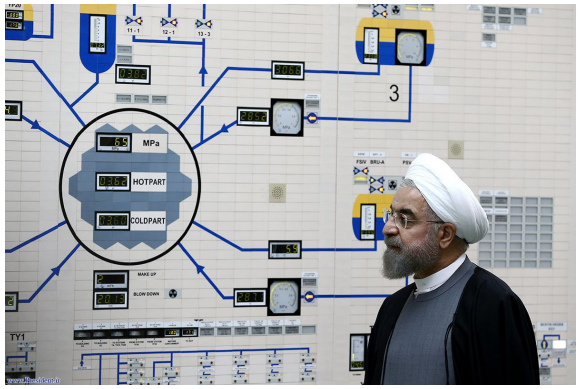
Although some features of the Additional Protocol (AP) of the Non-Proliferation Treaty (NPT), are available in the JCPOA, ratifying of the AP by Iran will ensure the continuation of these provisions after the 15 years' duration of the deal.

This research tries to find answers to the following key questions; 1) will Iran eventually ratify the Additional Protocol? 2) what are the requirements to aid in verification efforts and to reinforce the transparency of the nuclear agreement on Iran, and eventually, 3) how the IAEA goes about monitoring Iran's nuclear sites to enforce the nuclear agreement on Tehran?

The study strives to achieve the following applied objectives; first, to ascertain whether Iran will ratify the Additional Protocol providing the continuation of monitoring and verification provisions after the implementation of the JCPOA. Second, to identify the challenges that the IAEA may face in monitoring and verifying Iran's compliance with the JCPOA.

Iran's Commitment to the Joint Comprehensive Plan of Action

The prospect of a nuclear-armed Iran had unsettled neighboring countries and threatened a nuclear arms race in the Middle East. To thwart Iran's nuclear ambition, the international community had imposed an increasingly crippling series of economic sanctions, implemented by the UN Security Council, the United States, and the European Union. By 2013, the crippling measures brought the Iranian economy to its knees and the regime responded by entering negotiations in 2013, and on July 14, 2015, reached a deal with the P5+1 countries which is known as the Joint Comprehensive Plan of Action (JCPOA).[1]



According to the parameters of the deal, Iran committed itself to a serious rollback of its nuclear project in exchange for sanctions relief. In December 2015, the International Atomic Energy Agency (IAEA) certified Iran in compliance with the agreement, thus paving the way for sanction relief. The IAEA promised stringent oversight of Iran's remaining civil program for the 15 years' duration of the agreement. All sides of the agreement expressed optimism that the deal would prevent proliferation in the Middle East.

The Vienna agreement presents new opportunities but still faces challenges. It is not clear whether a detailed and binding inspection regimen can be developed, given Iran's record of cheating.

The JCPOA wiped out most of the achievements of Tehran's decades-long nuclear endeavor. Iran has been restricted to 6,000 IR-1 first generation centrifuges of limited enrichment capacity. In addition, Iran has been allowed 300 kg of Low Enriched Uranium (LEU) per year; excess LEU needs to be shipped out of the country.[2] These limitations were devised with a view of lengthening of the time Iran would need to fabricate enough weapon-grade uranium for a single nuclear weapon, should it renege on the agreement and leave the NPT. An additional step was mandated by the JCPOA. Iran should also sign the Additional Protocol which will continue in perpetuity for as long as Iran remains a party to the NPT.[3]

The Vienna agreement presents new opportunities but still faces challenges. It is not clear whether a detailed and binding inspection regimen can be developed, given Iran's record of cheating. While some analysts argue that the negotiated parameters would block Iran's pathways to a nuclear weapon, however, Iran may become more powerful as sanctions are lifted. Iran originally installed its centrifuges and enriched this uranium under crippling sanctions and intense international scrutiny. Therefore, without sanctions in place, Iran will be able to enrich faster if it decides to violate the deal and breakout time and re-imposing sanctions will not work.[4]

Iran has a long history of fomenting tensions in the region and an equally long record of deception in dealing with the Safeguard Division of the IAEA. As a result, a strong residue of mistrust has clouded the JCPOA achievements. Concerns have been raised that, despite the stringent oversight, Iran could manage an illicit weapons program. Questions about Iran's ultimate intention of achieving a nuclear weapons-based dominance in the Middle East had also not been put to rest.

