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Flash Executive Summary Report

GEOIntelligence

According to many sources, Iran could be capable of producing a nuclear weapon within a week or two, with a handful of additional weapons in subsequent weeks, albeit with immature and untested delivery systems. Iran, the world's largest state-sponsor of terrorism, is problematic enough, but an Iran with nuclear weapons would be even worse and could create epic problems in the Middle East and eventually could threaten the U.S. homeland with nuclear attacks.

Since Iran began its nuclear weapons journey about four decades ago, all U.S. Presidents and their teams worked hard to offramp Iran's nuclear weapons efforts, sometimes with the support of many nations, sometimes unilaterally.

President Trump placed high priority on ridding Iran of its nuclear ambitions in his first Administration, and this momentum carries into his second term. This report focuses on Iran's nuclear intentions, which includes the path that Iran is pursuing and its current status, President Trump's effort to denuclearize Iran with several scenarios that could play out, and the economic implications.

Iran's Intent with Nuclear Weapons:

It is unclear exactly why Iran's leaders desire nuclear weapons. Some experts are convinced Tehran sees the acquisition of a nuclear weapon capability as a guarantor of Iranian sovereignty; in other words, Iran probably wants nuclear weapons for deterrence. Iran's primary adversaries have nuclear weapons (Israel and the United States), and if Iran also had nuclear weapons, it might deter Israel and the U.S. from waging large-scale war against Iran and/or attempting regime change. Also, a nuclear weapons capability is congruent with Persian pride – joining a relatively small club of nations with nuclear weapons is a way to gain regional prestige. Nuclear weapons could also be a means to bolster internal public support, support of the fundamentalist voices within Iran, and to elevate the Shia arm of Islam in the region.

Regardless of the motive, many believe Iran is intent on obtaining nuclear weapons. The time, effort, and expense are vast to develop nuclear weapons capabilities. And, for developing nations such as Iran, it comes at a high cost to their citizens' quality of life. Some estimate that Iran has spent $2 trillion on its nuclear program, with 30 to 40 percent of its population living in poverty (not that this seems to matter to Iran's leaders).

It bears noting that the pursuit of nuclear weapons by "rogue nations" can present dangers to regime leaders. Take Saddam Hussein – he lost his power, then his life, in part due to his pursuit of weapons of mass destruction. Some argue that Muammar Gaddafi likewise lost his power and life, but for inverse reasons, when he surrendered his nuclear ambitions. Regardless, Iran is a different case than the Iraqi and Libyan examples, as Iran cannot be comprehensively taken down in a preventative war like the previous examples were. But Iran does have vulnerabilities short of large-scale war – this point will be expanded on shortly.

Producing a Nuclear Weapons Capability is Difficult:

Thankfully, despite the proliferation and rapid improvements in technologies, producing an operationally usable nuclear weapon remains a very complex and difficult process. Several key capabilities/technologies are needed.

As a reference point, during World War II, the United States developed the world's first operational nuclear weapon program in just a few years, whereas Iran has been working on its program for four decades. But the United States' nuclear program had several advantages that Iran does not, including many of the world's top scientists, a national imperative that includes an almost unlimited check book, the world's best industrial base, an ability to largely cloak the program in secrecy (though Soviet spies were in the program), and operates without any external constraints from other nations. Iran lacks all these attributes, especially the absence of external constraints – Israel, the United States, and most of the community of nations are dead set against Iran's nuclear weapons program – this has been Iran's largest obstacle. However, Iran has had significant technological help from North Korea and possibly Russia. Hence, while Iran is disadvantaged in many ways, as a rogue nation, it also has helpful, maligned accomplices.

Iran's Path to an Operational Nuclear Weapons Capability:

Nuclear Fuel Source: The fuel path to a nuclear weapons capability must follow the plutonium route, the uranium route, or both simultaneously. Iran chose the uranium path as it is the simpler of the options and is the path that most nuclear proliferators select. Except for a relatively short period when an international agreement curtailed its enrichment efforts, Iran has steadily increased its uranium enrichment capabilities using cascading centrifuge technologies. Uranium enrichment increases the concentration of the U-235 isotope needed for weapons development. Most of the difficulty in enriching uranium ore is taking it from its raw state, with a percentage of only 0.7 of the fissionable U-235 isotope, to around 20 percent enrichment; this period consumes most of the total effort towards a nuclear weapon. Enrichment above 20 percent is known as Highly Enriched Uranium, or HEU. As the enrichment percentage increases, higher levels of U-235 are exponentially easier and quicker to achieve. U-235 enrichment must reach around the level of 90 percent to be capable of nuclear yield. Iran has significant stocks of uranium enriched at the 60 percent level, with the capability to close the gap to 90 percent quickly, given its robust and dispersed/hidden centrifuge capacities. Some believe that Iran is now just a week or two away from refining weapons-grade uranium, if or when it chooses to. An International Atomic Energy Agency (IAEA) report released last month stated Iran has doubled its 60 percent stocks since February 2025; however, Iran rejects this assessment.

