



Politics vs. Protocol

Iran's Nuclear Archive and the IAEA's Responsibilities

Tzvi Kahn
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List of Acronyms

AP	Additional Protocol
CSA	Comprehensive Safeguards Agreement
IAEA.....	International Atomic Energy Agency
INFCIRC	Information Circular
JCPOA.....	Joint Comprehensive Plan of Action
NPT.....	Treaty on the Non-Proliferation of Nuclear Weapons (also known as the Nuclear Nonproliferation Treaty)
PMD	Possible Military Dimensions
UNGA.....	United Nations General Assembly
UNSC	United Nations Security Council

Executive Summary

In an April 2018 press conference, Prime Minister Benjamin Netanyahu disclosed that Israel's Mossad intelligence agency had conducted a raid on a warehouse in Iran the previous January, removing a half-ton of files cataloguing Tehran's efforts to develop a nuclear weapon.¹ The covert archive contained a wealth of new information that contradicts longstanding assumptions about Iran's nuclear program. While a 2007 U.S. National Intelligence Estimate judged "with high confidence" that Iran "halted its nuclear weapons program" in 2003,² the archive shows that the program continued, albeit in a more circumscribed and diffuse manner.

Specifically, the archive identifies additional nuclear facilities, equipment, and activities previously unknown to the International Atomic Energy Agency (IAEA), the UN body tasked with monitoring Iran's nuclear program and verifying its key nuclear-related commitments. Israeli officials estimate that the Jewish state seized only 20 to 50 percent of the archive's contents, suggesting that the IAEA's knowledge base likely has additional gaps.

The IAEA harbors an obligation to remedy these gaps by securing prompt access to the facilities, equipment, and materials described in the archive. This responsibility stems directly from the IAEA's legal mandate, as established by the multiple non-proliferation agreements that Iran has concluded. A careful review of these accords shows that the IAEA has no pretext for inaction or delay. Further investigation of Iran's nuclear program remains necessary to ensure that no covert nuclear activity persists today.

This report assesses that the IAEA, despite its clear duty, has not demonstrably satisfied its mandate. In the years since the finalization of the 2015 nuclear deal,

formally known as the Joint Comprehensive Plan of Action (JCPOA), the IAEA has provided insufficient transparency and clarity about its inspections in Iran. This opacity raises questions about the diligence of the IAEA's investigations – particularly its probe of sites, equipment, and activities documented in the archive.

The agency's approach also invites criticism that political considerations have interfered with its obligation to serve as an objective, technical body. In fact, the actions and public statements of IAEA leaders convey a hesitation to scrutinize key Iranian activities that potentially violate the JCPOA, lest the resulting evidence undermine the accord's viability.

This report begins with an overview of the archive's contents and their significance, showing that they offer actionable findings relevant to the enforcement of Tehran's current nonproliferation agreements. The report then presents a survey of these agreements – the Treaty on the Non-Proliferation of Nuclear Weapons (more commonly known as the Nuclear Nonproliferation Treaty, or NPT), the Comprehensive Safeguards Agreement (CSA), the CSA's Additional Protocol (AP), and the JCPOA – and the core legal obligations they impose on Iran, the IAEA, and other countries.

This report subsequently examines the IAEA's pre-JCPOA efforts to inspect and report on Iran's nuclear program pursuant to the NPT, CSA, and AP. The agency's actions established a precedent not only for timely responses to disclosures of new information, but also for comparatively detailed reporting and transparency about Tehran's steps – or lack thereof – to fulfill its commitments. This report then appraises the IAEA's post-JCPOA efforts, noting both possible failures to inspect key sites and a significant decline in transparency and clarity in reporting.

1. Israel Ministry of Foreign Affairs, Press Release, "PM Netanyahu presents conclusive proof of Iranian secret nuclear weapons program," April 30, 2018. (<https://mfa.gov.il/MFA/PressRoom/2018/Pages/PM-Netanyahu-presents-conclusive-proof-of-Iranian-secret-nuclear-weapons-program-30-April-2018.aspx>)

2. Office of the Director of National Intelligence, National Intelligence Council, "Iran: Nuclear Intentions and Capabilities," November 2007, page 6. (https://www.dni.gov/files/documents/Newsroom/Reports%20and%20Pubs/20071203_release.pdf)

Based on this analysis, the report urges the IAEA to take the following steps, which are indispensable for the fulfillment of its mandate:

- Inspect promptly all Iranian sites, equipment, and materials discussed in the archive.
- Strengthen its investigation of past and present issues concerning the possible military dimensions (PMD) of Iran's nuclear program.
- Issue comprehensive, transparent reports of Iran's nuclear activities.
- Require Tehran to supply the IAEA with all documents in the archive that Israel failed to extract from the warehouse, along with any related documents.

The report also urges the Trump administration and Congress to take the following actions:

- Demand the IAEA's implementation of the above steps.
- Conduct a public information campaign highlighting the findings in the archive and its implications for IAEA inspections.
- Call on the IAEA Board of Governors to exercise greater oversight of the IAEA's activities.

Introduction

On the night of January 31, 2018, Mossad agents broke into a nondescript warehouse in Tehran's Shorabad district. Over the course of six-and-a-half hours, the Israeli spies – using torches that burned at temperatures of at least 3,600 degrees – cut through safes that contained Iran's clandestine nuclear archive, removing 55,000 pages as well as 183 compact discs that held another 55,000 files. They fled the scene by

5 a.m., just before the morning shift of Iranian guards would begin at 7 a.m. According to American and British intelligence officials, the files are genuine.³

Israel's raid marked the culmination of a two-year intelligence operation. After Iran and world powers concluded the Joint Comprehensive Plan of Action (JCPOA) in July 2015, Tehran collected its nuclear files from sites throughout the country – an apparent effort to preserve its nuclear know-how for future use. Citing Israeli officials, *The New York Times* recounted that the Islamist regime then “consolidated them at the warehouse, in a commercial district with no past relationship to the nuclear program, and far from the declared archives of the Ministry of Defense. There were no round-the-clock guards or anything else that would tip off neighbors, or spies, that something unusual was happening there.”⁴ But Israeli intelligence learned of Tehran's plan to save the files and, in early 2016, began monitoring their transfer.

The Jewish state's operation yielded a trove of new insights about Iran's nuclear program. In a December 2015 report, the IAEA assessed that Iran's efforts to develop a bomb “did not advance beyond feasibility and scientific studies, and the acquisition of certain relevant technical competences and capabilities.”⁵ But the archive indicates that Tehran, as of 2003, had already designed a nuclear weapon and developed plans to produce five warheads. In addition, the archive includes the minutes of meetings of Iranian officials – many still holding leadership positions today – that discuss methods for concealing Iran's nuclear activities. The archive even contains “deception folders” recording Iran's misinformation to IAEA officials, thereby ensuring their uniformity in each meeting with the agency.⁶

3. David E. Sanger and Ronen Bergman, “How Israel, in Dark of Night, Torched Its Way to Iran's Nuclear Secrets,” *The New York Times*, July 15, 2018. (<https://www.nytimes.com/2018/07/15/us/politics/iran-israel-mossad-nuclear.html>)

4. Ibid.

5. International Atomic Energy Agency, “Final Assessment on Past and Present Outstanding Issues regarding Iran's Nuclear Programme,” GOV/2015/68, December 2, 2015, page 14. (<https://www.iaea.org/sites/default/files/gov-2015-68.pdf>)

6. David Albright, Olli Heinonen, and Andrea Stricker, “The Iranian Nuclear Archive: Implications and Recommendations,” *Foundation for Defense of Democracies and Institute for Science and International Security*, February 25, 2019. (<https://www.fdd.org/analysis/2019/02/25/the-iranian-nuclear-archive-implications-and-recommendations>)

Perhaps most notably, the archive discloses facilities and work previously unknown to the IAEA. For example, it discusses a tunnel complex at the Parchin military complex, known as the Shahid Boroujerdi project, likely intended for the fabrication of uranium-based nuclear weapon components.⁷ Similarly, it indicates that Iran conducted more high explosive tests at Parchin than earlier IAEA reports indicate.⁸ The archive also expounds on a plan, known as Project Midan, to construct an underground test site for nuclear weapons.⁹

The archive shows that the IAEA's December 2015 "assessment, unfortunately, was not correct," notes an April 2019 report by arms control scholars at the Belfer Center for Science and International Affairs at Harvard University's Kennedy School of Government. In fact, "the program revealed by the archive was more advanced and substantial than previously known," indicating that Tehran "had made considerable progress on nearly every aspect of developing and manufacturing nuclear weapons."¹⁰ Consequently, the Harvard report continues, the archive's disclosures "reset the factual

basis for further interactions with Iran about its nuclear program."¹¹

Tehran's duplicity grew out of increased international pressure over Iran's nuclear program. In August 2002, an Iranian opposition group exposed two clandestine sites in Iran – a uranium enrichment plant near Natanz and, as the IAEA would later confirm, a heavy water production plant near Arak.¹² After the United States invaded Iraq in 2003, the Islamic Republic feared that it would become Washington's next target. However, rather than halt its nuclear program, Iran devised a strategy aimed at preserving it while minimizing the risk of detection.

To that end, Iran split its nuclear weapons project – then known as the Amad plan – into covert and overt parts. The overt parts, located at research institutes and universities, consisted of nuclear activities that Tehran could tenably describe as non-military in nature. Covert sites, meanwhile, would focus on research and development of weaponization activities aimed at preserving and advancing Iran's expertise.¹³ "Let there be no mistake: the amount of personnel in

7. David Albright, Olli Heinonen, Frank Pabian, and Andrea Stricker, "A Key Missing Piece of the Amad Puzzle: The Shahid Boroujerdi Project for Production of Uranium Metal & Nuclear Weapons Components," *Foundation for Defense of Democracies and Institute for Science and International Security*, January 11, 2019. (<https://www.fdd.org/analysis/reports/2019/01/11/a-key-missing-piece-of-the-amad-puzzle>)

8. David Albright, Sarah Burkhard, Olli Heinonen, and Frank Pabian, "New Information about the Parchin Site: What the Atomic Archive Reveals About Iran's Past Nuclear Weapons Related High Explosive Work at the Parchin High Explosive Test Site," *Foundation for Defense of Democracies and Institute for Science and International Security*, October 23, 2018. (<https://www.fdd.org/analysis/2018/10/23/new-information-about-the-parchin-site>)

9. David Albright, Sarah Burkhard, Olli Heinonen, Frank Pabian, and Andrea Stricker, "Project Midan: Developing and Building an Underground Nuclear Test Site in Iran," *Foundation for Defense of Democracies and Institute for Science and International Security*, April 2, 2019. (<https://www.fdd.org/analysis/reports/2019/04/02/project-midan>)

10. Aaron Arnold, Matthew Bunn, Caitlin Chase, Steven E. Miller, Rolf Mowatt-Larssen, and William H. Tobey, "The Iran Nuclear Archive: Impressions and Implications," *Belfer Center for Science and International Affairs at the Harvard University Kennedy School of Government*, April 2019, page 7. (<https://www.belfercenter.org/sites/default/files/files/publication/The%20Iran%20Nuclear%20Archive.pdf>)

11. *Ibid.*, page 13.