IAEA Challenges in Verifying Iran's Compliance with the JCPOA

This section reviews the challenges that the IAEA may face in enforcing the JCPOA on Iran, ranging from budget and staffing shortfall that the Iran deal will consume to the agency's dependence on Iranian cooperation to access nuclear sites and the intrinsic difficulty in detecting undeclared activities such as weapons development and centrifuge manufacturing that do not leave a nuclear trace.

Additional Protocol (AP)

The JCPOA created a loophole for Iran because there is no specific timeline for the country's ratification anywhere in the deal. The open-ended timetable for ratification of the AP remains a major challenge for the nuclear agreement.

Iran has signed the Additional Protocol on December 18, 2003, but never ratified the protocol. According to the nuclear agreement, "Iran will seek, consistent with the Constitutional roles of the President and Parliament, ratification of the Additional Protocol."[5] Although some features of the AP, including inspections, monitoring of stockpiles of missile material and information about fuel cycle research- are available in the nuclear agreement, ratifying of the AP by Iran ensures the continuation of these provisions after the 15 years' duration of the deal.

The JCPOA created a loophole for Iran because there is no specific timeline for the country's ratification anywhere in the deal. The open-ended timetable for ratification of the AP remains a major challenge for the nuclear agreement.

Not to mention that for Iran to ratify the AP, the text had to be approved by a number of bodies: the Majlis (Parliament), the Council of the Custodians of the Constitution, and, finally, the Supreme Leader. Still, Ayatollah Khamenei is not obligated to endorse the AP and, in fact, could reject it out of hand by invoking a State Order (Hukm-e Hokumati). Still, a power struggle between the moderate forces and their hardline opponents would dictate whether the Majlis will ratify the AP or not. As of this writing, there is no indication that the Majlis will ratify the protocol.

Budget Challenges

This section tries to find an answer to the question of whether the IAEA has enough budget for its Iran task force?

The IAEA funds its programs through its regular budget in which it receives from donors and the member states based on a scale pegged to each country's gross national income. These funds are normally spent for programs like safeguards and weapons' inspectors as well as administrative costs among other things. Until 2011, the United States and Japan were the largest contributors to the IAEA (and other UN agencies), and respectively provided almost 25 percent and 10 percent of the IAEA's regular budget. As a rule, the poorest members of the agency pay one percent or less of the agency's regular budget.[6] However, since then, Washington decreased its payment to 22% for the IAEA though, in 2014, it provided about $24 million in extra-budgetary funds for safeguards implementation.[7]

In addition to the US cutting down its payment in recent years, other member states in the agency's Board of Governors (BOG) also have pressured the IAEA to rein in its spending, a policy called "zero-real growth" appeared in the agency's 2015 budget report. In its 2015 report, the IAEA described a host of activities that it has undertaken to cut expenditures, including among other things, introducing a "paper smart" policy and "optimizing the use of technical and office supplies." For example, the agency asked the office to bemore careful about using the copy machines as a way to reduce spending, a situation that reflects the overarching economic challenges member states face.[8]

IAEA budget shortfall will cause challenges for the IAEA to verify Iran's compliance with the JCPOA. In addition to technical, political and logistical challenges, the inspection regime in Iran perhaps is the greatest challenge facing the IAEA.

In his speech on October 31, 2014, at Brookings Institution, the IAEA Director General Yukiya Amano pressed his case for more resources from the member states to enable the IAEA to carry out its global activities. As Amano said "the number of nuclear facilities coming under the IAEA safeguards continues to grow steadily- by 12 percent in the past five years alone. So does the amount of nuclear material to be safeguarded. It has risen by around 14 percent in that period." Amano's speech went on "with 72 nuclear-power plants under construction, and many additional countries considering the introduction of nuclear power in the coming years, that trend looks very likely to continue."[9] Almost one year after his Brookings Institution speech, on September 14, 2015, the

Director General admitted that despite these new duties, funding for the IAEA has not kept pace with growing demands. As he put it "Funding for the agency has not kept pace with growing demand for our services and is unlikely to do so in the coming years."[10]

