Iran's Nuclear Agreement: The Three Specific Clusters of Concerns

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ABSTRACT When Iran's nuclear agreement was signed, critics raised questions about the terms of the agreement, its duration and especially about whether the deal would prevent Iran from achieving nuclear weapons. However now, three years since the agreement was signed, one might be able to judge whether or not it is a good deal and what are its future implications. This research intends to review three specific clusters of concerns that critics had, and tries to find out whether or not these concerns have materialized. The first was that under the guise of the JCPOA Iran would commence a clandestine weaponization to produce a bomb. The second concern was that regional actors would respond to the JCPOA by developing their own nuclear arsenals. The third concern was that Iran would use the money it would receive from the sanctions relief to expand its regional ambitions.

Introduction

he prospect of a nuclear-armed Iran had unsettled neighboring countries and threatened a nuclear arms race in the Middle East. To thwart Iran's nuclear ambition, the international community imposed an increasingly crippling series of economic sanctions, implemented by the UN Security Council, the United States, and the European Union. By 2013, the crippling measures along with the combination of other factors including internal political divisions in the country and the threat of a joint military attack by the United States and Israel brought the Iranian economy to its knees and the regime back to the negotiating table. On July 14, 2015, Iran and the P5+1 reached an agreement (JCPOA) which curtailed most of the achievements of Iran's decades-long nuclear endeavor. In December 2015, the International Atomic Energy Agency (IAEA) certified Iran in compliance with the agreement, thus paving the way for implementation of the JCPOA. As a part of the deal, the IAEA promised stringent oversight of Iran's nuclear program to ensure that it would remain peaceful for the duration of the agreement and beyond.

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According to the JCPOA, Iran's total enrichment capacity will remain where it is now until 2028

By any measure, the JCPOA wiped out most of the achievements of Tehran's decades-long nuclear endeavor. Iran has been restricted to 6,000 IR-1 first generation centrifuges of limited enrichment capacity. As measured by Separate Work Units (SWU), a standard gauge of the separative power of a centrifuge, the IR-1 has been estimated at having around 1 kg uranium SWU/year. The more advanced models

which Iran had worked hard to fabricate are more efficient and have a higher SWU capacity. The IR-2M and the IR-4 are estimated to be three to five times more efficient than IR-1, designed to have roughly about five SWU/year per machine and 1 IR-8 centrifuge is estimated to be 16 times more efficient than IR-1, roughly equivalent to enrichment capacity of 16 kg uranium SWU/year = 24 kg UF6 SWU/year.²

In addition, until 2030, Iran will be limited to a 300 kg cap on its Low Enriched Uranium (LEU) per year; excess LEU needs to be shipped out of the country. These limitations were devised with a view of lengthening the breakout time, meaning the length of time Iran would need to fabricate enough weapon-grade uranium for a single nuclear weapon, should it renege on the agreement and leave the NPT. The same time framework applies to the so-called "sneak out scenario," a clandestine effort to enrich uranium without renouncing the NPT membership.³

The one-year timetable is limited to uranium production alone. It does not include projections about other parts of weaponization: fabricating the metallic core of the weapon from the powdered uranium hexaboride, building the trigger mechanism, integrating the weapon package into a delivery system, and testing. The time period to produce a working weapon known as "effective breakout time" is estimated to take at least one year for the duration of at least 10 years.⁴

To prevent Iran from cheating a justifiable suspicion given its record, the JCPOA offered a strict safeguards protocol based on electronic monitoring, visit of IAEA inspectors, and unspecified cyber sleuthing. Depending on the type of activity, the JCPOA restrictions would be lifted in 10-15 years, but the Additional Protocol which Iran is obliged to ratify until 2023 and which it is now voluntarily implementing, would guarantee a stringent IAEA oversight beyond the agreement's expiration date. According to the JCPOA, Iran's total enrichment capacity will remain where it is now until 2028. The level of enrichment is restricted to 3.67 percent until 2030. The path to a plutonium weapon is also blocked by the 15-year ban on constructing a new Heavy-Water Reactor (HWR) and on reprocessing spent fuel. Iran would need 1,400 to 2,800 kg LEU for one single bomb. These limitations make Iran's weaponiza-

tion almost impossible until 2030. Other prohibitions including surveillance of centrifuge production facilities and monitoring of Iran's uranium mines and mills will remain in place until 2035 and 2040 respectively. Moreover, Tehran will always be required to notify the agency when it decides to build a new nuclear facility. Should Iran default on its JCPOA obligations, sanctions would be reinstated, that is "snapped back."

The signing of the JCPOA has generated an enormous debate among foreign policy officials, the intelligence community, academic experts, and public intellectuals. On one side of the debate, there were those who considered the JCPOA as a serious rollback to Iran's nuclear aspiration. On the other side, others predicted the regime's decision to sign the deal as a part of its strategy of tricking the international community into relaxing the sanctions to manageable levels and then to continue with its illicit nuclear weaponization activities.⁷

Critics argue that the JCPOA is not strong enough to prevent Iran from commencing a clandestine weaponization, in a parallel undeclared facility, to produce a nuclear weapon. They further argued that the JCPOA will encourage regional actors to develop their own nuclear arsenals. More immediately, according to critics, Iran would use the pass it has received from the nuclear agreement to expand its regional ambitions. This research has been organized into three separate sections to review these three clusters of concerns in order to find out whether they have materialized.

Iran's Possible Engagement in a Clandestine Weaponization Activity

The first and indeed, the most important concern of critics of the JCPOA was that Iran would engage in covert weaponization activities to carry out a "sneak out" scenario, that is building a secret parallel nuclear program dedicated to military purposes. Under a "sneak out" scenario, critics of the deal said, Iran could enrich uranium in an undeclared enrichment facility to fabricate a bomb unknown to the IAEA, the designated watchdog organization empowered to visit Iran's declared nuclear sites only.⁸

Primarily, critics were concerned about Iran's breakout, defined as the time needed to produce approximately 27 kg of Weapon-Grade Uranium (WGU) known as a "significant quantity" –enriched to more than 90 percent of its fissile isotope U-235– to produce one nuclear weapon should the regime decide to leave the Non-Proliferation Treaty (NPT). To address this concern, the architects of the JCPOA set provisions in the agreement to lengthen Iran's breakout time. The nuclear agreement restricted Iran to operate 6,000 IR-1 first generation centrifuges of limited enrichment capacity.⁹

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Indeed, drastically limiting the number and quality of Iran's centrifuges and the uranium stockpile was said to lengthen the breakout period from 2 months in 2013 to one year for the next ten to fifteen years. The time period to produce a working weapon known as "effective breakout time"

is estimated to take at least one year. Robert Einhorn, a senior fellow in the Arms Control and Non-Proliferation Initiative and the Center for 21st Century Security and Intelligence surmised that as long as Iran had to rely on first-generation enrichment technology, it is unlikely to leave the NPT, expel the inspectors, and produce a nuclear warhead.¹⁰