Working Weapon: Weapons-grade HEU is just a start, albeit a big one. But to have an operationally deployable weapon, you must have weapons design and construction that can yield a nuclear detonation. Insights gained from the Israelis and IAEA reports highlight that Tehran had already made significant advancements in all the areas needed to begin development of an operationally usable weapon. More recently, it has been reported that a nuclear weapons research facility has been operating clandestinely for over a decade. Allegedly, the facility is also researching how to produce Tritium, a highly radioactive isotope of Hydrogen, and one of the most expensive substances in existence per its weight. While there are some peaceful uses of Tritium, such as radio-luminescent lighting, Tritium is mostly known as a method to boost nuclear yields.

Delivery System: With HEU and a working weapon, one must be able to deliver it to a target. The easiest method of delivery is by aircraft or perhaps drones. But air-breathing methods can be intercepted if targeted nations have advanced air defenses (such as Israel). Ballistic missiles, especially those that travel at intercontinental speeds, are more difficult to intercept, making ballistic missiles the favored path. Iran has the most formidable ballistic missile program in the region. Iran's recent successful launch of a 3-stage booster placing an imaging satellite into orbit demonstrates the ability to deliver a weaponized device in the near future. It bears noting that in the early period of U.S. space flight, NASA used nuclear-capable ICBMs as the initial launch platforms, highlighting that Iran could easily repurpose its space launch boosters into ICBMs, eventually with missiles that could reach the United States.

Events during President Trump's First Administration:

We must first go back 10 years with the Joint Comprehensive Plan of Action (JCPOA), signed in 2015 – an agreement that is not well understood and was subject to political bias. On one hand, the JCPOA descoped Iran's undeclared nuclear weapons development activities that had been ongoing for years, along with a verification regime and with timeframes that froze the program at low levels of uranium enrichment far below weapons grade. As a reward for this, the robust sanctions against Iran were largely lifted. On the other hand, despite claims by some that the JCPOA ended Iran's nuclear weapons program, in fact, the JCPOA merely imposed several timeframes on various aspects of Iran's nuclear weapons program (12-15 years depending on the exact capability). After expiration of the time limits, the agreement had no provision to restrain Iran from recommencing its nuclear weapons program. Restated, the JCPOA did not end Iran's nuclear weapons program; rather, the agreement delayed it. The long-term strategy that underpinned the JCPOA was hope – hope that within 15 years or so, Iran would stop its revolutionary and disruptive ways, join the community of nations, and end its desire for nuclear weapons. Also controversial, as the JCPOA ended many of the sanctions on Iran, it allowed Iran to use the monies in any way its leaders saw fit, including funding its proxies and associated terror groups to counter Israel and the United States.

For the shortcomings of the JCPOA, President Trump, in his first term, abandoned the agreement in 2018 and reinstated harsh sanctions on Iran in what was called "maximum pressure." In response, Iran steadily increased its production of HEU, furthered its long-range missile development, and resurrected its other nuclear weaponization efforts as described earlier.

President Trump's Second Administration:

President Trump's second administration is even more focused on the Iranian nuclear challenge. In February 2025, President Trump signed a policy that reinstated "maximum pressure" on Iran with the purpose of ensuring that "Iran should be denied a nuclear weapon and intercontinental ballistic missiles; Iran's terrorist network should be neutralized; and Iran's aggressive development of missiles, as well as other asymmetric and conventional weapons capabilities, should be countered." The Administration's approach is two-fold. First, the U.S. is imposing as much economic pressure on Iran as it can via sanctions to include going after those who are violating sanctions on Iran. The sanctions target all sectors of Iran's business, especially oil, by far Iran's top income source, with the goal of completely stopping all Iranian oil exports (with Russian and Chinese interference, this goal is difficult, if not impossible, to achieve). Second, the U.S. and Iran are engaged in renewed negotiations over Iran's nuclear program.