It was due to the fact that the regular budget of the IAEA in 2015 was approximately 350 million dollars. Of this amount, the nuclear verification program budget comprised $144.2 million. The agency's regular budget for 2016 is only slightly increased to $401 million.[11]

This budget shortfall will cause challenges for the IAEA to verify Iran's compliance with the JCPOA. In addition to technical, political and logistical challenges, the inspection regime in Iran perhaps is the greatest challenge facing the IAEA admitted by the agency Director General in a press conference on Jul 14, 2015, following the signing of the JCPOA.[12] It was in fact predicted by the United States Government Accountability Office (GAO) in its report released on February 23, 2015. While the GAO predicts that the IAEA will require an extra $10 million per year for the duration of the JCPOA to monitor the deal, other sources like data from the IAEA Program and Budget for 2016 and from recent Safeguards Implementation Reports estimate that total safeguards expenditure for Iran might approach 18 million Euros per year.[13]

The agency's estimation sounds reasonable due to the fact that prior to the conclusion of the Joint Plan of Action (JPA)- agreed between China, France, Germany, the Russian Federation, the United Kingdom, the United States of America (E3+3) and Iran- and then the JCPOA, the cost of safeguards implementation in Iran in 2012 was $14 million when it was only limited to inspection of specific sites initially allowed by Iran as a precondition to restart diplomatic negotiations.[14]

Though the US State Department is proposing a $191 million contribution to the IAEA in its Fiscal Year 2017 budget request, (101,064.0 regular budget and 89,800.0 voluntary contributions) a $5 million increase over the current year, to help the agency meet its new obligations, the agency falls short of sufficient money to verify Iran's compliance.[15]

Since 2003, the cost of verification in Iran increased steadily due to Iran's perceived proliferation risk. Since then, the IAEA has implemented state-level safeguards in Iran to an extraordinary degree of intensity and scope. By 2013 (prior to the deal) safeguards implementation in Iran cost the agency about $14 million a year- more than any other member state except Japan, the world's most safeguarded country. A large amount of this money was spent on non-routine activities including analysis of several thousand samples taken from the field in Iran's nuclear sites.[16]

For the Fiscal Year 2016, the agency's member states donated this amount to the IAEA's regular budget. To cover the cost of implementing the AP on Iran, the IAEA plans to allocate approximately $6 million for 2017 to 2019 from its regular budget. It is, in fact, an enhanced verification package that is part of the JCPOA, and to cover the costs of inspections as well as the elements beyond those associated with AP implementation including equipment, travel, and support services.[17]

The remaining approximately $12 million, required to pay for "transparency measures" is supposed to be paid by the states' extra-budgetary contributions. It is doubtful for the United States and the other member states to pay this amount because as mentioned, not only has the United States cut down its payment in recent years but other member states in the agency's Board of Governors also have pressured the IAEA to rein in its spending, within the parameters of the "zero-real growth".[18]

Staffing Shortfall

The IAEA reportedly has set up 70 professionals including 45 qualified inspectors-approximately 90 percent of the staff the agency needs- for its Iran

task force. This would put the agency's ongoing safeguard activities at risk in other countries not to mention that the IAEA is short of 20 inspectors globally. This shortage would degrade the quality of safeguards inspections, making it difficult for the IAEA to detect noncompliance. Though inspectors log 80 days annually in the field, this number in Iran is 110 days. To overcome this shortcoming, the agency promised to train more people in order to focus on potential indicators of undeclared activity.[19]

The IAEA reportedly has set up 70 professionals including 45 qualified inspectors-approximately 90 percent of the staff the agency needs-for its Iran task force. This would put the agency's ongoing safeguard activities at risk in other countries not to mention that the IAEA is short of 20 inspectors globally.

According to the nuclear agreement, the agency will authorize up to 150 inspectors, and other staff, to conduct inspections in Iran several times per week. As a rule, the inspection team will stay for a day or longer due to the fact that the workload will be much larger than before the JCPOA. However, Iran is allowed to refuse inspectors on an individual basis, without being required to explain the reason.[20]

Monitoring

Analysts and inspectors of the Safeguard Department should carry out safeguard activities. For doing so, they should verify whether the quantity of nuclear material that is declared by the member state is accurate and complete.[21] For this purpose, the inspectors of the safeguard department will carry out a number of activities ranged from counting items (e.g., containers of uranium or plutonium), to measuring their attributes (e.g., isotopic composition), and finally compare findings with records and declared amounts. Additionally, the inspectors take environmental sampling remote monitoring, analysis of open source documents, as well as analysis of commercial satellite imagery.