To prevent Iran from cheating, the JCPOA proposed a strict safeguards protocol. The stringent oversight was also designed to prevent the so-called "sneak out" contingency, in a parallel, undeclared nuclear site. Critics noted that a "sneak out" is a more likely scenario than a breakout and requiring extreme vigilance on the part of the IAEA. To this end, IAEA will monitor Iran's nuclear supply chain. In Fordow and Natanz a "round-the-clock access" will be available, including continuous monitoring via surveillance equipment. Using a new generation of monitoring technology such as fiber-optic seals on equipment that electronically send information to the IAEA, infrared satellite imagery to detect covert sites, "environmental sensors that can detect minute signs of nuclear particles," tamper-resistant, radiation-resistant cameras, computerized accounting programs for information gathering and anomalies detection and using big data sets to monitor Iran's dual-use imports are particularly promising. Human monitoring will also intensify as the number of IAEA inspectors will triple from 50 to a 150. 12

Of greatest concern for the critics is that the JCPOA limits Iran's ability to break out or sneak out in the short-term, but it did not fundamentally remove the Iranian nuclear weapons option. As key provisions of the JCPOA expire in the next 5-15 years, according to critics of the deal, Iran will be in an increasingly strong position to produce a bomb. The JCPOA is therefore seen by some as at best a temporary pause to Iranian nuclear ambitions, rather than a permanent solution. Proponents of the deal disagree and argue that the set of provisions in the nuclear agreement renders Iran's weaponization impossible. As explained above, the JCPOA restrictions such as the number of Iran's first-generation centrifuges, the research and development of more advanced ones, Iran's total enrichment capacity, the level of enrichment and the path to a plutonium weapon will remain in place for a long time after the expiration of the nuclear agreement.¹³ Leonard Spector, a nuclear non-proliferation expert at James Martin Center for Nonproliferation Studies, maintains that although



the JCPOA is not a long-term solution "given the choice of an Iranian nuclear weapon next spring or in 2025, the second alternative is most certainly the better one, and that means keeping the deal intact." ¹⁴

Concerns about Iran's developing nuclear capabilities in a non-declared site have been addressed by the IAEA's request to access the nuclear supply chain "to verify the absence of undeclared nuclear materials and activities or activities inconsistent with" the agreement. If Iran bans such a request or otherwise fails to satisfy the IAEA's concerns, a special process lasting up to 24 days will be set in motion eventually triggering sanctions snapback if Iran fails to comply. Experts maintain that this time will be enough to prevent the removal or concealment of evidence of illicit activities that would be of greatest concern and would shorten Iran's breakout time." ¹⁵

The IAEA nonstop monitoring of the entire nuclear supply chain will significantly increase the likelihood of detecting an undeclared enrichment program. The provisions of the agreement are set to prevent Iran's future weaponization activities. Iran is committed not to engage in weaponization activities including "certain work in uranium and plutonium metallurgy, nuclear explosive modeling, research on explosive detonation and neutron initiation systems, and procurement of specialized equipment for those purposes." Moreover, the UNSC Resolution 2231 which endorsed the nuclear agreement imposed restrictions on importing sensitive dual-use technologies, materials and equipment relevant to the development of nuclear weapons. Furthermore, the JCPOA provi-

Six world powers (the U.S., UK, France, China, Russia and Germany) reached a deal with Iran on limiting Iranian nuclear activity on July 14, 2015.

HASAN TOSUN / AA Photo sions commit the Islamic Republic to allow the IAEA access to any places in Iran where illicit activities are suspected of taking place. The JCPOA's provisions can effectively detect Iran's covert violations of the accord.¹⁷

The IAEA's eights reports since January 16, 2016 (Implementation Day of the JCPOA), indicate that Iran has fulfilled its JCPOA commitments and did not continue its nuclear activities. On May 11, 2017, IAEA director general Yukiya Amano confirmed Iran's compliance. As the director noted, "Iran is implementing its Comprehensive Safeguards Agreement, including what is known as modified Code 3.1." On June 2, 2017, the secretary general of the IAEA, Yukiya Amano, reported that Iran's activities were well within the parameters of the JCPOA, including enrichment, centrifuge research, development and inventory, and transparency measures. Specifically, "All declared rotor tubes, bellows and rotor assemblies have been under continuous monitoring by the Agency, including those rotor tubes and bellows manufactured since Implementation Day (para. 70)." Iran has manufactured rotor tubes using carbon fiber that have been sampled and tested by the agency, all of which has been subject to the agency containment and surveillance measures. In other words, the IAEA did not find any evidence of mass manufacturing of parts for advanced centrifuges. On June 12, 2017, Amano told the quarterly meeting of the IAEA Board of Governors that the agency is verifying and monitoring Iran's implementation of 'all its nuclear-related commitments' under the nuclear agreement. The IAEA report presented on June 12, 2017, by Amano showed no deviations from Iran's obligations.¹⁸

In his response, David Albright, director of the Institute for Science and International Security (ISIS), a private think tank based in Washington which emerged as high-profile on Iran's nuclear program, took issue with the analysis, describing it as "particularly minimalist in nature." He emphasized that the agency lacked access to military sites, and that "the lack of such access undermines any statement that the IAEA is able to verify the JCPOA." Albright suggested that the United States and its allies should press the IAEA "to report more fully on the status of Iran's compliance with the nuclear deal, particularly on challenges facing the IAEA in its efforts, including gaining access to military sites." He also warned the media "not to make the mistake of falsely interpreting the IAEA report as stating Iran is complying with the JCPOA, given the lack of any such statement in the report and its many omissions." 19

Other experts have disagreed with ISIS and the Albright report. For instance, Mark Fitzpatrick, the executive director of the International Institute for Strategic Studies (IISS-Americas) explained that "IAEA reports on Iran are less detailed" now because "Iran is no longer considered by the IAEA to be in noncompliance with its safeguards agreement." Fitzpatrick added that he had consulted with experts in three capitals, and he is certain that the "claim that the

IAEA is 'withholding' information, however, is an exaggeration."²⁰

The U.S. intelligence community has not reacted to the IAEA's report, but previous statements on the issue of Iran's compliance were somewhat contradictory. On April 13, CIA director Mike Pompeo said that "we should be mindful and read that JCPOA when it talks about declared facilities and undeclared facilities and how much access the IAEA will have to each of those two very distinct groups" Pompeo noted that his agency is monitoring both declared and undeclared sites. On May 11, 2017, in a report to Congress, Director of National Intelligence Daniel R. Coats stated that "the JCPOA has also enhanced the transparency of Iran's nuclear activities, mainly through improved access by the International Atomic Energy Agency and its investigative

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authorities under the Additional Protocol to its Comprehensive Safeguards Agreement." Unlike Pompeo, Coats did not raise the issue of possible illicit work in undeclared sites. Instead, he spent time discussing the threat of Iran's ballistic-missile project.²¹

Equally important, on April 18, 2017, the Department of State has certified Iran as being in compliance with the deal as required by the Iran Nuclear Agreement Review Act (INAR) of 2015. Written by Secretary of State, Rex W. Tillerson, the letter stated that the conditions of the Atomic Energy Act of 1954 (AEA), including the INRA are met as of April 18, 2017.²²

Similarly, Defense Secretary, Jim Mattis, testified before the Senate Armed Services Committee and confirmed that there is no indication that Iran has violated the nuclear agreement. Appearing with Mattis, Marine Gen. Joe Dunford, the chairman of the Joint Chiefs of Staff, also told the panel that Iran "is not in material breach" of the JCPOA, contending that the pact has "delayed the development of a nuclear capability by Iran."