12. "Iran and Nuclear Weapons," *C-SPAN*, August 14, 2002. (<https://www.c-span.org/video/?172005-1/iran-nuclear-weapons>); David Albright and Corey Hinderstein, "Iran Building Nuclear Fuel Cycle Facilities: International Transparency Needed," *Institute for Science and International Security*, December 12, 2002. (<http://isis-online.org/isis-reports/detail/iran-building-nuclear-fuel-cycle-facilities-international-transparency-need/8>)

13. David Albright, Olli Heinoen, and Andrea Stricker, "Breaking Up and Reorienting Iran's Nuclear Weapons Program: Iran's Nuclear Archive Shows the 2003 Restructuring of its Nuclear Weapons Program, then called the AMAD Program, into Covert and Overt Parts," *Foundation for Defense of Democracies and Institute for Science and International Security*, October 29, 2018. (<https://www.fdd.org/analysis/2018/10/29/breaking-up-and-reorienting-irans-nuclear-weapons-program>)



⬆ September 26, 2018: The nuclear warehouse in Tehran's Turqzabad district and the nuclear archive in Tehran's Shorabad district are roughly five kilometers apart and easily accessed via the Tehran Second-Bypass Expressway. (Photo: Maxar Technologies [previously DigitalGlobe] via Google Earth. Research for annotations: Institute for Science and International Security)

the overt and covert parts will not decrease,” wrote one Iranian official in a 2003 memo stored in the archive. “The structure will not become smaller, and every sub-project will supervise both its overt and covert parts.”¹⁴

Another document in the archive contains the notes of an Iranian scientist explaining his rationale for hiding a particular area of nuclear research. “Neutrons’ research could not be considered ‘overt’ and needs to be concealed,” wrote Masoud Ali Mohammadi, a nuclear physicist at the University of Tehran. “We cannot excuse such activities as

defensive. Neutron activities are sensitive, and we have no explanation for them.”¹⁵

The Mossad’s raid in Shorabad formed the backdrop to another Israeli disclosure. In a September 2018 speech to the United Nations General Assembly (UNGA), Prime Minister Netanyahu said that Israel had located another warehouse, this time in Tehran’s Turqzabad district, containing equipment and material for Iran’s nuclear weapons program. But Israel’s discovery of the Shorabad archive, Netanyahu added, had already prompted the Iranians to begin removing large shipping containers from the Turqzabad site, lest it meet a similar fate.

14. Joby Warrick, “Papers stolen in a daring Israeli raid on Tehran archive reveal the extent of Iran’s past weapons research,” *The Washington Post*, July 15, 2018. (https://www.washingtonpost.com/world/national-security/papers-stolen-in-a-daring-israeli-raid-on-tehran-archive-reveal-the-extent-of-irans-past-weapons-research/2018/07/15/0f7911c8-877c-11e8-8553-a3ce89036c78_story.html)

15. David E. Sanger and Ronen Bergman, “How Israel, in Dark of Night, Torched Its Way to Iran’s Nuclear Secrets,” *The New York Times*, July 15, 2018. (<https://www.nytimes.com/2018/07/15/us/politics/iran-israel-mossad-nuclear.html>); Mohammadi was assassinated in 2010. See: Julian Borger and Saeed Kamali Dehghan, “Allegations fly over Iranian scientist’s assassination,” *The Guardian* (UK), January 12, 2010. (<https://www.theguardian.com/world/2010/jan/12/iran-scientist-assassination-allegation-west>)

“Just last month,” Netanyahu said, “they removed 15 kilograms of radioactive material” and “spread it around Tehran in an effort to hide the evidence.”¹⁶ Satellite imagery appears to confirm that Iran started to clear the site in the summer of 2018.¹⁷ According to media reports, the IAEA eventually visited the site several times in 2019, months after Netanyahu’s speech, and discovered traces of radioactive material.¹⁸

“Israel’s findings in Shorabad and Turqzabad show that further IAEA investigation remains necessary to verify whether Iran’s nuclear weaponization efforts continue covertly. The IAEA’s legal mandate toward Iran rests on a complex architecture of nonproliferation agreements, each of which imposes distinct enforcement obligations both on the agency and on Iran.”

Israel’s findings in Shorabad and Turqzabad show that further IAEA investigation remains necessary to verify whether Iran’s nuclear weaponization efforts continue covertly. The IAEA’s legal mandate toward Iran rests on a complex architecture of nonproliferation agreements, each of which imposes distinct enforcement obligations both on the agency and on Iran. This report now turns to a more detailed assessment of these obligations, and explains their direct applicability to Israel’s discoveries.

The Legal Mandate of the IAEA

Iran’s nonproliferation commitments, and the IAEA’s responsibility to enforce their key provisions, stem from several interlocking accords: the Treaty on the Non-Proliferation of Nuclear Weapons (more commonly known as the Nuclear Nonproliferation Treaty, or NPT), the Comprehensive Safeguards Agreement (CSA), the CSA’s Additional Protocol (AP), and – most recently – the JCPOA. United Nations Security Council (UNSC) Resolution 2231, which passed unanimously on July 20, 2015, just six days after the JCPOA’s finalization, endorses the JCPOA and tasks the IAEA with monitoring and verifying the JCPOA’s nuclear-related measures. To fulfill the vital obligations these documents enumerate, the IAEA bears a duty to inspect the sites, equipment, and activities divulged in the archive.

In its Statute, the IAEA articulates the organization’s key functions, objectives, and operating procedures. Established by the UN in 1957 at the initiative of President Dwight Eisenhower, the IAEA seeks, in the Statute’s words, to “establish and administer safeguards designed to ensure that special fissionable and other materials, services, equipment, facilities, and information made available by the Agency or at its request or under its supervision or control are not used in such a way as to further any military purpose.”¹⁹ The IAEA also aims to “encourage and assist research on, and development and practical application of, atomic

16. Israel Ministry of Foreign Affairs, Press Release, “PM Netanyahu addresses UN General Assembly,” September 27, 2018. (<https://mfa.gov.il/MFA/PressRoom/2018/Pages/PM-Netanyahu-addresses-UN-General-Assembly-27-September-2018.aspx>)

17. David Albright, Olli Heinonen, Frank Pabian, and Andrea Stricker, “Revealed: Emptying of the Iranian ‘Atomic Warehouse’ at Turqz Abad,” *Foundation for Defense of Democracies and Institute for Science and International Security*, November 29, 2018. (<https://www.fdd.org/analysis/2018/11/29/revealed-emptying-of-the-iranian-atomic-warehouse-at-turqz-abad>)

18. “TV: IAEA finds traces of radioactive material at Iran site flagged by Netanyahu,” *The Times of Israel* (Israel), July 11, 2019. (<https://www.timesofisrael.com/tv-iaea-finds-traces-of-radioactive-material-at-iran-site-named-by-netanyahu>); Francois Murphy, “Exclusive: U.N. nuclear watchdog inspects Iran ‘warehouse’ Netanyahu pointed to - sources,” *Reuters*, April 4, 2019. (<https://www.reuters.com/article/us-iran-nuclear-inspection-exclusive/exclusive-u-n-nuclear-watchdog-inspects-iran-warehouse-netanyahu-pointed-to-sources-idUSKCN1RG2B9>); Laurence Norman, “U.N. Watchdog Inspects a Site Flagged as Suspicious by Israelis—but Possibly Too Late,” *The Wall Street Journal*, April 4, 2019. (<https://www.wsj.com/articles/u-n-watchdog-inspects-a-site-flagged-as-suspicious-by-israelis-but-possibly-too-late-11554422394>)

19. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article III, paragraph A (5), page 6. (<https://www.iaea.org/sites/default/files/statute.pdf>)

energy for peaceful uses throughout the world.”²⁰ Today, the IAEA has 171 member states, including the United States and Iran, which ratified the Statute in 1957 and 1958 respectively.²¹

“The IAEA statute requires inspectors to report to the director general ‘any non-compliance’ with a state’s safeguards commitments.”

The 35-member IAEA Board of Governors, which includes the United States but not currently Iran, serves as the agency’s primary policymaking and oversight body. The IAEA’s General Conference – a separate body consisting of all 171 IAEA member states – determines the IAEA’s budget and approves IAEA membership applications, among other functions. According to the Statute, the Board of Governors includes, for terms of one year, the 10 member states “most advanced in the technology of atomic energy including the production of source materials.”²² In practice, this provision has enabled the United States to serve on the Board of Governors since the IAEA’s inception. The remaining Board members serve for one or two years based on a variety of geographic criteria aimed at ensuring “equitable representation” across the world.²³ Iran previously

served on the Board in 1962-64, 1968-70, 1974-76, 1977-79, 1990-92, and 2001-2003.²⁴

The Board of Governors appoints, with the approval of the General Conference, the IAEA’s director general to a four-year term, subject to unlimited renewal. The Statute states that the director general is “responsible for the appointment, organization, and functioning” of the IAEA staff, known as the Secretariat, and “shall be under the authority of and subject to the control of the Board of Governors.”²⁵ Japanese diplomat Yukiya Amano assumed the role of director general in 2009, won reelection in 2013 and 2017, and passed away on July 18, 2019.²⁶ On July 25, the Board of Governors appointed Romanian diplomat Cornel Feruta as acting director general.²⁷ The appointment of Amano’s official successor remains pending.

The Statute requires IAEA inspectors to report to the director general “any non-compliance” with a state’s safeguards commitments. The director general “shall thereupon transmit the report to the Board of Governors.” In turn, the Board of Governors “shall call upon the recipient State or States to remedy forthwith any non-compliance” and “shall report the non-compliance to all members and to the Security Council and General Assembly of the United Nations.” If the member state still fails to comply, the Board may curtail or suspend civilian nuclear cooperation, call

20. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article III, paragraph A (1), page 5. (<https://www.iaea.org/sites/default/files/statute.pdf>)

21. International Atomic Energy Agency, “List of Member States,” accessed August 5, 2019. (<https://www.iaea.org/about/governance/list-of-member-states>)

22. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article VI, paragraph A (1), page 13. (<https://www.iaea.org/sites/default/files/statute.pdf>)

23. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article VI, paragraph A (2a), page 13. (<https://www.iaea.org/sites/default/files/statute.pdf>)

24. International Atomic Energy Agency, “Factsheet: Iran, Islamic Republic of,” accessed August 5, 2019. (<https://ola.iaea.org/Applications/FactSheets/Country/Detail?code=IR>)

25. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article VII, paragraph B, page 17. (<https://www.iaea.org/sites/default/files/statute.pdf>)

26. Kirsten Grieshaber, “Yukiya Amano, who led the International Atomic Energy Agency, dies at 72,” *The Washington Post*, July 24, 2019. (https://www.washingtonpost.com/local/obituaries/yukiya-amano-who-led-international-atomic-energy-agency-dies-at-72/2019/07/22/8515ad44-ac9f-11e9-bc5c-e73b603e7f38_story.html)

27. International Atomic Energy Agency, Press Release, “Designation of an Acting Director General,” July 25, 2019. (<https://www.iaea.org/newscenter/pressreleases/designation-of-an-acting-director-general>)



🕒 *President Lyndon B. Johnson (right) looks on as Secretary of State Dean Rusk signs the Treaty on the Non-Proliferation of Nuclear Weapons (also known as the Nuclear Nonproliferation Treaty, or NPT) on July 1, 1968, in the White House. Iran signed the NPT on the same day. (Photo: Corbis via Getty Images)*

for the return of any nuclear material or equipment provided by the IAEA, and suspend the state's IAEA membership.²⁸ The UNSC, pursuant to its authorities under Chapter VII of the UN Charter, may impose sanctions and other countermeasures.²⁹

The IAEA does not obligate states to accept IAEA safeguards as a condition of IAEA membership.³⁰ Nevertheless, the NPT has required most of its parties, including Iran, to sign a Comprehensive Safeguards Agreement (CSA) that places under IAEA safeguards all of their major nuclear facilities and certain nuclear materials – including the types of facilities and materials discussed in Iran's nuclear archive. Today, the NPT has become the cornerstone and legal foundation of the nonproliferation regime.