The nuclear watchdog would look for indicators of such activities including equipment, nuclear and non-nuclear material, infrastructure support, and traces in the environment to detect any undeclared activities and material. However, this might be the biggest challenge facing the agency, due to the fact that some activities may not be visible through satellite imagery. Particularly the type of activities that do not leave traces in the environment including centrifuge manufacturing and some weapons development activities.[22] In such a case, the IAEA's opportunity to detect these types of activities may be less than in the case for activities involving traceable nuclear material. Truly, the only way that these types of activities will be detected is if Iran were careless in using them.[23]

Another challenge for the agency inspectors is bureaucratic challenges stemming from the Iranian regime. According to the nuclear agreement, Iran must allow a number of 150 designated inspectors formed by the basic criterion that an inspector should have the nationality of a country that has diplomatic relations with Tehran. This will allow Iran to disqualify inspectors of the safeguard department and to limit visa support for the inspectors.[24]

The more problematic issue is stopping covert weaponization research that leaves no trace in the environment. It is referred to as the "sneak out," and that describes the risk of producing a single bomb at a covered facility deep in the Iranian mountains, or built from fuel and components obtained from a trading partner like North Korea behind the back of the UN nuclear watchdog.[25]

As many analysts pointed out, Iran has in the past repeatedly concealed enrichment and other nuclear facilities from the IAEA and has often been uncooperative about inspections. The current strategy would be logical if the breakout scenario was Tehran's only option for obtaining a bomb-through declared sites that are inspected by the IAEA. Yet, there is a high possibility that if Iran would decide to go nuclear, it will almost certainly choose a secret option, a parallel program devoted to military objectives.

Iran has a history of cheating the international community and the UN nuclear watchdog about its nuclear activities. It should have reported its uranium-enrichment activities to the IAEA, but they were instead kept secret until the August 2002 revelation by the MEK. By the time the program

was publicly revealed, Iran was operating one covert site in Tehran and was constructing two more underground facilities, including the Natanz plant. Even the MEK revelation did not stop Tehran's covert attempt. As early as 2006, it began constructing an underground uranium enrichment facility at a former IRGC base, near the city of Qom. Iran failed to acknowledge the existence of the facility, until being confronted with satellite imagery evidence on September 21, 2009.[26]

The inspection regime may provide Teheran with the same type of loopholes that enabled it to hide important enrichment activity from the IAEA in the past. A number of studies have argued that inspections are the Achilles heel of the monitoring system. Judging by experience, IAEA inspectors may experience serious difficulties preventing a short breakout opportunity as the regime has excelled in manipulations and subterfuge. As one analyst noted, "Iran is a big country, and even very strong inspections can't spot every hole in the ground." The advanced stage of the nuclear project makes their task even more complicated, as the final stage of weaponization can be hidden in plain sight.[27] According to the deal, the Iranians will not halt research and development of the faster centrifuges that will enable the regime to break out the bomb in a very short period.[28]

The IAEA's Dependence on Iranian Cooperation to Access Nuclear Sites

The agency may also face potential challenges in accessing some Iranian nuclear sites, meaning that it should rely on Iranian cooperation to access those sites.[29] The agency should rely on Iran's cooperation for its safeguard activities, but Iran's record shows that it denied access to the agency inspectors on many occasions in the past.[30] For example, during the Khatami administration, the regime has put much effort to evade the IAEA inspections that came to resemble what one analystcalled a 'cat and mouse' game. The pattern was always the same- an initial request to visit a specific facility or parts of a facility was denied, only to be permitted later. The Kalaye Electric Complex was a case in point. Since the Iranians did not declare the facility in their safeguards agreements, the IAEA was not authorized to visit the Kalaye Complex.[31]