On May 30, Albright published a report co-authored with Olli Heinonen, the former head of the IAEA's safeguards division. A mistranslated interview which Ali Akbar Salehi, the head of the Atomic Energy Organization of Iran (AEOI), had given to a Farsi-language organization prompted the analysis. ISIS posted a correction but did not change the body of the report. The authors suggested that Iran may be producing components of advanced centrifuges in secret military sites. They went on to speculate that Iran did not declare all dual-use flow-forming machines and filament-winding machines, which are used in

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their military industry but can also be used in fabricating centrifuges. Albright and Heinonen noted that "a key question is whether Iran is secretly making centrifuge rotor tubes and bellows at unknown locations, in violation of the JCPOA, and if it takes place, what the prob-

ability is that it goes without detection." In conclusion, the authors urged the IAEA, which has "authorities under the JCPOA and the Additional Protocol to investigate these propositions." They also appealed to the United States "to request the IAEA to produce more detailed quarterly reporting on its activities. Such information should include whether the IAEA has been able to verify in a timely and conclusive manner the production of centrifuges and their components."²⁴

In a June 5 analysis, ISIS also claimed 'persistent violations' by Iran. The ISIS report indicated a clear breach when Iran briefly exceeded the 130-tonne limit on heavy water stockpiles. However, the ISIS report has failed to explain that the amount of heavy water was limited under the agreement as an extra precaution against Iran being able to produce plutonium in its Arak HWR. Since January 2016, the Arak HWR has been disabled and according to experts, it is almost impossible to conceal construction of a new research reactor from intelligence agencies.²⁵

In its latest quarterly report to its member states released on August 31, 2017, the IAEA confirmed for the eighth time that Iran continues to comply with the nuclear agreement. The agency stated that "Iran has not carried out activities related to reprocessing at its nuclear sites, nor has it operated any of its declared facilities for the purpose of reconverting fuel plates or scrap into UF6 and has not built any new facilities for such a purpose." The Agency confirmed that Iran's stock of LEU is in line with the nuclear accord, as is the number of centrifuges used for enrichment. The report further stated that Iran has "not pursued the construction" of HWR (IR-40 Reactor) at Arak, which would give it the capability to produce weapons-grade plutonium. In other words, the agency certified that Iran has been transparent enough with regards to its nuclear activities allowed by the JCPOA.²⁶

The Israeli intelligence service also certified Iran's compliance. The majority of senior members of the Israeli military and intelligence (past or present) supported the JCPOA both publicly or privately. Even many of those who had major reservations now admit that the nuclear agreement has had a positive impact on the security of Israel and must be maintained by the United States. On September 1, 2015, Efraim Halevy, former director of Mossad and former

head of the Israeli National Security Council has said without an agreement, "Iran will be free to act as it wishes, whereas the sanctions regime against it will crumble in any case ... if the nuclear issue is of cardinal existential importance, what is the point of canceling an agreement that distances Iran from the bomb?" Ami Ayalon, former head of the Shin Bet, Israel's domestic security service, has said that the agreement "is the best possible alternative from Israel's point of view, given the other available alternatives. ... In the Middle East, 10 to 15 years is an eternity, and I don't believe that 10 or 15 years from now the world will stand by and watch Iran acquire a nuclear weapon."

Israel's military chief of staff, Lieutenant General Gadi Eisenkot, told a defense conference on January 2016 that the deal has set a serious rollback to Iran's manufacturing a bomb and since the deal was signed, they did not observe any suspicious activity on the part of the Iranians. On July 12, 2016, Uzi Eilam, former head of the crucial Israel Atomic Energy Commission (IAEC) –whose experts provide ongoing expertise in monitoring Iran's compliance with the nuclear agreement– maintained that the JCPOA has been a major success. Simply put, according to Eilam, "every single one of Iran's pathways to a nuclear weapon has been blocked. The deal has been a major success." ²⁸

A day after, on July 13, 2017, Carmi Gillon, Shin Bet director from 1995 to 1996, noted that the most serious threat that faced Israel was the possibility of Iran obtaining a nuclear weapon, but with the JCPOA, the threat of an Iranian nuclear weapon is more remote. "While no agreement is perfect, this achievement must not be underestimated. Now…the threat of an Iranian nuclear weapon is more remote than it has been in decades. Thanks to the agreement, Iran's nuclear program has been defanged and all its pathways to a bomb blocked."

On October 5, 2017, Uzi Arad, the former National Security Advisor to Israel's Prime Minister and Chairman of National Security Council (NSC) from 2009 to 2011, said that the JCPOA had clear tangible benefits for Israeli and international security and that Iran, to date, had honored its strict terms. While announcing his support for the deal, Arad warned that U.S. withdrawal from the agreement, "simply removes from existence that presented certain assets and certain things that are tangible –and replacing that with nothing." More recently, on October 11, 2017, Ehud Barak, former Israeli Prime Minister and former Defense Minister, noted that "it would be a mistake for President Trump to decertify the Iran nuclear deal. Even if America decides to pull out of it, no one will join –not the Chinese, not the Russians, not even the Europeans. It will serve the Iranians." ³¹

Equally important, the EU intelligence agencies confirmed that Iran has not commenced covert nuclear activities since the JCPOA was signed. On Septem-



Sejjil and Qadr-H medium range ballistic missiles are displayed next to a portrait of Iranian Supreme Leader Ayatollah Ali Khamenei on the occasion of the annual defense week on September 25, 2017, in Tehran. ATTA KENARE / AFP Getty Images

ber 21, 2017, Federica Mogherini, the European Union's foreign policy chief agreed that Iran was in full compliance of the agreement. On September 5, 2017, Mogherini agreed that the JCPOA "set a milestone for non-proliferation, making everyone more secure –in the region, in Europe, and in the world."³²

Unable to find any evidence of Iran's non-compliance, the focus in Washington has switched to Iran's ballistic missiles program. American officials have complained that Iran has violated the spirit of the nuclear agreement by conducting tests of missiles capable of carrying nuclear warheads prohibited under UNSC Resolution 2231.³³

There are certainly valid concerns about Iran's long-range missiles, since the cost-benefit analysis does not justify mounting conventional payloads. In the final weeks of negotiations, Iranian officials sought to soften UNSC Resolution 1929, which "dictated that Iran shall not undertake any activity related to ballistic missiles capable of delivering nuclear weapons." UNSC Resolution 2231 of July 20, 2015, which endorsed the nuclear pact, was more permissive: "Iran is called upon not to undertake any activity related to ballistic missiles designed to be capable of delivering nuclear weapons." "34"

Essentially, the new resolution created a loophole for Iran to exploit and complicated the effort to define what kinds of missiles are capable of carrying a nuclear payload. According to the Missile Technology Control Regime (MTCR),

an informal group that works on nuclear-capable missile technology, missiles with a range of three hundred kilometers and a payload of five hundred kilograms can deliver a nuclear payload. By the MTCR standard, Iran's missiles tests evidently violated Resolution 2231.³⁵

Eager to explore the boundaries of Resolution 2231, the Islamic Revolutionary Guard Corps' (IRGC) Aerospace Force launched several ballistic missiles that could potentially carry a nuclear payload. Days The Trump Administration wants to create a new legislation that would effectively reshape the nuclear agreement which includes the ballistic missiles program as well as overriding the JCPOA provisions that lift restrictions after the agreement will expire

after Donald Trump took office, on January 29, 2017, the IRGC Aerospace Force tested a new missile at the Semnan launch site, about 140 miles east of Tehran. Shortly after, Michael T. Flynn, then National Security Adviser, stated that Iran "was put on notice," a threat which left little doubt that the United States would react more severely should Iran test another missile in violation of Resolution 2231. More to the point, after being "put on notice," the Guards' Aerospace Force carried out only one test of a short-range surface-to-air missile on February 8, 2017, well within the limits of Resolution 2231.³⁶