1 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and Comprehensive Safeguards Agreement (CSA)

The NPT recognizes five countries – the United States, the United Kingdom, France, Russia, and China – as nuclear-weapon states. Article II of the NPT obligates other state parties to the NPT, known as non-nuclear-weapon states, not to receive, manufacture, or otherwise acquire nuclear weapons.³¹ Article VI of the NPT states that each state party, including the five nuclear-weapon states, “undertakes to pursue negotiations in good faith” for nuclear disarmament³² – though the article stops short of mandating a specific outcome to the negotiations.³³ Legally binding, the NPT opened for signatures in 1968 and went into force in 1970 after approval by the relevant legislative bodies of 46 state parties, including the United States and Iran. Today, the NPT has 191 state parties.

Article IV of the NPT endorses “the inalienable right” of all state parties to develop nuclear energy for peaceful purposes. At the same time, Article III of the NPT requires each state party to enter into a safeguards agreement with the IAEA for the purpose of “verification of the fulfillment of its obligations assumed under this Treaty with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons.”³⁴ An IAEA document known as INFCIRC/153 – referring to an Information Circular, which, in the IAEA's words, is published “to bring matters

28. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article XII, paragraph C, pages 28-29. (<https://www.iaea.org/sites/default/files/statute.pdf>)

29. Charter of the United Nations and Statute of the International Court of Justice, San Francisco, June 26, 1945, Chapter VII, pages 9-11. (<https://treaties.un.org/doc/publication/ctc/uncharter.pdf>)

30. International Atomic Energy Agency, “The Legal Framework for IAEA Safeguards,” April 2018, pages 1-2. (<https://www.iaea.org/sites/default/files/18/04/legal-safeguards-for-iaea-safeguards.pdf>). At the same time, countries supplying certain nuclear facilities or materials have required the recipient state to accept IAEA safeguards on those and related items.

31. Treaty on the Non-Proliferation of Nuclear Weapons (NPT), London, Moscow, and Washington, July 1, 1968. (<https://www.un.org/disarmament/wmd/nuclear/npt/text>)

32. Ibid.

33. See: Christopher A. Ford, “Debating Disarmament: Interpreting Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,” *Nonproliferation Review*, Vol. 14, No. 3, November 2007. (<https://www.nonproliferation.org/wp-content/uploads/npr/143ford.pdf>)

34. Treaty on the Non-Proliferation of Nuclear Weapons (NPT), London, Moscow, and Washington, July 1, 1968. (<https://www.un.org/disarmament/wmd/nuclear/npt/text>)

of general interest to the attention of its Member States"³⁵ – presents a standard template for these legally binding agreements, commonly known as “Comprehensive Safeguards Agreements” (CSA).

According to INFCIRC/153, “the objective of safeguards is the *timely* detection of diversion of significant quantities of nuclear material from peaceful nuclear activities to the manufacture of nuclear weapons or of other nuclear explosive devices” (emphasis added).³⁶ This requirement highlights the need for a rapid IAEA response to any disclosures of new information – such as the findings in Iran's nuclear archive – that point to potential misconduct by a member state.

Scope of IAEA Inspections under the NPT and CSA

In states with a CSA, the IAEA may request access to any site it deems necessary, including undeclared or military sites. As Hans Blix, the IAEA's director general from 1981 to 1997, stated in February 1995, the “scope” of the CSA is “not limited to the nuclear material actually declared by the state; *it also includes that which should be declared*” (emphasis added).³⁷ In March 1995, the IAEA Board of Governors reaffirmed that the CSA “should be designed to provide for

verification by the Agency of the *correctness and completeness* of States' declarations, so that there is credible assurance of the non-diversion of nuclear material from declared activities *and of the absence of undeclared nuclear activities*” (emphasis added).³⁸

For inspections of declared sites, the IAEA must give the member state advance notice of 24 hours to one week, depending on the nuclear material or activity under scrutiny. However, the CSA allows the IAEA to request access to an undeclared site – a step the CSA calls a “special inspection” – only if the agency determines that available information “is not adequate” to discharge the agency's responsibilities. For special inspections, the CSA presents no timeframe, stating merely that the state must provide access “as promptly as possible after the Agency and the State have consulted.”³⁹

As a practical matter, though, because state declarations form the basis of the safeguards process, the CSA offers the IAEA limited means to determine whether nuclear activity persists at undeclared sites. Thus, the IAEA has invoked a special inspection only twice in its history: Romania, in 1992, and North Korea, in 1993.⁴⁰ Moreover, even if the IAEA finds grounds to

35. International Atomic Energy Agency, “IAEA Documents & Conventions,” accessed August 5, 2019. (<https://www.iaea.org/publications/documents>)

36. International Atomic Energy Agency, “The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons,” INFCIRC/153 (Corrected), June 1972, page 9. (<https://www.iaea.org/sites/default/files/publications/documents/infcircs/1972/infcirc153.pdf>)

37. International Atomic Energy Agency, “Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System,” GOV/2784, February 21, 1995, pages 2-3. This document appears as Annex 1 in a later IAEA report: International Atomic Energy Agency, “Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System,” GC(39)17, August 22, 1995. (https://www-legacy.iaea.org/About/Policy/GC/GC39/GC39Documents/English/gc39-17_en.pdf)

38. International Atomic Energy Agency, “Discussion Including Decision on ‘Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System: Programme 93+2’ at the March 1995 Session of the Board of Governors,” GC(39)17, March 1995, page 58. This document appears as Annex 3 in a later IAEA report: International Atomic Energy Agency, “Strengthening the Effectiveness and Improving the Efficiency of the Safeguards System,” GC(39)17, August 22, 1995. (https://www-legacy.iaea.org/About/Policy/GC/GC39/GC39Documents/English/gc39-17_en.pdf); see also: David Albright, Olli Heinonen, and Orde Kittrie, “Understanding the IAEA's Mandate in Iran: Avoiding Misinterpretations,” *Institute for Science and International Security*, November 27, 2012. (http://isis-online.org/uploads/isis-reports/documents/Misinterpreting_the_IAEA_27Nov2012.pdf)

39. International Atomic Energy Agency, “The Structure and Content of Agreements between the Agency and States Required in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons,” INFCIRC/153 (Corrected), June 1972, page 22. (<https://www.iaea.org/sites/default/files/publications/documents/infcircs/1972/infcirc153.pdf>)

40. Romania cooperated with the inspection; North Korea rebuffed it. See: Olli Heinonen, “The Case for an Immediate IAEA Special Inspection in Syria,” *The Washington Institute for Near East Policy*, November 5, 2010. (<https://www.washingtoninstitute.org/policy-analysis/view/the-case-for-an-immediate-iaea-special-inspection-in-syria>)

invoke a special inspection, the CSA's lack of a specific timeframe for the state's provision of access enables the state, should it so choose, to delay access indefinitely.

If the NPT's reliance on state declarations "sounds frighteningly naïve, it was," wrote Mohammad ElBaradei, the IAEA's director general from 1997 to 2009, in his 2011 memoir. "For regimes that chose to conceal their nuclear activities, the IAEA was a beat cop with a blindfold."⁴¹ The NPT's shortcomings eventually led the IAEA to develop the AP, discussed in subsection **2** below.

The IAEA's Role in Determining Compliance with the CSA and NPT

Pursuant to Article III of the NPT, the IAEA retains the authority to determine a state party's compliance with the CSA. Pursuant to the IAEA Statute, the IAEA must report any noncompliance to the IAEA Board of Governors, which may then refer the offending state to the UNSC for countermeasures.

However, the IAEA is not technically a party to the NPT itself. As such, if an NPT state party believes that another state party has engaged in illicit nuclear activity, it may independently assert that the state party has not complied with Article II of the NPT. An NPT state party may reach this determination even if the IAEA has not declared the other state party in noncompliance with the CSA pursuant to Article III of the NPT.

Nevertheless, while declarations of noncompliance by an NPT member state can place diplomatic pressure on the offending party, they exert little practical impact without the intervention of the IAEA Board of Governors and the UNSC. Upon referral by the Board, the UNSC can pass resolutions asserting non-compliance, demanding

the cessation of illicit activity, and instituting sanctions that are binding on all UN member states.

Iran, the NPT, and the CSA

Iran signed the NPT in 1968 and ratified it in 1970.⁴² Iran signed a CSA with the IAEA in 1973; the CSA went into force in 1974.⁴³

Between the IAEA's first visit to Natanz in 2003 and the JCPOA's finalization in 2015, the IAEA and its Board of Governors repeatedly found Iran in noncompliance with the CSA for failing to declare key nuclear sites, activities, and material. Iran's misconduct spurred the international community to seek Iran's adoption of the AP and ultimately the JCPOA, discussed in subsections **2** and **3** below.



Iran's Nuclear Archive in Shorabad: Implications for the NPT and the CSA

- ▶ Iran's failure to declare the sites, equipment, and activities identified in the nuclear archive constitutes an apparent violation of the CSA and of the NPT's Articles II and III.
- ▶ In light of Iran's other violations of the CSA, as documented by the IAEA in multiple reports between 2003 and 2015, Iran's omissions raise concerns that undeclared nuclear activity may continue today.
- ▶ In accordance with the IAEA Statute, the IAEA director general is obliged to report any Iranian noncompliance with the CSA – and, by extension, Iran's noncompliance with the NPT's Article III – to the Board of Governors, which may then report Iran to the UNSC and the UNGA.
- ▶ Even without action by the IAEA, NPT state parties, including the United States, can exert diplomatic pressure on Tehran by declaring Iran in violation of the NPT's Article II.

41. Mohammad ElBaradei, *The Age of Deception: Nuclear Diplomacy in Treacherous Times* (New York: Picador, 2011), page 10.

42. United Nations Office for Disarmament Affairs, "Iran (Islamic Republic of)," accessed August 5, 2019. (<http://disarmament.un.org/treaties/s/iran%28islamicrepublicof%29>)

43. International Atomic Energy Agency, "The Text of the Agreement between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferatio [sic] of Nuclear Weapons," INFCIRC/214, June 19, 1973. (<https://www.iaea.org/sites/default/files/publications/documents/infcircs/1974/infcirc214.pdf>)

2 Additional Protocol (AP)

First issued by the IAEA in 1997, the AP “is not a stand-alone agreement,” as the agency puts it,⁴⁴ but a legally binding addendum to the CSA that parties to the NPT may voluntarily elect to sign. The AP contains strengthened tools to detect and inspect undeclared facilities, materials, and activities. In so doing, the AP fills gaps in the IAEA’s knowledge that may otherwise endure if the agency relied only on a state’s CSA declarations. When a state adopts an AP, the IAEA subsequently regards the state’s CSA and AP as a single document, with the AP simply providing improved methods to implement the CSA’s mandate. Today, the AP has entered into force in 134 countries. An IAEA document known as INFCIRC/540 provides a standard AP model.⁴⁵

The AP resulted from the agency’s experience in Iraq, North Korea, and South Africa in the early 1990s, which demonstrated that inspectors lacked significant means to detect undeclared nuclear material and activities in states with CSAs. Thus, notes the IAEA, the AP aims to provide “broader access to information about the State’s nuclear programme, increased physical access by the IAEA and improved administrative arrangements.”⁴⁶ In IAEA parlance, access provided by a state under an AP, including any relevant information the state provides, is called “complementary access.”⁴⁷

For states with an AP, the IAEA seeks to reach what it describes as a “broader conclusion that all nuclear material” in the state “remains in peaceful activities.”⁴⁸ Such a determination typically occurs after a multi-year



➦ *Ali Akbar Salehi (left), then Iran’s resident representative to the IAEA and currently the head of the Atomic Energy Organization of Iran, and Mohammad ElBaradei, then the IAEA’s director general, sign the Additional Protocol on December 18, 2003, in Vienna, Austria. (Photo: Dean Calma/IAEA)*

investigation, at which time the IAEA implements “integrated safeguards.” The agency defines integrated safeguards as “an optimum combination of all safeguards measures available to the IAEA” under the CSA and AP aimed at achieving “maximum effectiveness and efficiency in meeting the IAEA’s safeguards obligations within available resources.” In other words, because the agency has “increased assurance of the absence of undeclared nuclear material and activities for the State as a whole, the intensity of inspection activities at declared facilities and LOFS [i.e., locations outside facilities] can be reduced.”⁴⁹

The IAEA reaches a broader conclusion only for countries that both have signed and have ratified an AP. The agency recertifies the broader conclusion annually.