Even after Khatami promised a more liberal policy, the Agency's inspectors were denied access to parts of the complex during a visit in March 2003. Iran assured the inspectors that only 'simulation studies' had taken place there and that no nuclear material had been used in these simulations. When the Agency continued to insist on getting soil samples from the site, the authorities had to make some fast adjustments. According to Rouhani, shortly after, the equipment was dismantled and moved to Pars Trash- another facility under the Atomic Energy Organization of Iran (AEOI) located in Tehran. The Kalaye Complex was renovated to prevent detection of nuclear material and an incomplete declaration was submitted to the IAEA.[32]

The agency may also face potential challenges in accessing some Iranian nuclear sites, meaning that it should rely on Iranian cooperation to access those sites. The agency should rely on Iran's cooperation for its safeguard activities, but Iran's record shows that it denied access to the agency inspectors on many occasions in the past.

In May and June 2003, Iran gave the IAEA inspectors access to the Kalaye Complex, but their request for sampling was denied. After more pressure from the Agency, the Iranians relented and the inspectors were allowed to take samples in August using 'swipes'- small squares of cloth wiped over selected surfaces. The swipes were analyzed in the IAEA's member states laboratories (using double-blind samples to mask the origin), revealing traces of both LEU and HEU. The evidence forced the hands of the regime to belatedly admit that the Kalaye Complex was used for experiments with centrifuges. More embarrassing, the IAEA inspectors reportedly found the centrifuge factory concealed behind a false wall at the facility.[33]

Iran also denied the IAEA's inspector access to the Lavizian-Shian site fingered by the Mojahedin-e Khalq (MEK); satellite images provided by the Institute for Science and International Security (ISIS) on March 10, 2004, indicated that the complex, including roads and walkways vanished. When the inspectors were finally able to access the facility,

they found no traces of nuclear activity. The MEK contended that, in anticipation of the inspection, the Iranians destroyed the facility, removed six inches of top soil and relocated the equipment to another site, Lavizian 2.[34]

The Parchin facility outside Tehran was another sore point that the IAEA inspectors have been denied access both in 2004 and in February 2012. Throughout 2004, both the MEK and David Albright's ISIS had warned about illegal activities in the sprawling complex run by the Ministry of Defense, but the IAEA had been denied access. Parchin was already on the CIA's list because it housed a missile production facility including a modified Shahab-3 that could potentially deliver a nuclear payload. On March 24, the MEK revealed the existence of a secret tunnel dug under the facility where work on a weapon's project was conducted under the direction of Mohsen Fakhrizadeh Mahabadi, a Brigadier General in the Revolutionary Guards and a professor of physics at Imam Hossein University in Tehran.[35]

Iranian hardliners tend to view these inspections as endangering Iran's security due to the belief that they are aimed at intelligence gathering on Iranian defense facilities and the IAEA's insistence on accessing those sites may eventually lead Iran to torpedo the deal.[36] In June 2015, a month before the JCPOA was concluded, the Iranian parliament passed a law that would prevent access to Iranian military facilities and scientists.[37] A month before, in May 2015, Ayatollah Khamenei stated that his country would resist 'coercion and excessive demands' and refuse access to military sites and nuclear scientists. As he put it "the impudent and brazen enemy expects that we allow them to talk to our scientists and researchers about a fundamental local achievement but no such permission will be allowed."[38]

However, some parts of Iran's nuclear infrastructures will be under monitoring around the clock and include high-tech surveillance, but for other parts, there will be no direct surveillance and inspectors are not allowed to visit whenever they request and Iran can block their access. In this situation, a joint commission including eight members (the United States, Iran, France, Germany China, Russia, the UK, and the EU) will deal with the request and make a decision. If five members of the joint commission vote for access, Iran must allow inspectors to visit within 24 days. Opponents argue that in this 24 day period Iran would be able to clean up any illicit activities.[39]

Still, the most challenging issue is that, if Iran eventually would not allow IAEA inspectors even after the 24 days outlined by the nuclear agreement, how the global powers would deal with the issue is not clear at worse and not effective (snap-back approach) at best.

Conclusion

The nuclear accord wiped out most of the achievements of Iran's decades-long nuclear marathon, but its success depends on a number of factors including full transparency and vigorous verification, an approach which has its own risks due to the fact that Iran now is a nuclear-threshold state.