With all of Iran's rhetoric, it could appear surprising that Iran is open to negotiations. But, as our update on the Israel-Hamas War last month pointed out, Iran's internal situation is worse than it has been in decades. Iran is notably weaker for several reasons: Hezbollah was defeated; Iran lost its Integrated Air Defense Systems through Israeli air strikes, leaving its nuclear weapons sites vulnerable to attack; the Houthis are a nuisance but are not existential; and Syria was defeated despite decades of Iranian support. Further, during Iranian and Israeli attacks on each other, Israel came out as the clear winner. Iran's two large drone and missile attacks against Israel were mostly unsuccessful, as Israel's Iron Dome, along with support from U.S. forces and others, shot down most of Iran's weapons. Conversely, Israel's attacks on Iran were extremely effective. This could embolden Israel to be more aggressive against Iran, with Israel knowing it can defend itself while being able to wreak havoc across Iran with relative impunity.

Additionally, Israel has laid bare much of Iran's nuclear infrastructure to attack; in recent weeks, Israel reminded Iran (and the world) that it is prepared to follow through with its policy (that is also echoed by President Trump) in which it will not tolerate a nuclear-armed Iran. Iran is 75 times larger than Israel – if Iran were to have nuclear-tipped ICBMs, Israel could be in danger of existential destruction. A read of modern regional nuclear history demonstrates that Israel will engage militarily (albeit often covertly) to slow or halt the development of enemy nuclear capabilities. The Israelis bombed nuclear (or suspected nuclear) facilities in Syria and Iraq. It is also speculated that the Israelis were behind clandestine cyberattacks on Iranian nuclear capabilities as well as assassinations of key Iranian nuclear experts. Israeli leadership has repeatedly made it clear they will militarily strike Iran's nuclear capabilities with or without U.S. permission or support. The implication here is simple: if Iran edges too close to nuclear breakout, its nuclear capabilities will almost certainly be attacked – has Iran already edged too close?

With all the above factors in play, President Trump's team has met with Iranian diplomats five times in the past few months. While it is good that the talks are happening, no substantial progress has been announced to date. After the fifth round of talks concluded in late May 2025, the U.S. stated: "The talks continue to be constructive – we made further progress, but there is still work to be done. Both sides agreed to meet again in the near future."

Many Potential Scenarios:

It is too early to tell where this long-term challenge will end up, but there are several scenarios to monitor. The following does not present every possible scenario, but it highlights the range of options where one or more situations could come into play.

First, Iran's nuclear weapons program could be attacked before it becomes operational. Israel could destroy key portions of Iran's nuclear program at almost any moment. Iran's nuclear program is vast, dispersed, and in some cases deeply buried. Yet, its program is somewhat more vulnerable after Israel's softening of Iran several months ago. Israel probably could not comprehensively eliminate all of Iran's nuclear infrastructure, but Israel does not need to – Israel would only need to eliminate certain critical elements of Iran's nuclear infrastructure, which would prevent or at least significantly delay Iranian efforts to produce nuclear weapons. Along these lines, while not probable at this point, the U.S. could either join with Israel in the attacks or do so unilaterally. U.S. strike potential exceeds that of Israel and could set back Iran's program for a significant period of time. This option remains on the table for both Israel and the United States, but it is unlikely as long as negotiations remain active. But if negotiations stall, the likelihood of this scenario increases.

Second, the status quo could continue, with Iran on the verge of making nuclear weapons, ongoing but unsuccessful negotiations, increasing pressure and sanctions on Iran, and threats by Israel and/or the U.S. to take military action against Iran. Some of Iran's leaders may prefer to buy more time to recover from Israel's attacks on its territory and for potential opportunities for Iran to better its position in the Middle East. This is most likely what Iran is doing right now with its continuing, but apparently less-than-productive negotiations. However, as pressure on Iran grows, internal politics may force Iran to pursue a different scenario. Furthermore, Israel and the U.S. appear to have limited patience, so this strategy may work for a while, but not for the long term.