44. International Atomic Energy Agency, “Additional Protocol,” accessed August 5, 2019. (<https://www.iaea.org/topics/additional-protocol>)

45. International Atomic Energy Agency, “Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards,” INFCIRC/540 (Corrected), September 1997. (<https://www.iaea.org/sites/default/files/infcirc540c.pdf>)

46. International Atomic Energy Agency, “Additional Protocol,” accessed August 5, 2019. (<https://www.iaea.org/topics/additional-protocol>)

47. See: *IAEA Safeguards Glossary: 2001 Edition* (Vienna: International Atomic Energy Agency, 2002), page 91. (https://www.iaea.org/sites/default/files/iaea_safeguards_glossary.pdf)

48. International Atomic Energy Agency, “Additional Protocol,” accessed August 5, 2019. (<https://www.iaea.org/topics/additional-protocol>)

49. International Atomic Energy Agency, “Safeguards Statement for 2018,” page 5, accessed August 5, 2019. (<https://www.iaea.org/sites/default/files/19/06/statement-sir-2018.pdf>); see also: Laura Rockwood, *Legal Framework for IAEA Safeguards* (Vienna: International Atomic Energy Agency, 2013), pages 29-30. (<https://www.iaea.org/sites/default/files/16/12/legalframeworkforsafeguards.pdf>); *IAEA Safeguards Glossary: 2001 Edition* (Vienna: International Atomic Energy Agency, 2002), page 19. (https://www.iaea.org/sites/default/files/iaea_safeguards_glossary.pdf)

Scope of IAEA Inspections under the AP

In states with an AP, the IAEA may continue to request access to any site in the country it deems necessary, including undeclared or military sites. However, in contrast to states that lack an AP, the IAEA need not limit itself to state declarations as the basis of any request for access.

The IAEA may seek access both to undeclared and to declared sites with only 24-hour notice. “Advance notice shall be in writing,” states INFCIRC/540, “and shall specify the reasons for access and the activities to be carried out during such access.”⁵⁰

The IAEA's Role in Determining Compliance with the AP

The IAEA has the authority to determine a state's compliance with the AP, and must report any noncompliance to the IAEA Board of Governors. Since the IAEA treats the AP and the CSA as a single document, any IAEA determination of noncompliance with the AP would constitute, by definition, a determination of noncompliance with the CSA.

Iran and the AP

Tehran signed an AP with the IAEA, and began the AP's provisional implementation, in December 2003.⁵¹ Nonetheless, the administration of Iranian President Mohammad Khatami failed to seek the AP's parliamentary ratification. This lapse reflected Iran's reluctance to adhere to the AP's terms: Tehran only signed the AP in response to the global outcry that resulted from the discovery of Natanz, Arak, and several other incidents of undeclared materials and activities. These disclosures exposed the CSA's limitations.

For the next three years, the IAEA and its Board of Governors continually urged Iran both to comply with its CSA and AP commitments and to secure the AP's parliamentary ratification. Nevertheless, Iran repeatedly rebuffed the IAEA's investigation of key undeclared sites and activities. Ultimately, on February 4, 2006, the frustrated Board of Governors referred Iran to the UNSC.⁵² Two days later, Iran – now under the leadership of President Mahmoud Ahmadinejad – announced it would cease the provisional implementation of the AP, though the regime did not formally withdraw from it. Between 2006 and 2010, the UNSC imposed four rounds of sanctions against Iran. Under the JCPOA, the administration of President Hassan Rouhani resumed the provisional implementation of the AP, discussed in subsection **3** below.



Iran's Nuclear Archive in Shorabad: Implications for the AP

- ▶ Since the AP constitutes an amendment to the CSA, the IAEA's responsibility to declare Iran in noncompliance with the CSA for concealing the sites, equipment, and activities in the archive remains the same. Per the IAEA Statute, the IAEA's director general has an obligation to report any Iranian noncompliance with the CSA and the AP to the Board of Governors, which may then report Iran to the UNSC and UNGA. In addition, NPT state parties may declare Iran in noncompliance with the NPT's Article II.
- ▶ The AP, and Iran's decision to resume implementing it under the JCPOA, adds another layer of responsibility for the IAEA: reaching a broader conclusion that all nuclear material in Iran remains in peaceful activities. However, without a full investigation of the sites, equipment, and activities identified in the archive, the IAEA lacks the ability to reach a credible broader conclusion.

⁵⁰. International Atomic Energy Agency, “Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards,” INFCIRC/540 (Corrected), September 1997, page 7. (<https://www.iaea.org/sites/default/files/infcirc540c.pdf>)

⁵¹. International Atomic Energy Agency, Press Release, “Iran Signs Additional Protocol on Nuclear Safeguards,” December 18, 2003. (<https://www.iaea.org/newscenter/news/iran-signs-additional-protocol-nuclear-safeguards>); International Atomic Energy Agency, “Protocol Additional to the Agreement between the Islamic Republic of Iran and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons,” INFCIRC/214/Add.1, December 18, 2003. (<https://www.iaea.org/sites/default/files/infcirc214a1.pdf>)

⁵². International Atomic Energy Agency, “Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran,” GOV/2006/14, February 4, 2006. (<https://www.iaea.org/sites/default/files/gov2006-14.pdf>)

3 Joint Comprehensive Plan of Action (JCPOA)

The JCPOA – an arrangement reached on July 14, 2015, among Iran, the United States, the United Kingdom, Germany, France, Russia, and China, along with the high representative of the European Union for foreign affairs and security policy – “reaffirms that under no circumstances will Iran ever seek, develop or acquire any nuclear weapons.”⁵³ Under the JCPOA, Iran agreed once again to apply the AP provisionally, pending its ratification by the parliament. Unlike the NPT, the CSA, and the AP, however, the JCPOA itself imposes no new binding legal obligations on its parties. Rather, the JCPOA includes aspirational political commitments for further and more intrusive mechanisms – beyond those in the CSA and in the AP – to monitor Iran’s nuclear activity.⁵⁴

UNSC Resolution 2231, which passed six days after the JCPOA’s finalization, “[r]equests the Director General of the IAEA to undertake the necessary verification and monitoring of Iran’s nuclear-related commitments” under the JCPOA. The resolution “reaffirms that Iran shall cooperate fully as the IAEA requests to be able to resolve all outstanding issues, as identified in IAEA reports.” It further states that the provisions of six previous UNSC resolutions on Iran, including the four resolutions imposing sanctions, “shall be terminated” after the IAEA director general submits a report to the UNSC

confirming that Iran completed key steps specified in the JCPOA to curtail its nuclear activities.⁵⁵ The late Yukiya Amano, then the director general, submitted such a report on January 16, 2016.⁵⁶

Section T of Annex I of the JCPOA, which prohibits key nuclear weaponization activities, closes a loophole in the NPT, the CSA, and the AP that had enabled Iran to develop and utilize key dual-use equipment that could serve both a civilian and a military purpose. Under Section T, Iran must first seek permission from the Joint Commission – the body established by the JCPOA to monitor the accord’s implementation – before it can use such equipment.⁵⁷ The Joint Commission, chaired by the high representative of the European Union for foreign affairs and security policy, consists of representatives of each JCPOA state party.

The JCPOA’s provisions reflect the IAEA’s longstanding recognition that Tehran’s decades-long history of nuclear mendacity required measures even stricter than the AP to ensure the peaceful nature of Iran’s nuclear program. In fact, as early as September 2005, nearly two years after Iran signed the AP, ElBaradei said that Iran constitutes “a special verification case that requires additional transparency measures as a prerequisite for the Agency to be able to reconstruct the history and nature of all aspects of Iran’s past nuclear activities, and to compensate for the confidence deficit created.”⁵⁸

53. Joint Comprehensive Plan of Action, Vienna, July 14, 2015, Preface, page 2. (http://www.eeas.europa.eu/archives/docs/statements-eeas/docs/iran_agreement/iran_joint-comprehensive-plan-of-action_en.pdf)

54. See: Gary Samore, Ed., “The Iran Nuclear Deal: A Definitive Guide,” *Belfer Center for Science and International Affairs at the Harvard University Kennedy School of Government*, August 2015, pages 33-37. (<https://www.belfercenter.org/sites/default/files/legacy/files/IranDealDefinitiveGuide.pdf>)

55. United Nations Security Council, Resolution 2231, July 20, 2015, page 3. ([https://undocs.org/S/RES/2231\(2015\)](https://undocs.org/S/RES/2231(2015)))

56. International Atomic Energy Agency, “Verification and Monitoring in the Islamic Republic of Iran in light of Security Council Resolution 2231 (2015),” GOV/INF/2016/1, January 16, 2016. (<https://www.iaea.org/sites/default/files/gov-inf-2016-1.pdf>)

57. Joint Comprehensive Plan of Action, Vienna, July 14, 2015, Annex I, Section T, page 27. (https://eeas.europa.eu/sites/eeas/files/annex_1_nuclear_related_commitments_en.pdf); see also: David Albright and Olli Heinonen, “Verifying Section T of the Iran Nuclear Deal: Iranian Military Site Access Essential to JCPOA Section T Verification,” *Foundation for Defense of Democracies*, August 31, 2017. (https://s3.us-east-2.amazonaws.com/defenddemocracy/uploads/documents/MEMO_Olli_SectionT.pdf)

58. IAEA Director General Mohamed ElBaradei, “Statement to the Forty-ninth Regular Session of the IAEA General Conference 2005,” September 26, 2015. (<https://www.iaea.org/newscenter/statements/statement-forty-ninth-regular-session-iaea-general-conference-2005>); see also: Assistant Secretary of State for International Security and Nonproliferation Christopher Ashley Ford, “Towards a Successful, Comprehensive, and Enduring Negotiated Solution With Iran,” *Remarks at the 23rd Wilton Park Nuclear Non-Proliferation Conference*, December 11, 2018. (<https://www.state.gov/towards-a-successful-comprehensive-and-enduring-negotiated-solution-with-iran>)

TIMELINE

Iran's key nonproliferation commitments date to the founding of the IAEA and have evolved over the course of nearly 60 years. This timeline tracks the key agreements Tehran has concluded and related developments.

1957

The International Atomic Energy Agency (IAEA) is founded.

1973

Iran signs the Comprehensive Safeguards Agreement (CSA).

1970

Iran ratifies the Treaty on the Non-Proliferation of Nuclear Weapons (also known as the Nuclear Nonproliferation Treaty, or NPT).

1958

Iran ratifies the IAEA Statute.

1974

Iran's CSA enters into force.

2003

Iran signs – but does not ratify – the Additional Protocol (AP), and begins its provisional implementation.