Still, the Trump Administration wants to create a new legislation that would effectively reshape the nuclear agreement which includes the ballistic missiles program as well as overriding the JCPOA provisions that lift restrictions after the agreement will expire. To this end, Trump announced that he will not certify Iran's compliance with the agreement under Iran Nuclear Agreement Review Act (INARA) and urged the Congress to take appropriate action. Such a law would keep U.S. sanctions in place should Tehran remove the restrictions, even though the sunset clauses allow it to do so. Furthermore, Trump wants to simplify the complex and relatively lengthy procedure for IAEA nuclear inspectors to visit sites (i.e. military sites) which are not covered by the nuclear agreement, and if Iran does not agree, that law would re-impose sanctions.³⁷

Tom Cotton and Bob Corker, the two prominent Republicans in the Congress are shaping the legislation based on Trump's specifications. The summary of the mentioned legislation was released by Corker on October 13, 2017, and states that "The legislation automatically re-imposes sanctions if Iran's nuclear program violates certain restrictions. These restrictions remain in force indefinitely, effectively ridding the JCPOA of its sunset provisions as they apply to U.S. sanctions; bolster IAEA verification powers; and limit Iran's advanced centrifuge program." 38

JCPOA and Concerns about Proliferation in the Middle East

The second cluster of concern relates to the problem of proliferation. It is more theoretical than applied because it comes from the International Relations (IR) theory of proliferation. This theory is based on the rational choice model, which postulates that, assuming rationality, players would respond to the proliferation of a relevant actor (i.e. Iran) by developing their own nuclear arsenals.

This particular theory was based on the history of the cold war which essentially serves as an empirical model that validates proliferation theory. One needs to look at this cluster of concern from the perspective of the most relevant regional actors which may want to proliferate: Saudi Arabia, Israel and Egypt. Turkey is not considered a proliferation prone country, because it is under the nuclear umbrella of the North Atlantic Treaty Organization (NATO).

Israel

Israel, the only country in the Middle East with nuclear weapons, has emerged as a leading opponent of Tehran's nuclear project. As envisaged by David Ben Gurion, the Israeli nuclear arsenal was to provide deterrence against threats from the Arab countries with numerically strong armies.³⁹ To sustain this deterrent power, however, Israel has to preserve its nuclear monopoly in the region. As a result of this assumption, under the so-called Begin doctrine, the Israel Air Force bombed the Iraqi Osirak reactor in 1981 and the Syrian reactor in 2007.⁴⁰

Following the discovery of Iran's nuclear program in the 1990s, Israel launched a fierce, multifaceted campaign to roll it back. Using an array of clandestine tools, the intelligence services, working alone or with the United States, sought to expose and damage Iran's nuclear infrastructure. On the diplomatic front, Jerusalem had led the drive to impose harsh economic sanctions on Tehran. By 2009, however, the newly elected Likud government concluded that, in spite of some guarded success, these measures would fail to stop Iran's nuclear progress.⁴¹

Instead, Netanyahu and his Defense Minister, Ehud Barak, planned to execute a pre-emptive strike on Tehran's nuclear facility. On a number of different occasions between 2010 and 2012, Netanyahu and Barak tried to persuade the security cabinet of eight ministers to launch a strike. They failed because of strong objections of the Israel Defense Forces (IDF), the intelligence chiefs and several cabinet members. Meir Dagan, the head of the Mossad, took a lead in organizing a strong opposition to the proposed mission. They and other opponents suggested that the action was ill-conceived because Iran was still several

years ahead of weaponization. More to the point, they argued that an attack on Iran presented a vastly more complex military challenge which could not be carried out without the help of the United States. 42

Forced to revert to the diplomatic route, the Likud government urged the United States to negotiate for a zero-enrichment deal, a position that the Obama Administration The Likud government urged the United States to negotiate for a zero-enrichment deal, a position that the Obama Administration viewed as unrealistic since the NPT entitled Iran to a civilian program

viewed as unrealistic since the NPT entitled Iran to a civilian program. Though the JCPOA represented a severe setback to Iran, Netanyahu mobilized the Israel lobby in the United States to defeat the JCPOA in Congress. During a bitterly fought campaign, Netanyahu and his American supporters, including most of the Jewish groups and the powerful Christian Zionist movement accused the Obama Administration of exposing Israel to a second Holocaust at the hand of a nuclear Iran. Jewish mega-donors such as the casino mogul Sheldon Adelson, Paul Singer, and Bernard Marcus contributed to candidates who objected to the deal.⁴³

Netanyahu's tactics generated considerable criticism from military leaders, intelligence officials, and nuclear experts in Israel. Days after Congress voted on the deal on September 17, 2015, a special panel of the IAEC passed a resolution praising the agreement. This stand was all the more remarkable because this highly secretive organization played a key role in evaluating the nuclear information collected by the intelligence services. Two of the former heads of the Commission –Gideon Frank and Shaul Chorev– were apparently involved with the panel. More consequential, the IDF chief Lieutenant General Gadi Eisenkot described the agreement as harboring both risks and opportunity. Adding that the "Prime Minister's Office" emphasized the only risk, Eisenkot assured the public that Iran would not be able to fabricate a bomb any time soon.⁴⁴

To prevent future internal division and public rebukes, Netanyahu appointed Yossi Cohen, a veteran intelligence operative and his National Security Adviser to head the Mossad. Cohen, who is personally close to Netanyahu, had been in charge of the clandestine operations against Iran under Dagan. The new director of the IAEC, Zeev Snir, came to the Ministry of Defense and had no activist history. The head of Aman, Major General Herzl Halevi, and the chief of the Research Department, Brigadier General Eli Ben Mor, are considered somewhat more hardliners on Iran than their predecessors, Aviv Kochavi and Itai Brun respectively. Without referring to nuclear weapons,

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Halevi told a closed-door meeting that Iran is engaged in "a technological war" with Israel and that it is closing the gap. Halevi asserted that the Iranians enroll and graduate more engineering and technology students than Israel.⁴⁵

Needless to say, the testing of the ballistic missiles by Iran provoked a negative reaction. The media pointed out to the slogan painted on the missiles and quoted the head of the Air and Ballistics Branch of the Revolutionary Guards stating that the missiles were designed to reach Israel. Commentators suggested that the hardliners in Iran had not abandoned their dream of vanquishing the Jewish state. For those familiar with the highly-charged discourse on Iran, it was clear that the Likud government scored an important point.⁴⁶

To counter the public relations fallout from the Iranian provocation, Washington accelerated its anti-missile collaboration with the IDF. Dating to the early 2000s, a joint American-Israeli project estimated at some \$3 billion, resulted in an integrated multilayered, anti-ballistic system: the short-range Iron Dome, the mid-range Jericho and the long-range Arrow. Linked to the FBX-T Raytheon radar systems, known popularly as the ex-band, it is part of the Joint Tactical Ground Station Theater Warning System (JTGS) based in Europe but operated by American personnel in Netivot in the Negev. To increase combat preparedness, the United States and Israel hold the biannual joint exercise Juniper Cobra, a five-day combined military exercise against regional threats, including missile attacks.⁴⁷