Iran is obliged to ratify the Additional Protocol but there are major challenges namely lack of a specific timeline for Tehran's ratification in the JCPOA and the power struggle in Tehran over the deal which indicate that Iran may not ratify the protocol at least in the foreseeable future. Even ratifying the AP may not provide a 100 percent guarantee that Iran would be caught if it cheated. To prevent that possibility, vigorous intelligence efforts are required by the IAEA member states to ensure a rigorous counter-proliferation regime.

As a crucial step, the IAEA agency should be able to implement the JCPOA effectively. Sustained funding is necessary from the member states to cover the costs of inspectors, to enable the IAEA to fully implement the JCPOA without cutting back on inspections in other states.

The IAEA should also train more experts and qualified inspectors for its Iran task force as the current number of the agency experts are not sufficient, which may not only put the agency's safeguard activities at risk, but also would degrade the quality of safeguard inspections and making it extremely difficult for the IAEA to detect non-compliance.

Endnotes

1 Farhad Rezaei, Iran's Nuclear Program: A Study in Nuclear Proliferation and Rollback, (New York: Palgrave Macmillan, 2016).

2 Alisa L. Carrigan, "Can the IAEA verify the Iran deal?," Bulletin of Atomic Scientists, (May 5, 2015): CNN, "Parameters of the tentative Iran nuclear deal," CNN.com, 2 April 2015 http://www.cnn.com/2015/04/02/world/iran-nuclear-deal-parameters/index.html; Michael R Gordon and David E Sanger, Iran Agrees to Detailed Nuclear Outline, First Step Toward a Wider Deal, The New York Times, 2 April 2015.

3 Moshe Ya'alon, Current Iran framework will make war more likely, The Washington Post, April 8, 2015, David E. Sanger and William J. Broad, In Iran Talks, U.S. Seeks to Prevent a Covert Weapon, New York Times, 22 November 2014.; and JCPOA, "Joint Comprehensive Plan of Action," 14 July 2015 https://www.justsecurity.org/wp-content/uploads/2015/07/271545626-Iran-Deal-Text.pdf ; TCACNP, "Factsheet: Iran and the Additional Protocol," The Center for Arms Control and Non-proliferation, 14 July 2015 armscontrolcenter.org/factsheet-iran-and-the-additional-protocol

4 John Ford, "How Iran Fooled the United States," The National Interest, April 20, 2015 nationalinterest.org/blog/the-buzz/how-iran-fooled-the-united-states-12679?page=show

5 IAEA, Status of the Additional Protocol Status as of 7 October 2016, https://www.iaea.org/safeguards/safeguards-legal-framework/additional-protocol/status-of-additional-protocol ; EUEA, Joint statement by EU High Representative Federica Mogherini and Iranian Foreign Minister Javad Zarif Vienna, 14 July 2015, http://collections.internetmemory.org/haeu/content/20160313172652/http://eeas.europa.eu/statements-eeas/2015/150714_01_en.htm

6 IAEA, "Scale of Assessment of Members' Contributions for 2015 Resolution adopted on 25 September 2014 during the seventh plenary meeting," International Atomic Energy Organization, 25 September 2014 https://www.iaea.org/About/Policy/GC/GC58/GC58Resolutions/English/gc58res-9_en.pdf ; Investopedia, "Gross National Income (GNI)," Investopedia.com, www.investopedia.com/terms/g/gross-national-income-gni.asp; and Mark Leon Goldberg, "The Cash-Strapped Agency at the Heart of the Iran Deal," The Atlantic, July 18, 2015 www.theatlantic.com/international/archive/2015/07/iaea-iran-nuclear-deal/398900/

7 "Annual Report on United States Contributions to the United Nations," Office of Management and Budget, June 6, 2011 https://www.whitehouse.gov/sites/default/files/omb/assets/legislative_reports/us_contributions_to_the_un_06062011.pdf ; Susan B. Epstein and Paul K. Kerr, "IAEA Budget and U.S. Contributions: In Brief, Congressional Research Service," Fas.org, February 17, 2016 https://www.fas.org/sgp/crs/nuke/R44384.pdf