2006

Iran announces it will cease the provisional implementation of the AP.

January 16, 2016

The JCPOA's implementation begins. Iran resumes the provisional implementation of the AP, which enables the IAEA to revisit the PMD investigation if it has reason to believe that covert activity continues.

December 15, 2015

The IAEA Board of Governors passes a resolution that closes its agenda item investigating the possible military dimensions (PMD) of Iran's nuclear program.

July 14, 2015

Iran and world powers conclude the Joint Comprehensive Plan of Action (JCPOA). In the JCPOA, Iran agrees to resume implementing the AP provisionally. Iran and the IAEA also sign the Roadmap for Clarification of Past and Present Outstanding Issues.

January 31, 2018

Israel conducts a raid of Iran's nuclear archive in the Shorabad district of Tehran, removing more than 100,000 files documenting the regime's efforts to develop a nuclear weapon.

April 30, 2018

In a press conference, Israeli Prime Minister Benjamin Netanyahu publicly discloses the Shorabad raid.

September 27, 2018

In a speech to the UN General Assembly, Netanyahu announces Israel's discovery of Iran's nuclear warehouse in the Turqzabad district of Tehran.



🕒 (L-R) China's Foreign Minister Wang Yi, France's then-Foreign Minister Laurent Fabius, Germany's then-Minister for Foreign Affairs Frank-Walter Steinmeier, High Representative of the European Union for Foreign Affairs and Security Policy Federica Mogherini, Iran's Foreign Minister Mohammad Javad Zarif, Britain's then-Foreign Secretary Philip Hammond, and America's then-Secretary of State John Kerry pose for a group photo after concluding the Joint Comprehensive Plan of Action (JCPOA) on July 14, 2015, in Vienna, Austria. (Photo: Joe Klamar/AFP/Getty Images)

In practice, though, the JCPOA weakens or ignores many of the IAEA's prior standards, protocols, and enforcement mechanisms aimed at detecting and preventing nuclear activity. These problems played a key role in persuading the Trump administration to withdraw from the JCPOA in May 2018.⁵⁹

Scope of IAEA Inspections under the JCPOA

Whereas the CSA and AP simply allow for short-notice inspections, the JCPOA puts Iran's major declared nuclear facilities and fuel cycle capabilities under continuous IAEA monitoring, albeit for limited timeframes: The

JCPOA's key provisions begin to expire in 2023. (The CSP and AP have no sunset clauses.)

The JCPOA states that Tehran "will fully implement the 'Roadmap for Clarification of Past and Present Outstanding Issues' agreed with the IAEA."⁶⁰ The Roadmap – an agreement separate from the JCPOA that Iran and the IAEA signed on the day of the JCPOA's finalization – aimed to resolve outstanding ambiguities in the IAEA's knowledge of Iran's past and present military nuclear work, formally known as the possible military dimensions (PMD) of its nuclear program.⁶¹

⁵⁹. The White House, Presidential Memorandum, "Ceasing U.S. Participation in the JCPOA and Taking Additional Action to Counter Iran's Malign Influence and Deny Iran All Paths to a Nuclear Weapon," May 8, 2018. (<https://www.whitehouse.gov/presidential-actions/ceasing-u-s-participation-jcpoa-taking-additional-action-counter-irans-malign-influence-deny-iran-paths-nuclear-weapon>)

⁶⁰. Joint Comprehensive Plan of Action, Vienna, July 14, 2015, paragraph 14, page 8. (http://www.eeas.europa.eu/archives/docs/statements-eeas/docs/iran_agreement/iran_joint-comprehensive-plan-of-action_en.pdf)

⁶¹. International Atomic Energy Agency, "Road-map for the Clarification of Past and Present Outstanding Issues regarding Iran's Nuclear Program," GOV/INF/2015/14, July 14, 2015. (<https://www.iaea.org/sites/default/files/gov-inf-2015-14.pdf>)



⬆ *The late Yukiya Amano (left), then the IAEA's director general, and Ali Akbar Salehi, the head of the Atomic Energy Organization of Iran, sign the JCPOA-related Roadmap for the Clarification of Past and Present Outstanding Issues on July 14, 2015, in Vienna, Austria. (Photo: Dean Calmal IAEA Photo)*

However, an IAEA report released on December 2, 2015, showed that Iran failed to cooperate with the IAEA's investigation, providing incomplete or misleading answers to many of the agency's questions.⁶² Tehran's intransigence contravenes its obligation under UNSC Resolution 2231 to "cooperate fully as the IAEA requests to be able to resolve all outstanding issues, as identified in IAEA reports."⁶³ Nevertheless, on December 15, 2015, the IAEA Board of Governors unanimously passed a resolution stating that Iran's

activity to implement the Roadmap "closes the Board's consideration of this item."⁶⁴

At the same time, the resolution did not close the PMD investigation permanently. In fact, the resolution created a new agenda item "covering JCPOA implementation and verification and monitoring in Iran in light of United Nations Security Council resolution 2231 (2015)."⁶⁵ This item enables the IAEA to revisit the issue as part of its efforts to reach a broader conclusion pursuant to the AP, which Iran agreed to implement provisionally under the JCPOA.⁶⁶ "Closing the PMD agenda item," noted then-Secretary of State John Kerry on December 15, 2015, "will in no way preclude the IAEA from investigating if there is reason to believe Iran is pursuing any covert nuclear activities in the future, as it had in the past."⁶⁷

Tehran's prevention of IAEA inspectors from undertaking a full PMD investigation has implications for another key JCPOA provision. The JCPOA lifts additional sanctions on Iran either when the IAEA reaches a broader conclusion or after eight years, whichever comes first.⁶⁸ In effect, the JCPOA ensures the lifting of sanctions even if the IAEA fails to reach a broader conclusion that Iran's nuclear program is peaceful in nature.

62. International Atomic Energy Agency, "Final Assessment on Past and Present Outstanding Issues regarding Iran's Nuclear Programme," GOV/2015/68, December 2, 2015. (<https://www.iaea.org/sites/default/files/gov-2015-68.pdf>); David Albright, Andrea Stricker, and Serena Kelleher-Vergantini, "Analysis of the IAEA's Report on the Possible Military Dimensions of Iran's Nuclear Program," *Institute for Science and International Security*, December 8, 2015. (http://isis-online.org/uploads/isis-reports/documents/ISIS_Analysis_of_the_IAEA_PMD_Report_December_8_2015_Final.pdf)

63. United Nations Security Council, Resolution 2231, July 20, 2015, page 3. ([https://undocs.org/S/RES/2231\(2015\)\)](https://undocs.org/S/RES/2231(2015)))

64. International Atomic Energy Agency, "Joint Comprehensive Plan of Action implementation and verification and monitoring in the Islamic Republic of Iran in light of United Nations Security Council Resolution 2231 (2015)," GOV/2015/72, December 15, 2015, page 3. (<https://www.iaea.org/sites/default/files/gov-2015-72-derestricted.pdf>)

65. *Ibid.*, page 4.

66. See: Olli Heinonen, "The IAEA's Right and Obligation to Inspect Military Facilities in Iran," *Foundation for Defense of Democracies*, April 4, 2018. (<https://www.fdd.org/analysis/2018/04/04/the-iaeas-right-and-obligation-to-inspect-military-facilities-in-iran>); "Possible Military Dimensions," *Institute for Science and International Security*, July 21, 2015. (http://isis-online.org/uploads/isis-reports/documents/Possible_Military_Dimensions_Final.pdf)

67. Secretary of State John Kerry, Press Statement, "Adoption of the IAEA Board of Governors Resolution on Iran's Nuclear Program," *U.S. Department of State*, December 15, 2015. (<https://2009-2017.state.gov/secretary/remarks/2015/12/250662.htm>)

68. Joint Comprehensive Plan of Action, Vienna, July 14, 2015, paragraph 20, page 11. (http://www.eeas.europa.eu/archives/docs/statements-eeas/docs/iran_agreement/iran_joint-comprehensive-plan-of-action_en.pdf)

The IAEA has indicated that the timeframe for its determination of a broader conclusion hinges on Iranian behavior. As Amano said in March 2017, “Eight years is mentioned, but it is not as a timeline for drawing the conclusion; I cannot tell how many years it will take, it will take a long time. But it depends very much on the level of cooperation from Iran.”⁶⁹

Under the JCPOA, Iran committed to seek the AP's parliamentary ratification either after eight years or when the IAEA reaches a broader conclusion, whichever comes first. The JCPOA's acceptance of delayed parliamentary ratification diverges from standard IAEA practice, which dictates that a country must ratify the AP before the IAEA can draw a broader conclusion. This approach raises concern about Tehran's long-term commitment to the AP. If Iran's parliament ultimately fails to ratify the AP, Tehran may choose to withdraw from the AP or to cease its implementation. In such a scenario, the IAEA's ability to detect and inspect undeclared sites would significantly diminish.

The IAEA's Role in Determining Compliance with the JCPOA

Contrary to common perception, the IAEA and its Board of Governors do not issue determinations of Iranian compliance or noncompliance with the JCPOA.⁷⁰ Rather, the IAEA only monitors, verifies, and reports on Tehran's implementation – or lack thereof – of nuclear-related measures specified in the JCPOA. The determination of Iranian compliance with the JCPOA

remains the prerogative of the parties to the agreement. Amano confirmed this mandate during a March 2017 interview:

We are serving as eyes and ears of the international community, we are on the ground 24/7, and we can state that the JCPOA is being implemented. That said, I would like to make it clear that this JCPOA is an agreement among E3, EU+3, and Iran, eight parties, and therefore in the end it is the responsibility of such a party or parties to provide the implementation, interpretation, or enforcement, and the same rule applies, the same principle applies, to the judgment whether or not in compliance.⁷¹

The JCPOA stipulates that if any party believes that Iran has violated its obligations, the party may refer the issue to the Joint Commission in order to initiate what the JCPOA alternately describes as a “dispute resolution mechanism” or “dispute resolution process.”⁷² Should the Joint Commission fail to resolve the dispute within 35 days, the JCPOA states that the complainant can “notify the UN Security Council that it believes the issue constitutes significant non-performance.”⁷³ Following receipt of such notification, the UNSC “shall vote on a resolution to continue the sanctions lifting.” If such a resolution “has not been adopted within 30 days of the notification,” either because a party has vetoed it or for any other reason, sanctions lifted under the JCPOA automatically resume.⁷⁴

69. “The Iran Deal: International Perspectives,” *Panel Discussion at the Carnegie Endowment for International Peace*, March 20, 2017. (<http://carnegieendowment.org/2017/03/20/plenary-iran-deal-international-perspectives-pub-67681>)

70. Tzvi Kahn, “Certifying Iran's Compliance with the Joint Comprehensive Plan of Action: Understanding the Roles of the IAEA, the Joint Commission, and the United States,” *Foundation for Defense of Democracies*, September 2017. (https://s3.us-east-2.amazonaws.com/defenddemocracy/uploads/documents/Memo_Tzvi_IranComplianceJCPOA.pdf)

71. “The Iran Deal: International Perspectives,” *Panel Discussion at the Carnegie Endowment for International Peace*, March 20, 2017. (<http://carnegieendowment.org/2017/03/20/plenary-iran-deal-international-perspectives-pub-67681>)

72. Joint Comprehensive Plan of Action, Vienna, July 14, 2015, paragraphs 36 and 37, pages 17-18. (http://www.eeas.europa.eu/archives/docs/statements-eeas/docs/iran_agreement/iran_joint-comprehensive-plan-of-action_en.pdf)

73. *Ibid.*, paragraph 36, page 17.

74. *Ibid.*, paragraph 37, page 17.