Welcoming as the anti-ballistic umbrella might be, Israel has also redoubled its diplomatic and political efforts. Jerusalem has complained to the United Nations and the P5+1 countries (the UN Security Council's five permanent members: China, France, Russia, the United Kingdom, and the United States, plus Germany) about what it described as Iran's blatant disregard for Resolution 2231 and the spirit of JCPOA. Israel's ambassador to the United Nations demanded the Security Council punish Iran. There is some sympathy for the Israeli position among the P5+1, but it is not clear whether the Security Council would act, because of the opposition of Russia and China.⁴⁸

Israel has received a better hearing in the Republican-dominated Congress where a number of legislative initiatives have been making their rounds. On May 24, 2016, Michael Elleman, an expert from the International Institute for Strategic Studies, testified before a Senate Committee on a considerable increase of ballistic tests in Iran. Elleman pointed out that ballistic missiles are

used to deliver a nuclear payload and that Iran has been trying to increase their precision. Though the Obama Administration slapped a number of sanctions on eleven entities and individuals linked to the ballistic project, lawmakers have considered the gesture as inadequate. They want to reauthorize the Iran Sanctions Act (ISA) due to expire at the end of the year and add a variety of new restrictions. Israel lobby organizations like United against Nuclear Iran and the Iran Project at the Foundation for the Defense of Democracies have warned companies and banks in the United States and abroad against doing business with Iran ⁴⁹

The election of Donald Trump as the president of the United States has added to the uncertainty about the future of the JCPOA. Trump repeatedly described the JCPOA as the "worst agreement ever" and promised to "dismantle" it. ⁵⁰ Although congressional Republicans mounted an unprecedented but ultimately unsuccessful campaign to derail the deal, the lobby and its congressional patrons have not abandoned their effort to limit the economic benefits of the deal to Iran. Lawmakers from the House Republican Israel Caucus introduced several bills which would, among others provisions, extend the Iran Sanctions Act, to block the sale of 80 Boeing planes to Iran, and prohibit the Export-Import Bank from financing business with Iran. Unlike President Obama, President Donald Trump has not vetoed the anti-Iran legislation, setting a relatively low bar for its passage. ⁵¹

Limiting the economic benefits of the JCPOA would impact the domestic discourse in Iran. Hardliners in Tehran have already accused President Rouhani of giving up much of the nuclear program for few economic benefits, a theme that is expected to dominate the presidential election in 2017.⁵²

Anti-Iran advocates in Washington used missile tests to justify further punitive measures. For instance, a Senate proposal advocated by AIPAC would give the Trump Administration power to impose sanctions on a wide variety of organizations and individuals for non-nuclear activities. The hotly disputed ballistic missile tests conducted by the Revolutionary Guards in the past year would also come under a review by the new administration; Congress is already crafting legislation that would further sanction countries, companies, and individuals implicated in the even small infringements -like the one reported by IAEA whereby Iran exceeded the amount of heavy water allowed under the deal- can trigger more measures. Under Obama, such disputes were resolved by a special team of State Department and National Security Council officials working with the IAEA.⁵³

Whether the Trump Administration would retain the team is doubtful, especially as such a move would be opposed by John Bolton or other hardliners who accused the IAEA of covering up for Iran and press for a more vigilant

oversight of Iran's compliance, creating additional friction. This, in turn, can trigger a potentially highly damaging development. Under the JCPOA terms, Iran is not due additional sanction relief until 2023, but the president is required to sign periodical waivers on sanctions which are on the books if Iran is judged to be compliant. By refusing to issue the waivers, the Trump Administration has essentially abrogated American participation in the accord.⁵⁴

Even without a formal abrogation, an aggressive American policy would make it hard for President Rouhani to protect all the aspects of JCPOA-mandated compliance. Hardliners may be encouraged by the fact that the EU, Russia and China, are not likely to agree on snapping back sanctions because they would hold the Trump Administration responsible for disrupting the increasingly flourishing trade with Tehran. It is virtually impossible to predict whether Iran, under a hardline leadership, would resume its nuclear project. It is equally difficult to foresee whether an Obama-type coalition behind the JCPOA could be recreated in the future should the need arise.

Saudi Arabia

Like Israel, Saudi Arabia has had a long history of strife with Iran. Immediately after it seized power, the regime, intent on exporting its revolution and undermining the Kingdom, launched operations against Riyadh and its Gulf neighbors. In its latest venture, Iran has promoted the Houthi rebellion in Yemen, arguably the most direct challenge to Saudi interest in decades. Riyadh has also taken a dim view of Iran's steadfast support for Bashar al-Assad in Syria. It is not surprising thus that the monarchy has considered Iran's nuclear ambition as not only a means of national preservation but as a protective umbrella for pursuing regional hegemony.⁵⁵

President Obama's readiness to negotiate with Iran met with considerable alarm in Riyadh. Though less openly vocal than the Israeli government, Wikileaks documents and other sources indicate that King Abdullah was exceedingly frustrated by the Obama imitative. To the Saudi elite, the JCPOA was an indication of Washington's willingness to tolerate Iran's expansionism at the cost of its historical alliance with the Middle Eastern Arab states. To make their feelings known, some officials in the royal circle urged to match Iran's nuclear advances. For example, Prince Turki al-Faisal, the former Saudi intelligence chief and an influential member of the elite, declared that Riyadh will not live in the shadow of a nuclear-armed Iran.⁵⁶

In fact, Saudis have already laid down the foundation for their own nuclear infrastructure. In 2010, a royal decree created the King Abdallah City for Atomic and Renewable Energy (K.A.CARE) headed by Hashim A. Yamani. Waleed Hussein Abulfaraj, in charge of the atomic program at K.A.CARE, announced that Riyadh would gradually replace oil used to generate electricity with nucle-

ar-generated electricity. In 2011, K.A.CARE, signed a deal with France, a leader in nuclear technology, to build a number of nuclear reactors, the first of which is projected to go online in 2020. In June 2015, a plan for two French-built European Pressurized Reactors (EPR) –among the most advanced and safest in the world– was announced.⁵⁷

It is not entirely clear whether K.A.CARE would enrich its own uranium or buy it abroad. Saudi Arabia joined the NPT, but did not sign the Additional Protocol and the updated version of the Small Quantities Protocol (SQP). Originally established to exempt states with no or little nuclear activity from safeguard inspections, in 2005 the Board of Governments of the IAEA modified the SQP to deter states from clandestine processing.⁵⁸

The Saudis have a vested interest in demonstrating that the JCPOA would spur proliferation and Israeli intelligence must be viewed as suspect for the same reason

Riyadh has not yet signed the 123 Agreement (Section 123 of the U.S. Atomic Energy Act) which would give it access to American nuclear technology in exchange for forgoing indigenous enrichment. Even so, Saudi Arabia would find it difficult to purchase enrichment technology because the Nuclear Suppliers Group (NGS), a loose trade group of countries that make crucial components for nuclear energy, are not likely to supply Saudi needs.⁵⁹