8 IAEA, "The Agency's Budget Update for 2015, International Atomic Energy Agency," iaea.org, July 2014 https://www.iaea.org/About/Policy/GC/GC58/GC58Documents/English/gc58-2_en.pdf

9 IAEA Director General Yukiya Amano, "Challenges in Nuclear Verification: The IAEA's Role on the Iranian Nuclear Issue," iaea.org, https://www.iaea.org/newscenter/statements/challenges-nuclear-verification-iaea's-role-iranian-nuclear-issue

10 IAEA Director General Yukiya Amano, "Statement to Fifty-Ninth Regular Session of IAEA General Conference 2015," iaea.org, September 14, 2015 https://www.iaea.org/newscenter/statements/statement-to-fifty-ninth-regular-session-of-iaea-general-conference-2015

11 IAEA, "IAEA, IAEA Regular Budget for 2016," International Atomic Energy Agency, 2016 https://www.iaea.org/about/budget; IAEA, "IAEA, The Agency's Programme and Budget 2016 -2017," International Atomic Energy

Agency, https://www.iaea.org/About/Policy/GC/GC59/GC59Documents/English/gc59-2_en.pdf

12 IAEA Channel, "IAEA Director General Amano's Remarks to the Press on Agreements with Iran," Youtube.com, July 14, 2015 https://www.youtube.com/watch?v=FOnE6mESVfw

13 GAO, "Nuclear Nonproliferation Preliminary Observations on IAEA's Role in Verifying the Iran Agreement," United States Government Accountability Office, www.gao.gov/assets/680/675222.pdf; and IAEA, Safeguards Statement for 2015, https://www.iaea.org/sites/default/files/16/08/statement_sir_2015.pdf

14 Mark Hibbs, "Iran and the Evolution of Safeguards," Carnegieendowment.org, December 16, 2015 carnegieendowment.org/2015/12/16/verification-and-implementation-biennial-collection-of-analysis-on-international-agreements-for-security-and-development/iobq

15 Susan B. Epstein and Paul K. Kerr, "IAEA Budget and U.S. Contributions: In Brief, Congressional Research Service."

16 Andreas Persbo Mark Hibbs, "Verification in Iran: 15 Questions and Answers," Carnegieendowment.org, August 04, 2015 carnegieendowment.org/2015/08/04/verification-in-iran-15-questions-and-answers/ieai

17IAEA, "IAEA, Introductory Statement to the Board of Governors," iaea.org, June 2016 https://www.iaea.org/newscenter/statements/introductory-statement-to-the-board-of-governors-june-2016

18 Mark Hibbs, "Vigorous Verification in Iran," Carnegieendowment.org, June 28, 2016 carnegieendowment.org/2016/06/28/vigorous-verification-in-iran-pub-63946

19 Ibid.; GAO, "Nuclear Nonproliferation Preliminary Observations on IAEA's Role in Verifying the Iran Agreement."

20 Homas E. Shea, "IAEA Verification of the Iran Nuclear Deal: 10 Hot Issues," Armscontrol.org, July 23, 2015 https://www.armscontrol.org/blog/ArmsControlNow/2015-07-23/IAEA-Verification-of-the-Iran-Nuclear-Deal-10-Hot-Issues

21 GAO, "Nuclear Nonproliferation Preliminary Observations on IAEA's Role in Verifying the Iran Agreement."

22 Ibid.

23 Andreas Persbo Mark Hibbs, "Verification in Iran: 15 Questions and Answers."

24 Ibid.

25 David E. Sanger and William J. Broad, In Iran Talks, U.S. Seeks to Prevent a Covert Weapon.

26 Jonathan Weisman, West Raps Iran Nuclear Site, The Wall Street Journal, September 26, 2009.; and Jeffrey T. Richelson, "Underground Facilities: Intelligence and Targeting Issues," National Security Archive Electronic Briefing Book, No 372, March 23, 2012 http://nsarchive.gwu.edu/NSAEBB/NSAEBB439/

27 Max Fisher, "This is an astoundingly good Iran deal," Vox World, July 16, 2015 http://www.vox.com/2015/4/2/8337347/iran-deal-good; Dore Gold, "Inspections: The Weak Link in a Nuclear Agreement with Iran," Jerusalem Center for Public Affairs, Vol 14, No 19, (June 11, 2014):

28 Ibid.

29 GAO, "Nuclear Nonproliferation Preliminary Observations on IAEA's Role in Verifying the Iran Agreement."; Andreas Persbo Mark Hibbs, "Verification in Iran: 15 Questions and Answers."