Iran's Nuclear Archive in Shorabad: Implications for the JCPOA

- ▶ Tehran's decision to preserve the archive is inconsistent with its JCPOA commitment "that under no circumstances will Iran ever seek, develop or acquire any nuclear weapons."⁷⁵
- ▶ Even if Iran opts to withdraw from the JCPOA, Tehran would still have a legally binding obligation, pursuant to the CSA and AP, to declare the sites, equipment, and activities identified in the archive. Likewise, an Iranian withdrawal from the JCPOA would not lessen the IAEA's obligation to investigate the archive.
- ▶ If Iran remains in the JCPOA, then the contents of the archive raise specific concerns about Iran's potential violations of Section T of Annex I of the agreement, which addresses dual-use equipment that has both civilian and military applications. Documents from the archive refer to specific types of dual-use equipment controlled by Section T, but the current location of this equipment remains unknown. If Iran continues to use such equipment covertly, even for a non-military purpose, Iran would be in violation of Section T, a possibility requiring IAEA attention.⁷⁶
- ▶ The archive's disclosures suggest that Iran's efforts to implement the JCPOA-related PMD Roadmap were insufficient. The IAEA has an obligation to continue the PMD investigation pursuant to the AP, which Iran agreed to implement provisionally under the JCPOA. Without further investigation of the archive's disclosures, the IAEA lacks the ability to reach a credible broader conclusion that all nuclear material in Iran remains in peaceful activities.
- ▶ If the IAEA discovers illicit activities as a result of its investigations into the archive, it may declare Iran in noncompliance with the CSA and the AP. Members of the Joint Commission may also declare Iran in noncompliance with the JCPOA and initiate the JCPOA's dispute resolution process.

The next section of this report turns to an examination of the IAEA's pre-JCPOA record of reporting and transparency in cases when the IAEA received new information from external parties about Iran's nuclear program. The report then compares those pre-JCPOA precedents with the IAEA's post-JCPOA reporting and transparency. The evident contrast helps explain and assess the IAEA's response to the new information in the Shorabad archive.

IAEA Reporting and Transparency

The sites, equipment, and activities described in the nuclear archive not only defy Iran's nonproliferation commitments. Rather, they also reflect Tehran's

longstanding efforts to keep its nuclear program a secret. For this reason, transparent, detailed IAEA reporting and rapid IAEA responses to new information – including to the data in the archive – remain vital to holding Iran accountable for any nuclear misconduct. However, more than 15 months after the archive's disclosure, the IAEA has yet even to mention the archive in any of its quarterly reports.

To be sure, while both INFCIRC/153 and the IAEA Statute require the agency to report noncompliance to the Board of Governors, they lack specificity regarding the amount of detail the IAEA must provide the Board of Governors about its inspections. Similarly, they lack specificity concerning how quickly the IAEA must respond to new information about nuclear activity. As a practical matter, these

75. Ibid., Preface, page 2.

76. See: David Albright, Olli Heinonen, and Andrea Stricker, "The Iranian Nuclear Archive: Implications and Recommendations," *Foundation for Defense of Democracies and Institute for Science and International Security*, February 25, 2019. (<https://www.fdd.org/analysis/2019/02/25/the-iranian-nuclear-archive-implications-and-recommendations>); David Albright, Sarah Burkhard, Olli Heinonen, and Frank Pabian, "New Information about the Parchin Site: What the Atomic Archive Reveals About Iran's Past Nuclear Weapons Related High Explosive Work at the Parchin High Explosive Test Site," *Foundation for Defense of Democracies and Institute for Science and International Security*, October 23, 2018. (<https://www.fdd.org/analysis/2018/10/23/new-information-about-the-parchin-site>)

decisions constitute the prerogative of the IAEA director general, who makes individual judgment calls in each case.

Still, pre-JCPOA reporting on Iran's nuclear program established a precedent not only for relatively swift IAEA responses to new data (though Tehran often failed to cooperate with the IAEA's efforts), but also for transparency and detail in reporting to the Board of Governors. These standards began to decline after the JCPOA. Reports since then have omitted a wide range of information that would enable independent assessments of Iran's adherence to its nonproliferation commitments.

Pre-JCPOA Reporting and Transparency

As early as 2003, the IAEA – then under the leadership of ElBaradei – stated that Tehran had adopted a “policy of concealment,” dating to the 1970s, aimed at hiding “breaches of its obligation to comply with the provisions of the Safeguards Agreement.”⁷⁷ Between 2003 and 2015, dozens of IAEA reports to the Board of Governors assessed Iranian nuclear activities – including violations of its CSA and AP – by providing extensive detail on Iran's stockpiles of low-enriched uranium, centrifuge operations, research and development on advanced

centrifuges, and illicit procurement efforts, among other data. Moreover, the reports identified suspicious sites by name, such as Parchin and Lavisan-Shian.⁷⁸

The IAEA's November 2011 report, authored by Amano, provided the most comprehensive documentation of the agency's knowledge – or lack thereof – of the Iranian nuclear program's undeclared sites and activity. In light of Tehran's refusal to provide “the necessary cooperation,” the report said, the IAEA “is unable to provide credible assurance about the absence of undeclared nuclear material and activities in Iran, and therefore to conclude that all nuclear material in Iran is in peaceful activities.”⁷⁹ This concern, the report noted, bore particular salience in light of Iran's willingness to declare other nuclear facilities only after the IAEA “was made aware of their existence by sources other than Iran.”⁸⁰

In response to many of the IAEA's reports to the Board of Governors, Iran routinely objected that the IAEA Statute and the CSA require the agency to keep its findings confidential.⁸¹ But the IAEA and its Board of Governors dismissed these complaints, providing a clear standard for future reporting. While both the Statute and the CSA prohibit the IAEA from publicly disclosing “confidential information” related to its

77. International Atomic Energy Agency, “Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran,” GOV/2003/75, November 10, 2003, page 10. (<https://www.iaea.org/sites/default/files/gov2003-75.pdf>)

78. See: Valerie Lincy and Gary Millhollin, “Iran's Nuclear Veil: How to increase transparency under the Joint Comprehensive Plan of Action,” *Wisconsin Project on Nuclear Arms Control*, February 1, 2017. (<http://www.wisconsinproject.org/wp-content/uploads/2017/03/Iran-Watch-Report-Transparency-02-01-2017.pdf>); Jacqueline Shire and David Albright, “Iran's NPT Violations – Numerous and Possibly On-Going?” *Institute for Science and International Security*, September 29, 2006. (<https://www.isis-online.org/publications/iran/iranntviolations.pdf>)

79. International Atomic Energy Agency, “Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions in the Islamic Republic of Iran,” GOV/2011/65, November 8, 2011, page 9. (<https://www.iaea.org/sites/default/files/gov2011-65.pdf>)

80. *Ibid.*, page 7.

81. See, e.g., International Atomic Energy Agency, “Communication dated 16 June 2015 received from the Permanent Mission of the Islamic Republic of Iran to the Agency regarding the Report of the Director General on the Implementation of Safeguards in Iran,” INFCIRC/885, June 25, 2015, page 3. (<https://www.iaea.org/sites/default/files/infcirc885.pdf>); International Atomic Energy Agency, “Communication dated 14 December 2012 received from the Permanent Mission of the Islamic Republic of Iran to the Agency regarding the Report of the Director General on the Implementation of Safeguards in Iran,” INFCIRC/847, December 20, 2012, pages 2, 11, and 14. (<https://www.iaea.org/sites/default/files/publications/documents/infcircs/2012/infcirc847.pdf>)

inspections,⁸² these provisions do not preclude the issuance of reports to the Board of Governors, which then bears the right to publicize them if a majority of its members agree, as they did in these instances.

Case Study: Natanz and Arak

When an Iranian opposition group exposed the facilities at Natanz and Arak in August 2002, the IAEA's then-director for safeguards operations for the region wrote a letter to Iran within days seeking clarification.⁸³ Iran initially delayed IAEA requests for access, but eventually, in February 2003, allowed ElBaradei and his delegation to visit Natanz.⁸⁴ Under CSAs that lack an AP, though, heavy water and associated production plants – in contrast to uranium enrichment plants – are not subject to safeguards and therefore do not require declaration to the IAEA. Still, Tehran confirmed to the delegation that it had begun constructing a heavy water production plant in Arak, thus corroborating the opposition group's report.⁸⁵

In May 2003, Iran further informed the IAEA that it planned – but had not yet begun – to construct a heavy water research reactor in Arak as well, which would constitute a nuclear facility requiring declaration to the

IAEA under the CSA, with or without an AP. A heavy water research reactor would enable Tehran to produce weapons-grade plutonium sufficient for a nuclear warhead. The AP, which Iran signed in December 2003, strengthened the CSA by requiring member states to declare all heavy water-related facilities and activities, including heavy water production plants. Pursuant to the AP, the IAEA ultimately visited Arak for the first time in May 2004.⁸⁶

In September 2003, the IAEA Board of Governors passed a resolution expressing “concern” that Iran had introduced nuclear material into its pilot centrifuge enrichment cascade at Natanz.⁸⁷ In June 2004, the Board passed a resolution stating that it “[d]eplores” that Tehran’s “cooperation has not been as full, timely and proactive as it should have been.”⁸⁸ The resolution further said that the Board “regrets” that Tehran’s commitments “to suspend all enrichment-related and reprocessing activities ... have not been comprehensively implemented.” The resolution then called on Iran “to reconsider its decision to start construction of a research reactor moderated by heavy water.”⁸⁹

In multiple resolutions over the subsequent 11 years, the IAEA Board of Governors as well as the UNSC echoed

82. Statute of the International Atomic Energy Agency, New York, October 23, 1956, Article VII, paragraph F, page 18. (<https://www.iaea.org/sites/default/files/statute.pdf>); International Atomic Energy Agency, “The Text of the Agreement between Iran and the Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferatio [sic] of Nuclear Weapons,” INFCIRC/214, Article 5(a) and Article 9(c)(ii), June 19, 1973, pages 2 and 4. (<https://www.iaea.org/sites/default/files/publications/documents/infcircs/1974/infcirc214.pdf>)

83. Interview with Olli Heinonen, April 12, 2019.

84. International Atomic Energy Agency, “Implementation of the NPT safeguards agreement in the Islamic Republic of Iran,” GOV/2003/40, June 6, 2003, page 2. (<https://www.iaea.org/sites/default/files/gov2003-40.pdf>); IAEA Director General Mohamed ElBaradei, “Introductory Statement to the Board of Governors,” March 17, 2003. (<https://www.iaea.org/newscenter/statements/introductory-statement-board-governors-46>)

85. International Atomic Energy Agency, “Implementation of the NPT safeguards agreement in the Islamic Republic of Iran,” GOV/2003/40, June 6, 2003, page 2. (<https://www.iaea.org/sites/default/files/gov2003-40.pdf>)

86. International Atomic Energy Agency, “Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran,” GOV/2004/34, June 1, 2004, page 4. (<https://www.iaea.org/sites/default/files/gov2004-34.pdf>)

87. International Atomic Energy Agency, “Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran,” GOV/2003/69, September 12, 2003, page 2. (<https://www.iaea.org/sites/default/files/gov2003-69.pdf>)

88. International Atomic Energy Agency, “Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran,” GOV/2004/49, June 18, 2004, page 2. (<https://www.iaea.org/sites/default/files/gov2004-49.pdf>)

89. *Ibid.*, page 3.

these calls.⁹⁰ For example, the UNSC's December 2006 resolution imposing sanctions on Iran stated that Iran "shall without further delay suspend ... all enrichment-related and reprocessing activities, including research and development," as well as "work on all heavy water-related projects, including the construction of a research reactor moderated by heavy water."⁹¹