Observers have argued that purchasing enrichment technology or, better still, nuclear weapons from Pakistan is a more plausible scenario. Saudis have a long history of collaboration with Pakistan and financed Abdul Qadeer Khan, "father" of its nuclear weapons. In 2013, Mark Urban, the *BBC* defense correspondence, claimed that as part of a finance deal, Pakistanis fabricated a number of warheads to be transferred to Riyadh in an emergency. Other journalists have supported the "off the shelf" arsenal in Pakistan theory as well. However, it is hard to assess the veracity of these reports. The Saudis have a vested interest in demonstrating that the JCPOA would spur proliferation and Israeli intelligence must be viewed as suspect for the same reason. Having objected to the impending JCPOA, Israelis found it useful to disclose information strengthening the proliferation scenario. 10

The new Saudi leaders have taken additional steps to position themselves as Iran's main counterpart in the region. In the reassessment of the Saudi economic and geopolitical position, King Salman and his son Prince Mohammed, who serves as Defense Minister, unveiled a dramatic proposal to restructure the Saudi economy. Named "Vision 2030," the plan would seek to diversify the Saudi economy away from its overwhelming dependence on oil towards manufactur-

Egypt's attitude toward Tehran's nuclear project has differed from that of Saudis and Israel in ways that make it complex and occasionally contradictory ing and investment.⁶² A revitalized economy is expected to increase Saudi security and self-sufficiency. As one knowledgeable observer put it: "It, perhaps, constitutes the most important and comprehensive futuristic plans that prepare for all possible positive and negative eventualities, underpinned on realism away from the costly 'comfort zone' mentality."⁶³

Translated into the language of realist theory of international relations, Saudis accepted the U.S. diminished role in the region and its perceived shift toward Iran. Indeed, this is the gist of the evolving "Salman doctrine," which also envisages isolating

Iran diplomatically and using conventional military means to increase Tehran's cost of fomenting upheaval. At the present time there is nothing in the "Salman doctrine" to hint of proliferation but, depending on future developments, nuclear option could be incorporated.⁶⁴

To dissuade Riyadh from taking the nuclear path, the Obama Administration agreed to upgrade the Patriot anti-missile defense system operating in the Kingdom. In July 2015, the State Department approved the sale of 600 Lockheed Patriot Advanced Capability (PAC-3) missiles, the newest version of the Patriot system. Saudi Ballistic Defense System (BDS) is being supplemented by the Terminal High Altitude Area Defense (THAAD), a Lockheed-made interceptor, powered by the Raytheon AN/TPT-2 E-Band radar. THAAD has a flawless performance record against a variety of short and medium-range missiles. According to some military experts, Washington should link the Saudi BDS to those of the Gulf States, Jordan and Israel into a single and effective response to Iranian missiles.

Egypt

Like Israel and Saudi Arabia, Egypt has had stormy relations with Iran. The two countries broke off diplomatic relations in 1979 and despite several attempts at reconciliation, notably during the period of President Hosni Mubarak they only resumed relations during the time of President Mohammed Morsi in 2011. President Abdel Fattah el-Sisi, who replaced Morsi in 2014, has been much more critical. He has blamed Tehran for aiding the violent Muslim Brotherhood resistance and for helping to destabilize the Sinai Desert through the Iran-aligned Hamas forces in Gaza. Echoing Saudi grievances, Egyptian officials described Iran's involvement in Yemen as not helpful.⁶⁶

Egypt's attitude toward Tehran's nuclear project has differed from that of Saudis and Israel in ways that make it complex and occasionally contradictory. Egypt's ambivalence toward nuclear energy in general and nuclear weapons,



The President of the International Atomic Energy Agency (IAEA) Yukiya Amano met with Iranian President Hasan Rouhani in Tehran, on October 29, 2017.

in particular, goes a long way toward explaining this complexity. President Gamal Nasser was the first among Middle Eastern leaders to consider nuclear power. He created the Egyptian Atomic Energy Commission in 1954, which is currently known as the Atomic Energy Authority (AEA). Ibrahim Hilmy Abdel Rahman, its first director, negotiated a number of agreements with the Soviet Union under which Egypt received a 2MW light-water research reactor EETR-1 located in Inshas.⁶⁷

After Israel unveiled the Dimona reactor in December 1961, Nasser stepped up its nuclear rhetoric. He announced that should Israel acquire nuclear weapons, "we would secure atomic weapons at any cost." Indeed, Egypt tried to buy a HWR capable of producing plutonium, an alternative to the more arduous process of enriching uranium to weapon grade used in nuclear weapons. Reports at the time indicated that Nasser wanted the Soviet Union, China or India to supply Egypt with nuclear weapons. In line with his growing pan-Arabism, Nasser envisioned a pan-Arab nuclear force led by Egypt. The devastating loss in the Six Day war in 1967, however, put Egypt's nuclear ambition on hold.⁶⁸ Neither Sadat nor Mubarak, who succeeded him in 1981, were nuclear enthusiasts. In fact, Mubarak was even lukewarm toward civilian nuclear technology. After a number of failed attempts, following the 1986 Chernobyl nuclear disaster, negotiations to buy nuclear reactors were terminated.

Having decided that acquiring nuclear weapons was prohibitive for economic and political reasons, Egypt, which joined the NPT in 1980, decided to push

for a Middle East Nuclear Free Zone. Mubarak embraced this idea and made it the so-called WMD-Free Zone, the core of Egyptian nuclear policy. The subsequently renamed Middle East Nuclear Weapons Free Zone (MENWFZ) movement became a major irritant in the relations between Cairo and Jerusalem, a country which has not joined the NPT and never acknowledged its arsenal. Known as ambiguity (*amimut*), this posture was a low-cost strategy to develop nuclear weapons without censure of an international community. In fact, in the 1970s, the United States committed itself to shield Israel from pressure to join the NPT. But MENWFZ challenged this arrangement and the Egyptians pushed the United Nations to take up the initiative at the 1990 General Assembly meeting.

During the 1995 NPT Review Conference, Egyptian representatives agreed to vote for the extension of the treaty in return for a promise to convene a separate meeting to discuss the Free Zone. Mohammed ElBaradei, the Egyptian diplomat, who helmed the IAEA (1997-2009), strongly encouraged this move. In his view, Western countries engaged in rank hypocrisy by turning a blind eye to Israel's undeclared nuclear arsenal and its attack on the Syrian reactor, while harassing Iran. ElBaradei was pleased with Egypt and other states in the Arab Group that objected to the American drive to impose sanctions on Iran.⁶⁹

He also supported Egypt's continued efforts to convene a special conference on a nuclear free zone, which was backed by Tehran. During a high-profile visit to Washington in September 2006, the former President Mohammad Khatami called to denuclearize the Middle East. On September 17, 2009, Egypt and Iran scored a victory when the IAEA General Assembly passed a resolution calling on Israel to join the NPT and open its program for inspection. The companion resolution was a first of its kind appeal for a regional Nuclear Weapons Free Zone.