Third, perhaps Iran may attempt to convince the world that it is abandoning its nuclear weapons ambitions (that it never admitted to) while unilaterally downsizing its enrichment capabilities, weapon and missile development, etc., in order to get some sanctions relief. But all the while, Iran would retain its weapons program by moving it deeper into the shadows. If Iran tries this, it is unlikely to work for several reasons. Israel, the U.S., and most of the world would not believe the Iranian pitch, nor would Iran be able to successfully move its nuclear weapons program deep enough in the shadows that Israeli and U.S. intelligence would not be privy to most that is going on. Iran's leadership presumably understands this, so this is not a likely scenario.

Fourth, it may be possible that negotiations could lead to Iran once again entering into an agreement akin to the JCPOA, retaining enrichment capabilities at levels below HEU with an international monitoring regime, along with the reward of at least some relief on sanctions. If Iran believes it cannot outlast President Trump's maximum pressure campaign, as well as the threat of Israeli and/or U.S. attacks on its nuclear infrastructure, this may be its best bet. This scenario may be difficult for the Trump Administration, as it withdrew from the JCPOA for reasons mentioned above, and the President has stated several times that Iran must completely rid itself of any nuclear capability, even enrichment at low levels. But President Trump is also a deal maker, so he may be able to accept this outcome with a spin that his agreement is somehow far better than the JCPOA, which was favored by other Administrations.

Fifth, is that Iran completely gives up its nuclear ambitions, to include even a low level of uranium enrichment. This would be a huge win for Israel, the U.S., the region, and the world, but at a huge cost to Iran's prestige and ambition. While the exact details behind Iran's desire for a nuclear weapons capability are unknown, it is unlikely that Iran's pursuit is for a future negotiated trade for sanction relief or some other advantage. Most likely, Iran's goal is to attain a nuclear weapons capability at some point. Iran has sacrificed much to get its nuclear program where it is, and it is unlikely that it would totally surrender it.

Sixth, if Iran can stall for some time as highlighted by the second scenario, all the while waiting for the right moment to quickly leap or "break out" with an operational nuclear capability, Iran could then use its new nuclear arsenal to attempt to deter both Israel and the U.S. against attacking it. This is the riskiest option for Iran, as Israel and the U.S. would almost certainly see intelligence indicators of what Iran was up to, and the first option, attacks on Iran's nuclear infrastructure would be likely, if not all-but-certain, if Iran selects this path.

Economic Implications:

The implications of the Islamic Revolution will continue to be the foundation of Iran's narrative to influence actions regionally and globally. Iran will continue as an existential threat to Israel.

If Iran's nuclear programs were directly attacked by Israel and/or the U.S., the Middle East's stability, which is always precarious, would worsen. If the preventative attack comes from Israel, Iran would mount the most aggressive attacks on Israel that it could – and Israel would strike back. Escalation could be dramatic. Such a war could endanger global commons throughout the region, particularly shipping, and within that, energy.

The Strait of Hormuz will continue to be a high-risk choke point due to Iran's ability to interdict the global energy supply, agricultural commerce, and military maritime presence passing through the strait and progressing through the Persian Gulf.

Iran's proximity to the Caspian Sea and investments in modern ports have established a lifeline and interior lines of supply for illegal trade to Russia in violation of international sanctions.

Uncertainty regarding Iran and its nuclear activities will continue to create volatility in the global energy markets. Oil prices could rise given potential supply chain disruptions, or conversely, be lower if agreements are reached, resulting in sanction relief. The energy market for nuclear power could also be impacted by the outcome of the situation in Iran. Global demand for lower-carbon electrical power sources has driven increased interest in nuclear power generation, specifically in China, Russia, India, and Turkey, which are building or plan to build new reactors over the next few years according to the World Nuclear Association. Additionally, Iran is working with Russia to build its first nuclear reactor for civilian power. While the refinement of uranium is at different levels between military use and electrical power use, the supply chains for the necessary nuclear power elements are common and could also impact energy markets depending on the outcome of the Iranian discussions. The civilian use of nuclear power in Iran could also complicate the negotiation over Iran's nuclear weapons program and its visibility for compliance with an agreement.

Finally, if Iran were to obtain a nuclear weapons capability, there could be a nuclear arms race in the Middle East, with increased volatility that would follow, impacting the global economy. Saudi Arabia has indicated that it would develop nuclear weapons if Iran does. In 2011, Prince Turki al-Faisal, a former Saudi intelligence chief, warned that if Iran developed nuclear weapons, Saudi Arabia would pursue its own nuclear capabilities. This sentiment was echoed in 2018 and 2023 by Crown Prince Mohammed bin Salman.