Case Study: Lavisian-Shian

In June 2004, the IAEA again responded rapidly when it received new information, this time about suspicious activity at Lavisian-Shian. An Iranian opposition group first brought the site to public attention in May 2003, claiming that it served as a base for a biological weapons center.⁹² In late 2003 and early 2004, though, the IAEA received information that possible undeclared nuclear activity occurred there as well, prompting it to begin an investigation. The agency issued requests to visit the site in February and March 2004, each of which Tehran denied.⁹³

In a television newscast on June 16, 2004, ABC News reported – based on satellite images provided by the Institute for Science and International Security, a think tank based in Washington, DC – that Iran had dismantled the facility and razed part of the site during

the IAEA's inquiry.⁹⁴ "This destruction at the site raised concerns," noted the institute, "because it is the type of measure Iran would need to take if it was trying to defeat the powerful environmental sampling capabilities of IAEA inspectors."⁹⁵ On June 18, the IAEA Board of Governors passed a resolution stating that it "[d]eplores" that Tehran's "cooperation has not been as full, timely and proactive as it should have been."⁹⁶

The IAEA once more sought access to the site. "As a result of this new information, in June 2004 the IAEA requested and received permission from Iran to visit and take environmental samples from Lavizan-Shian," wrote Pierre Goldschmidt, the IAEA's deputy director general at the time, and arms control scholar Nima Gerami.⁹⁷ The IAEA arrived at the site on June 28, less than two weeks after the ABC News report, and collected environmental samples.⁹⁸ The results showed no evidence of nuclear activity. "It should be borne in mind, however, that detection of nuclear material in soil samples would be very difficult in light of the razing of the site," stated the IAEA. "In addition, given the removal of the buildings, the Agency is not in a position to verify the nature of activities that have taken place there."⁹⁹

90. For listings of these resolutions, see: International Atomic Energy Agency, "IAEA and Iran - IAEA Reports," accessed August 5, 2019. (<https://www.iaea.org/newscenter/focus/iran/iaea-and-iran-iaea-reports>); International Atomic Energy Agency, "IAEA and Iran - UN Security Council Resolutions and Statements," accessed August 5, 2019. (<https://www.iaea.org/newscenter/focus/iran/iaea-and-iran-un-security-council-resolutions-and-statements>)

91. United Nations Security Council, Resolution 1737, December 27, 2006, page 2. ([https://undocs.org/S/RES/1737\(2006\)](https://undocs.org/S/RES/1737(2006)))

92. "Iranian Regime's Programs for Biological and Microbial Weapons: Press Briefing by Soona Samsami and Alireza Jafarzadeh," *Iran Watch*, May 15, 2003. (<https://www.iranwatch.org/library/ncri-iranian-regimes-programs-biological-weapons-5-15-03>)

93. Yossi Melman and Meir Javedanfar, *The Nuclear Sphinx of Tehran* (New York: Carroll & Graf Publishers, 2007), pages 131-134.

94. Jacqueline W. Shire, "Is Iran Still Hiding Nuclear Activities?" *ABC News*, June 18, 2004. (<https://abcnews.go.com/WNT/Investigation/story?id=131726&page=1>)

95. "ISIS Imagery Brief: Destruction at Iranian Site Raises New Questions About Iran's Nuclear Activities," *Institute for Science and International Security*, June 17, 2004. (<http://isis-online.org/isis-reports/detail/isis-imagery-brief-destruction-at-iranian-site-raises-new-questions-about-i/8>)

96. International Atomic Energy Agency, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," GOV/2004/49, June 18, 2004, page 2. (<https://www.iaea.org/sites/default/files/gov2004-49.pdf>)

97. Nima Gerami and Pierre Goldschmidt, "The International Atomic Energy Agency's Decision to Find Iran in Non-Compliance, 2002–2006," *Center for the Study of Weapons of Mass Destruction at the National Defense University*, December 2012, page 10. (https://ndupress.ndu.edu/Portals/68/Documents/casestudies/CSWMD_CaseStudy-6.pdf)

98. International Atomic Energy Agency, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," GOV/2004/60, September 1, 2004, page 3. (<https://www.iaea.org/sites/default/files/gov2004-60.pdf>)

99. International Atomic Energy Agency, "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," GOV/2004/83, November 15, 2004, page 22. (<https://www.iaea.org/sites/default/files/gov2004-83.pdf>)

Case Study: Fordow

A similar process unfolded after the United States, Britain, and France, in late September 2009, exposed another Iranian covert facility: the uranium enrichment plant under a mountain at Fordow, located near the holy city of Qom. Washington immediately noted the site's implications. "Iran's decision to build yet another nuclear facility without notifying the IAEA represents a direct challenge to the basic compact at the center of the non-proliferation regime," said President Barack Obama at a press conference announcing Fordow's discovery.¹⁰⁰ The "size and configuration of this facility," he added, "is inconsistent with a peaceful program." In early October 2009, ElBaradei visited Tehran to meet with Iranian leaders, who agreed to allow an IAEA visit to Fordow at the end of the month.¹⁰¹

In its November 2009 report, the IAEA stated that Iran's failure to notify the agency of "the decision to construct" the site "is inconsistent with its obligations" under the CSA. "Moreover," the IAEA said, "Iran's delay in submitting such information to the Agency does not contribute to the building of confidence."¹⁰² In a subsequent November 2009 resolution, the IAEA Board of Governors urged Tehran "to comply fully and without delay with its obligations" under prior UNSC resolutions, and "to meet the requirements of the Board of Governors, including by suspending immediately construction at Qom."¹⁰³ In a June 2010 resolution, the UNSC affirmed that Iran "shall without further

delay" take steps "to address the serious concerns raised by the construction of an enrichment facility at Qom in breach of its obligations to suspend all enrichment-related activities."¹⁰⁴

Post-JCPOA Reports and Transparency

After the implementation of the JCPOA, the IAEA's reports to the Board of Governors began to include significantly less detail about Iran's steps either to meet or to evade its commitments. These gaps undermine the ability of members of the Board of Governors and members of the Joint Commission to reach independent, fully informed assessments of Iran's adherence to its commitments – particularly as those commitments pertain to the sites, equipment, and activities identified in the archive.

“After the implementation of the JCPOA, the IAEA’s reports to the Board of Governors began to include significantly less detail about Iran’s steps either to meet or to evade its commitments.”

IAEA reports have omitted crucial data on centrifuge production and operation; enriched uranium stocks and production; controversies over Iranian adherence to centrifuge research and development restrictions; the amount of enriched uranium exempted from the

100. The White House, Press Release, "Statements By President Obama French President Sarkozy And British Prime Minister Brown On Iranian Nuclear Facility," September 25, 2009. (<https://obamawhitehouse.archives.gov/the-press-office/2009/09/25/statements-president-obama-french-president-sarkozy-and-british-prime-mi>)

101. International Atomic Energy Agency, Press Release, "IAEA Director General and Iranian Officials Discuss Enrichment Plant Visit," October 5, 2009. (<https://www.iaea.org/newscenter/news/iaea-director-general-and-iranian-officials-discuss-enrichment-plant-visit>); International Atomic Energy Agency, "Transcript of IAEA Director General Remarks at Joint Press Conference with Atomic Energy Organization of Iran - 4 October 2009," October 4, 2009. (<https://www.iaea.org/newscenter/mediaadvisories/transcript-of-iaea-director-general-remarks-at-joint-press-conference-with-atomic-energy-organization-of-iran-4-october-2009>)

102. International Atomic Energy Agency, "Implementation of the NPT Safeguards Agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran," GOV/2009/74, November 16, 2009, page 7. (<https://www.iaea.org/sites/default/files/gov2009-74.pdf>)

103. International Atomic Energy Agency, "Implementation of the NPT safeguards agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran," GOV/2009/82, November 27, 2009, page 2. (<https://www.iaea.org/sites/default/files/gov2009-82.pdf>)

104. United Nations Security Council, Resolution 1929, June 9, 2010, page 4. ([https://undocs.org/S/RES/1929\(2010\)](https://undocs.org/S/RES/1929(2010)))

JCPOA stockpile limits; large hot cells in excess of allowed limits; monitoring of key dual-use equipment; the exact quantity of heavy water under Iran's control in Iran and elsewhere; and illicit procurement activities and controversies.¹⁰⁵ IAEA reports also lack detail about the agency's steps to verify Section T of Annex I of the JCPOA.

Moreover, the post-JCPOA reports lack details about the status of multiple sites that Tehran, according to pre-JCPOA reports, had barred the IAEA from accessing in whole or in part. In August 2017, the IAEA acknowledged that it had not requested permission to visit any military sites in Iran since the JCPOA's implementation. In an interview with Reuters, an anonymous IAEA official cited the possibility that Iran might deny the agency permission to visit military sites, thereby giving American leaders a rationale to abandon the JCPOA. "We just don't want to give them an excuse to," the official said.¹⁰⁶ In effect, the UN watchdog acknowledged that political considerations had interfered with its mission to serve as an independent and unbiased monitor of Iran's nuclear activities.

The lack of transparency is particularly significant in light of the Obama administration's repeated pledges that the JCPOA would provide unparalleled insight into Iran's nuclear program. On the day after the accord's finalization, President Obama said it would offer "unprecedented, around-the-clock monitoring of Iran's key nuclear facilities and the most comprehensive and intrusive inspection and verification regime ever negotiated."¹⁰⁷ Ten days later, then-Director of National Intelligence James Clapper asserted, "We will have far better insight on the – certainly the industrial aspects

of the Iranian nuclear program with this deal than what we have today."¹⁰⁸

Notably, however, the Shorabad archive includes documentation of activities at many of the sites that the IAEA omitted in post-JCPOA reporting. This report now turns to the IAEA's response – or apparent lack thereof – to the archive's disclosures. In the context of the overall gaps in the IAEA's post-JCPOA reporting on Iran's nuclear program, the IAEA's opaque response to the archive offers significant reason for concern.

The IAEA's Response to Iran's Nuclear Archive

The disclosure of Iran's nuclear archive has spurred renewed attention to the IAEA's legal obligations pursuant not only to the JCPOA but also to its forerunners. Yet since Netanyahu's April 2018 press conference, the IAEA has not stated publicly whether it has visited any of the specific sites that the archive identifies. The agency also has not indicated whether it has sought or obtained the remaining files from the archive that Israel did not remove. Still, numerous vague or contradictory public statements by Amano cast doubt on the adequacy of the IAEA's efforts.

One day after Netanyahu's April 2018 press conference, an IAEA spokesperson appeared to dismiss the archive's significance, quoting the conclusion of the IAEA's December 2015 report that Iran's nuclear activities "did not advance beyond feasibility and scientific studies, and the acquisition of certain relevant technical competences and capabilities." Based on this report,

105. See: Olli Heinonen, "Concerns about a Reduction of Transparency in IAEA Reporting on Iran's Nuclear Program," *Foundation for Defense of Democracies*, November 28, 2016. (https://s3.us-east-2.amazonaws.com/defenddemocracy/uploads/documents/112816_IAEA_Memo_Olli_.pdf)

106. Francois Murphy, "U.S. pressure or not, U.N. nuclear watchdog sees no need to check Iran military sites," *Reuters*, August 31, 2017. (<https://www.reuters.com/article/us-iran-nuclear-inspections/u-s-pressure-or-not-u-n-nuclear-watchdog-sees-no-need-to-check-iran-military-sites-idUSKCN1BB1JC>)

107. The White House, Press Release, "Press Conference by the President," July 15, 2015. (<https://obamawhitehouse.archives.gov/the-press-office/2015/07/15/press-conference-president>)

108. "Herding Cats: Synthesizing the Intelligence Community," *Interview at the Aspen Security Forum*, July 24, 2015, page 9. (<http://aspensecurityforum.org/wp-content/uploads/2015/07/Herding-Cats-Synthesizing-the-Intelligence-Community.pdf>)

the spokesperson stated, “the Board of Governors declared that its consideration of this issue was closed.” In an apparent reference to the Shorabad archive, the spokesperson added that the agency “evaluates all safeguards-relevant information available to it. However, it is not the practice of the IAEA to publicly discuss issues related to any such information.”¹⁰⁹

At a June 2018 press conference, though, Amano appeared to indicate that the IAEA spokesperson issued the statement without full knowledge of the archive's contents. “We have just started to look into the information [in the archive] and it will take a long time,” he said.¹¹⁰ Amano offered no specific timeframe for the review process.