Some experts considered Egyptian behavior to constitute a "misdirection point," as in "the more Iran pursues nuclear capabilities, the more Cairo rails against the Israel Bomb." But for the Egyptians, the attack on the Syrian reactor was conclusive proof of double standards and hypocrisy which ElBaradei railed against. Egypt registered its protest by voting against sanctions on Iran during the 2009 meeting of the IAEA Board of Governors.⁷⁰

As the leader of the 118 nations Non-Aligned Movement (NAM) and New Agenda Coalition –a group of eight influential countries, including Brazil and South Africa, Egypt– has occupied a special position in shaping the nuclear agenda. Teaming up with Iran, it compelled the 2010 NPT Review conference to call for a special meeting in 2012 to discuss a regional WMD ban. Finland agreed to host the initiative, but, in November 2012, Washington, acting under Israeli pressure, intervened to postpone the gathering. After being

declared in compliance with NPT in January 2016, Iran has joined Egypt to push for a new conference, a stand that found support in the European Union and beyond.⁷¹

Even as Israel and Saudi Arabia were signaling their opposition to the JCPOA in the spring of 2015, the Egyptians renewed their push for a NWFZ, in conjunction with the debate about the Comprehensive Nuclear Test Ban Treaty (CNTBT). During the May 2015 NPT Review Conference, Egypt urged a new deadline of March 2016 for a special MENWFZ conference, only to be vetoed by the United States. At the time, Tehran, which was anxious to see the JCPOA negotiations through, did not support Egypt. However, there are strong indications that Iran which was reinstated as a Non-Nuclear Weapons State (NNWS) within the NPT, would team up with Egypt

Egypt did not sign the Additional Protocol and is free of other intrusive inspection regimes. But its past history and its leadership of the MENWFZ indicate a lack of interest in proliferation

to push for a MENWFZ. Mohamad Javad Zarif, Iran's Foreign Minister, said as much in a *Guardian* article titled "Iran has signed a historic nuclear deal, now it's Israel's turn." Ambassador Badr Abdel Ati, the spokesman for the Egyptian Foreign Ministry, stated that: "We assess the agreement within the framework of Egyptian foreign policy's general direction, which believes in a principal goal that is for the Middle East to be free of nuclear proliferation."⁷²

Ironically, Egypt's rapid demographic growth renewed its interest in nuclear energy. Egypt has experienced periods of electricity shortages in recent years, because the Aswan Dam, which once supplied half of the country's electric output, now accounts for about 15 percent. In November 2015, Cairo signed an agreement with Russia for a nuclear power plant with four 1,200 MW-reactors each to be located in Dabaa on the Mediterranean coast. The complex is expected to go online in 2020 and is said to include a water desalination facility. President Sisi emphasized that the facility would be strictly peace-oriented, but some observers noted that it could hide a clandestine program should a decision to proliferate be made. In any event, the deal with Russia would make Egypt a regional leader in the field of nuclear technologies boasting a highly-advanced generation 3+ plant. As a side benefit, the accord has cemented the growing closeness to Moscow, a premier supplier of nuclear technology and know-how.⁷³

To what extent these developments could signal a hedging strategy is not clear. Egypt did not sign the Additional Protocol and is free of other intrusive inspection regimes. But its past history and its leadership of the MENWFZ indicate a lack of interest in proliferation.

Iran's Meddling in Regional Countries and Proxy Wars

The third cluster of concern is perhaps one that is not related to the implication of the JCPOA, but rather to the long-standing historical campaign of Iran to control certain areas of the Middle East. Just like the debate about Iran's possible clandestine weaponization, in a similar fashion, divergent camps emerged in a debate about the way Iran would use this money. The resulting narrative was divided; while some argued that the regime's leaders face urgent economic problems and need to fund development projects to jump-start the economy, others asserted that sanctions relief will contribute to Iran's increased support for the terror groups in the region especially supporting Syrian President Bashar al-Assad which Iran considers to be vital to its national interest, and other regional actors like Hezbollah and Hamas or Houthis in Yemen.⁷⁴

Critics of the deal argued that Iran would use the influx of capital which it would receive from the sanction relief to invest in what is known as "revolutionary export," that is a program to destabilize neighboring countries through direct or proxy involvement in conflict, civil unrest and terror activities. Even then Secretary of State, John Kerry, acknowledged to *CNBC* that some of the money could go to groups considered terrorists, and there was nothing the U.S. could do to prevent that. "I think that some of it will end up in the hands of the IRGC or other entities, some of which are labeled terrorists."

Yet, it remains difficult to understand how much money exactly the Iranians would have received from sanction relief and how they would use it. Some estimates indicate the sum ranged from \$29 billion at its lowest to as much as \$150 billion at highest. For instance, Adam J. Szubin, the acting Under Secretary of the Treasury for Terrorism and Financial Intelligence, estimated that Iran has \$100 billion to \$125 billion in foreign exchange assets worldwide, but that his office's "assessment is that Iran's usable liquid assets after sanctions relief will be much lower, at little more than \$50 billion." The money has been impounded for years in accounts of Iran's trading partners like China, India, South Korea and Turkey which could not be redeemed since, as of February 2013, Iran was effectively barred from repatriating assets accumulated from oil exports because of American sanctions that would penalize those countries if Iran were permitted access.⁷⁶

Although Iran has spent the large part of the money it has received from the sanctions relief on pressing domestic needs, however, there are indications that the regime has spent part of it on its foreign adventurism, including involvement in the Syrian civil war to keep Bashar al-Assad in power. There are also indications that the regime has spent some money on other proxies like Houthis in Yemen, Hezbollah in Lebanon and Hamas in Gaza strip, to expand its Shiite influence.

The precise amount of capital that Iran invests in destabilizing the region is not clear, precisely because Iran does not have a hierarchical political system and this makes tracing the influx of money extremely difficult. Iran's political system is based on a series of complex arrangements among elites whose power base is anchored either in the state or parastatal domain. Each group has its own funding and sources of income. Some of the money comes from the state budget, some from the Revolutionary Guards and some from the foundations like *Bon*-

Estimates for Iran's annual support to the Syrian government range from \$6 billion to \$14-15 billion or \$15-20 billion

yad-e Mostazafan-e Enghelab-e Eslami. This makes it virtually impossible to ascertain how much money comes from each source and how and where they spend this money.⁷⁷

The official statistics released by Iran, as well as global organizations evidently show an escalation in military spending following the nuclear agreement, which can likely be attributed to Iran's involvement in the wars of Syria, Iraq and Yemen. During Rouhani's tenure, Iran's military budget has increased significantly. There are several estimates of Iran's military spending. The Congressional Research Service indicates that in 2014, Iran's military expenditure was \$9.29 billion. The database of Stockholm International Peace Research Institute (SIPRI) an international institute based in Sweden, dedicated to research into conflict, armaments, arms control, indicates that t Iran's military expenditure in 2015 was \$10 billion.⁷⁸

According to the same database, Iran's defense budget was \$14.5 billion in 2016. Unofficial Iranian sources accounted Iran's 2017 defense budget at approximately \$19 billion. However, the official numbers showed that Iran's military budget for the fiscal year of 2017 was approximately \$16 billion. Of this amount, \$7.4 billion (53 percent) was allocated to the Revolutionary Guards and Quds Force– approximately 63 percent increase from \$4.52 billion in 2016. On April 19, 2017, Rouhani bragged about a 145 percent increase in Iran's military budget.⁷⁹ The president himself announced that his government had taken significant measures in beefing-up the defensive foundations.⁸⁰

On August 17, 2017, Iranian lawmakers voted overwhelmingly to apportion a separate budget for the country's ballistic missile program and for foreign operations by the Quds Force, the international arm of the Revolutionary Guards. The bill "Countering America's Terrorist and Adventurist Actions" was passed by 228 votes in Parliament. According to the Articles 11 and 12 of the bill, Iran will spend \$260 million on its ballistic missile program and around \$300 million on activities by the Quds Force. Another \$260 million will go to other military and intelligence projects. Reportedly, a large amount

of this capital goes to combat troops, training them, providing them with arms and munitions and more importantly, to intelligence and special operations, including false flag operations.⁸¹