30 GAO, "Nuclear Nonproliferation Preliminary Observations on IAEA's Role in Verifying the Iran Agreement."

31 Mohamed Elbaradei, The Age of Deception: Nuclear Diplomacy in Treacherous Times, (New York: Metropolitan Books, 2011), Hassan Rouhani, Amniat-e Meli va Diplomacy Hastei [Na-

tional Security and Nuclear Diplomacy], (Tehran: Markaz-e Tahqiqat-e Istiratizhik, 2012).

32 Mohamed Elbaradei, The Age of Deception: Nuclear Diplomacy in Treacherous Times, (New York: Metropolitan Books, 2011), Hassan Rouhani, Amniat-e Meli va Diplomacy Hastei [National Security and Nuclear Diplomacy], (Tehran: Markaz-e Tahqiqat-e Istiratizhik, 2012).

33 Hassan Rouhani, Amniat-e Meli va Diplomacy Hastei [National Security and Nuclear Diplomacy], Mohamed Elbaradei, The Age of Deception: Nuclear Diplomacy in Treacherous Times.

34 IAEA Report, June 17, 2004; "ISIS Imagery Brief: Destruction at Iranian Site Raises New Questions About Iran's Nuclear Activities," Institute for Science and International Security, http://isis-online.org/isis-reports/detail/isis-imagery-brief-destruction-at-iranian-site-raises-new-questions-about-i/8, Con Coughlin, "Teheran park 'cleansed' of traces from nuclear site," The Daily Telegraph, March 6, 2006 http://www.telegraph.co.uk/news/worldnews/middleeast/iran/1512242/Teheran-park-cleansed-of-traces-from-nuclear-site.html?mobile=basic.

35 Alireza Jafarzadeh, The Iran threat: President Ahmadinejad and the coming nuclear crisis, (New York: Palgrave Macmillan, 2007), Da Gunny, "Iran's Green Salt Project was initially brought to light by reports of a laptop computer in the CIA's possession," Truth on Target, August 26, 2010 http://truthontarget.blogspot.com/2010/08/irans-green-salt-project-was-initially.html.; and GAO, "Nuclear Nonproliferation Preliminary Observations on IAEA's Role in Verifying the Iran Agreement."

36 Tarja Cronberg, "The Great Balancing Act: EU Policy Choices During The Implementation of The Iran Deal," sipri.org, April 2016 https://www.sipri.org/sites/default/files/EUNPC_no%2050.pdf

37 Associated Press, "Iran parliament bans access to military sites, scientists," The Iran Project, June 21, 2015 http://theiranproject.com/blog/2015/06/21/iran-parliament-bans-access-to-military-sitesscientists/

38 AP, "Iran leader rules out key aspects of any nuke deal," Associated Press, May 20, 2015 http://www.cbsnews.com/news/iranayatollah-khamenei-military-sites-scientist-interviews-nuclear-deal/

39 Tarja Cronberg, "The Great Balancing Act: EU Policy Choices During The Implementation of The Iran Deal."; Samuel C. Rajiv, "JCPOA and the IAEA: Challenges Ahead " idsa.in, August 07, 2015 www.idsa.in/issuebrief/JCPOAandtheIAEAChallengesAhead_sscrajiv_070815

İRAM
İran Araştırmaları Merkezi

About İRAM

Center for Iranian Studies in Ankara is a non-profit research center dedicated to promoting innovative research and ideas on Iranian affairs. Our mission is to conduct in-depth research to produce up-to-date and accurate knowledge about Iran's politics, economy and society. İRAM's research agenda is guided by three key principles – factuality, quality and responsibility.

İRAM
Center for Iranian Studies in Ankara

Oğuzlar Mh. 1397. Sk. No: 14 06520 Çankaya, Balgat, Ankara, Turkey
Phone: +90 312 284 55 02 - 03 Fax: +90 312 284 55 04
e-mail: info@iramcenter.org www.iramcenter.org