Five days after Netanyahu's September 2018 UNGA speech disclosing the Turqzabad warehouse, Amano issued a statement seeming to suggest that the IAEA needed to verify the authenticity of Israel's claim before a visit could take place. The agency “does not take any information at face value,” Amano said. Rather, all information provided by third parties “is subject to rigorous review... to arrive at an independent assessment” of its accuracy. “The agency's work related to nuclear verification,” he added, “is and must always be impartial, factual, and professional.”¹¹¹ In a

November 2018 press conference, Amano reaffirmed this statement, adding that the agency was reviewing the archive. “We need to analyze the information and it will take time, of course,” he said.¹¹²

Amano seemed to fear that an immediate request for access to Turqzabad and to sites discussed in the Shorabad archive would convey the impression of bias in Israel's favor. According to news reports published in April 2019 and July 2019, though, the IAEA ultimately visited the Turqzabad site several times in 2019 and discovered traces of radioactive material that Tehran had not declared.¹¹³ Still, the agency's delay may have denied it an opportunity to find more evidence of potentially illicit conduct beyond the undeclared traces of radioactive material. In fact, commercial satellite imagery had shown that Iran, in the months prior to Netanyahu's UNGA speech, apparently emptied the Turqzabad site, possibly removing possible nuclear-related equipment.¹¹⁴

Amano, however, did not acknowledge any shortcomings in the IAEA's efforts. “Our inspectors have had access to all the sites and locations in Iran which they needed to visit,” he said in an address to the UNSC on April 2, 2019.¹¹⁵ This rhetoric mirrored the IAEA's official declarations in its seven quarterly reports on Iran's nuclear program between November

109. International Atomic Energy Agency, Press Release, “Statement on Iran by the IAEA Spokesperson,” May 1, 2018. (<https://www.iaea.org/newscenter/pressreleases/statement-on-iran-by-the-iaea-spokesperson>)

110. International Atomic Energy Agency, “2018-06-04 IAEA Board of Governors Press Briefing Yukiya Amano,” June 4, 2018. (<https://iaea.wistia.com/medias/piax9hjbnt>)

111. International Atomic Energy Agency, “Statement by IAEA Director General Yukiya Amano,” October 2, 2018. (<https://www.iaea.org/newscenter/statements/statement-by-iaea-director-general-yukiya-amano-2-october-2018>)

112. International Atomic Energy Agency, “2018-11-22 IAEA Board of Governors Press Briefing Yukiya Amano,” November 22, 2018. (<https://iaea.wistia.com/medias/t0uj7avgoz>)

113. “TV: IAEA finds traces of radioactive material at Iran site flagged by Netanyahu,” *The Times of Israel* (Israel), July 11, 2019. (<https://www.timesofisrael.com/tv-iaea-finds-traces-of-radioactive-material-at-iran-site-named-by-netanyahu>); Francois Murphy, “Exclusive: U.N. nuclear watchdog inspects Iran ‘warehouse’ Netanyahu pointed to - sources,” *Reuters*, April 4, 2019. (<https://www.reuters.com/article/us-iran-nuclear-inspection-exclusive/exclusive-u-n-nuclear-watchdog-inspects-iran-warehouse-netanyahu-pointed-to-sources-idUSKCN1RG2B9>); Laurence Norman, “U.N. Watchdog Inspects a Site Flagged as Suspicious by Israelis—but Possibly Too Late,” *The Wall Street Journal*, April 4, 2019. (<https://www.wsj.com/articles/u-n-watchdog-inspects-a-site-flagged-as-suspicious-by-israelis-but-possibly-too-late-11554422394>)

114. David Albright and Andrea Stricker, “IAEA Visits Turqz-Abad: Too Little, Too Late? The IAEA Has Many More Sites to Inspect Associated with the Iranian Nuclear Archive,” *Institute for Science and International Security*, April 4, 2019. (<http://isis-online.org/isis-reports/detail/iaea-visits-turqz-abad-too-little-too-late>)

115. IAEA Director General Yukiya Amano, “Strengthening the Non-Proliferation Treaty ahead of the Review Conference in 2020,” *Briefing Delivered to the United Nations Security Council*, April 2, 2019. (<https://www.iaea.org/newscenter/statements/strengthening-the-non-proliferation-treaty-ahead-of-the-review-conference-in-2020>)

2017 and May 2019, each of which stated that the agency “conducted complementary accesses under the Additional Protocol to all the sites and locations in Iran which it needed to visit.”¹¹⁶

“Both pre-JCPOA and post-JCPOA reports have included affirmative reporting of steps Iran has taken pursuant to its nonproliferation commitments. Amano’s claim thus suggests that he had been selective in furnishing information to the Board of Governors relevant to assessing Iran’s nuclear activity.”

At the same time, Amano’s UNSC address omitted a crucial statement that appeared in each of the five preceding IAEA reports: “Timely and proactive cooperation by Iran in providing such access facilitates implementation of the Additional Protocol and enhances confidence.”¹¹⁷ Further ambiguity emerges from another statement that appears in each of the IAEA’s 14 reports from May 2016 to May 2019: “Evaluations regarding the absence of undeclared nuclear material and activities for Iran remained ongoing.”¹¹⁸ These equivocal statements suggest that the IAEA has yet to verify the complete cessation of nuclear weaponization activity at undeclared sites.

In fact, in a talk at the Center for Strategic and International Studies three days after his April 2019 UNSC speech, Amano abruptly conceded that the IAEA’s knowledge of Iran’s nuclear activities

remains incomplete. The December 2015 PMD report, he said, merely indicated the absence of a “credible indication” of nuclear weaponization activities. Nevertheless, Amano added, “I did not say that everything is in peaceful purpose, and we are continuing to undertake activities to verify that everything is in a peaceful purpose.”¹¹⁹

Amano then stated, in an apparent effort to counter critics, that IAEA practice bars him from disclosing further details about its inspections. “If we don’t have problems, we don’t share the information,” he added. “If we have the problems, then we bring it to the Board of Governors.”¹²⁰ Such reticence, however, contradicts not only his own acknowledgement, just minutes earlier, of gaps in the IAEA’s knowledge, but also past precedent: Both pre-JCPOA and post-JCPOA reports have included affirmative reporting of steps Iran has taken pursuant to its nonproliferation commitments. Amano’s claim thus suggests that he had been selective in furnishing information to the Board of Governors relevant to assessing Iran’s nuclear activity.

In light of “the criticisms the IAEA has been receiving,” notes the April 2019 report by arms control scholars at Harvard’s Kennedy School of Government, “it would help in building public confidence if the IAEA released more information on how it is using the information in the archive, and whether that information, combined with other information, has yet led to visits or requests to Iran for clarification. In the public domain, mysteries remain.”¹²¹

¹¹⁶. For a listing of these reports, see: International Atomic Energy Agency, “IAEA and Iran - IAEA Reports,” accessed August 5, 2019. (<https://www.iaea.org/newscenter/focus/iran/iaea-and-iran-iaea-reports>)

¹¹⁷. Ibid.

¹¹⁸. Ibid.

¹¹⁹. “Challenges in Nuclear Verification: A CSIS PONI event with Director General Yukiya Amano of the International Atomic Energy Agency (IAEA),” *Center for Strategic and International Studies*, April 5, 2019. (<https://www.csis.org/events/challenges-nuclear-verification>)

¹²⁰. Ibid.

¹²¹. Aaron Arnold, Matthew Bunn, Caitlin Chase, Steven E. Miller, Rolf Mowatt-Larssen, and William H. Tobey, “The Iran Nuclear Archive: Impressions and Implications,” *Belfer Center for Science and International Affairs at the Harvard University Kennedy School of Government*, April 2019, pages 25-26. (<https://www.belfercenter.org/sites/default/files/files/publication/The%20Iran%20Nuclear%20Archive.pdf>)

Policy Recommendations

The IAEA's response to the archive, as well as its general lack of transparency concerning Iran's post-JCPOA activities, bears troubling implications for Iran's nuclear program and nonproliferation commitments. Simply put, it suggests that the IAEA has yet to secure full access to all suspicious sites in Iran.

Consequently, the IAEA cannot state with confidence that Iran has complied with the CSA and the AP. Without full access to all undeclared sites, the IAEA also lacks the ability to reach a credible broader conclusion that all nuclear activity remains in peaceful purposes. Likewise, parties to the JCPOA cannot credibly state that Iran has complied with the JCPOA, while NPT member states cannot assume that Iran is in compliance with the NPT.

To address these problems, the IAEA, the Trump administration, and Congress should take the following steps.

For the IAEA:

- 1. Inspect all Iranian sites identified in the archive.** Nothing should be off-limits. Moreover, the IAEA should interview all relevant Iranian scientists and officials who worked on the nuclear program, and gain access to nuclear-related equipment identified in the archive. Only comprehensive inspections can ensure that Iran has permanently abandoned its pursuit of nuclear weapons.
- 2. Require Iran to provide the IAEA with all remaining documents in the archive.** According to Israeli officials, the files Israel seized constitute only 20 to 50 percent of the total archive. After Iran releases the files, the IAEA should require the regime to destroy any copies in its possession.
- 3. Strengthen its investigation of past and present issues concerning the PMD of Iran's nuclear program.** The IAEA's own report in December 2015 showed that Iran failed to cooperate with the Roadmap's PMD investigation. The Shorabad archive suggests that the nuclear program's PMD

may be more extensive than suspected prior to the JCPOA. A complete and honest declaration by Iran of its past nuclear activity is necessary to establish a baseline for verification of future inspections.

- 4. Issue comprehensive, timely, and transparent reports to the IAEA Board of Governors.** The IAEA's secrecy undermines the integrity of its efforts. IAEA reports should contain the same level of detail that pre-JCPOA reports included.

For the Trump Administration and Congress:

- 1. Urge the IAEA, both publicly and privately, to implement each of the four recommendations above.** While the United States has withdrawn from the JCPOA, it remains an NPT member state and a member of the IAEA Board of Governors. Consequently, Washington still has the right to insist upon Iran's adherence to its commitments under the NPT, the CSA, and the AP.
- 2. Urge other members of the IAEA Board of Governors to exercise stronger oversight of the IAEA.** The IAEA's director general reports to the Board of Governors and must follow its instructions. A majority vote of the Board can compel the IAEA to exercise greater diligence and transparency regarding inspections in Iran.
- 3. Wage a public information campaign that highlights the findings in the Shorabad archive and their implications for IAEA inspections.** To date, the Trump administration has rarely discussed the archive in public. Washington should make clear that its contents not only are of academic interest but also provide data with practical relevance to Iran's nonproliferation commitments.

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