Reportedly, part of the funding of the terror groups and rebel fighters in a number of regional countries comes from the state's annual defense budget. This includes potentially millions of dollars in monthly payments to pro-government forces in Syria, to fighters in Iraq, to Houthis in Yemen and to Hezbollah and Hamas. Estimates for Iran's annual support to the Syrian government range from \$6 billion to \$14-15 billion or \$15-20 billion. Reportedly, the value of Iranian oil transfers, lines of credit, military personnel costs and subsidies for weapons for the Syrian government is likely to be between \$3.5 and \$4 billion annually. Included in the payment list is the salary of Iranian-backed fighters in Syria who are reportedly paid between \$500 and \$1,000 a month to fight for the Assad regime. Afghan fighters in Syria have disclosed that they "had recently returned from training in Iran and planned to fight in Syria in exchange for receiving salaries from Iran ranging from \$500 to \$1000 a month." Another case in point of Iran's financially supporting the Assad regime was in July 2015 in which "Iran extended \$1 billion in additional financial credit to the Assad government, reportedly bringing the total approved credit to \$5.6 billion dollars since 2013,"82

In Iraq, where Iran is supporting government forces battling against the ISIS terror group, Iran has "spent more than \$1 billion" on military aid since 2015. However, the exact amount from 2015 onward is not clear. In one particular case, according to the intelligence sources, As'aib Ahl al-Haq a Shia terror group received between \$1.5 and \$2 million a month from Iran. Reportedly, Iran also pays up to \$1,500 per month to the Iraqi Nujaba group, which is now one of the most important Iraqi militias with 10,000 fighters.⁸³

Estimates for Iran's annual aid to Hezbollah range from \$100-\$200 million, according to the U.S. Department of Defense. Hamas, another group that has been historically receiving much of its political and material support from Iran has been receiving \$20-25 million per month in addition to receiving weapons, technical know-how and military training. Iran also financed al-Sabirin ("the patient") movement in the Gaza Strip, a new proxy militant group led by Hisham Salem, a former Palestinian Islamic Jihad (PIJ) commander. Al-Sabirin broke off from the PIJ after Iran suspended funding to that group for a few months. Reportedly, Iran provides \$10 million to al-Saberin annually.⁸⁴

Low on the list of revolutionary exporters is the Yemen's Ansarullah, better known as the Houthis, an armed group that receives financial and military aid from Tehran. A study by Conflict Armament Research (CAR), a London-based organization funded by the EU to monitor movement and use of conventional weaponry, indicated substantial Iranian involvement. IRGC and, uncharacteristically, Artesh, the Iranian official army, provided Houthis with a range of weapons. The Houthis were sent the Qasef-1 UAV (drone) nicknamed "kamikaze" to target coalition missile defense systems in "kamikaze" attacks. The militants used the Ababil drones fitted with high explosive warheads to engage high-value targets, such as radar and Patriot missile batteries.⁸⁵

One report suggests that Iran has provided Houthis with sophisticated arms and advisors from its proxy network, including Afghan and Shia Arab specialists to train Houthi units and provide logistical support. Iran also attempted to smuggle small arms into Yemen. Coalition and partner forces intercepted four

There is no support for the sneak out scenario, meaning that the Iranians have been using the JCPOA to commence a sneak out option behind the back of the IAEA

Iranian weapon shipments likely bound for Yemen in the Arabian Sea in February, March, and November 2016. It was reported that the Revolutionary Guards supplied or modified the anti-ship cruise missiles that Houthis fired at the *USS Mason* in October 2016.⁸⁶

Conclusion

Out of the three clusters of concerns, there is no support for the sneak out scenario, meaning that the Iranians have been using the JCPOA to commence a sneak out option behind the back of the IAEA. One reason is that enriching uranium is a complex process and given the intrusive inspection and verification regime imposed on Iran by the JCPOA, it would be hard to achieve.

Other facets of weaponization and fabricating a bomb are much easier to hide, as it includes research on high explosives and a missile warhead design, developing nuclear detonators, and conducting high-explosive experiments associated with compressing the fissile material. But the IAEA and the intelligence services of the state members have concluded that there is no indication of such suspicious activities being carried out by the Iranians since the JCPOA was signed.

Iran's missile program still remains a significant source of concern, but since the Trump Administration has put Iran on notice, the Guards' Aerospace Force carried out only one test of the short-range missile well within the limits of Resolution 2231. In other words, the Revolutionary Guards maintaining of their decision to abstain from ballistic missile tests means that Washington's policy of deterrence is validated. Although the missile industry in Iran

The Revolutionary Guards maintaining of their decision to abstain from ballistic missile tests means that Washington's policy of deterrence is validated

would not collapse, inability to test advanced models would undermine Iran's drive to produce longer-range missiles particularly because missile tests are essential for a large and advanced program such as Iran's. If, on the other hand, the Guards Corps somehow reverses its policy, Washington's credibility would be at

stake; the administration would then have to push for more serious sanctions, or, in the worst-case scenario, mount kinetic action.

Regarding the second cluster of concern, this author –exploring open intelligence sources– found no indication that any of the countries in the region are moving towards their own proliferation as a response to the JCPOA. One reason could be that Washington has been trying to alleviate the concerns of the regional countries by promising to provide them with an Anti-Ballistic Defense System known as Terminal High Altitude Area Defense (THAAD) as a way to prevent them from embarking on acquiring their own nuclear arsenal.⁸⁷

Saudi Arabia was not happy with the JCPOA but under pressure from Washington, Riyadh had to accept it. However, at the same time, they have been working on a hedging strategy should Iran abrogate the JCPOA. Admittedly, the nuclear energy program could provide the infrastructure for a clandestine weapons program, especially if Riyadh decides to enrich its own uranium.

The response of Egypt has been very different. Unlike the strained relations in other arenas, Egypt had a very long collaboration with Iran over the MEN-WFZ project to force Israel to get rid of its nuclear arsenal or at least to disclose its arsenal and to join the NPT. As a matter of fact, this was the main reason that Egypt joined NPT in the first place. After the JCPOA was signed, Egypt has adopted a hedging strategy by working with Russia to build civilian nuclear power plants.

Israel has a very different story because it has an undeclared nuclear arsenal and does not qualify as a test of proliferation theory. Still, Israel is a key player in the region and its response to the JCPOA is worth considering. The rightwing government of Benjamin Netanyahu, with the help of the Israel lobby in Washington mounted an unprecedented but ultimately futile campaign to defeat the JCPOA in the U.S. Congress, and eventually they had to agree with it. Though not known to the public, there are numerous reports that said the Israeli intelligent community, the military and the IAEC stated in so many different ways that the nuclear agreement prevents Iran from acquiring a nuclear bomb and Israel should not retaliate against the agreement.

However, the evidence supports the third concern that Iran would utilize the money it had received from the sanctions relief to sponsor terrorism and to destabilize the region. As critics of the deal argued, Iran has been using the influx of capital which it has received from the sanction relief to invest in what is known as "revolutionary export," a code name for spreading the ideology of the Islamic Republic in the region.

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