

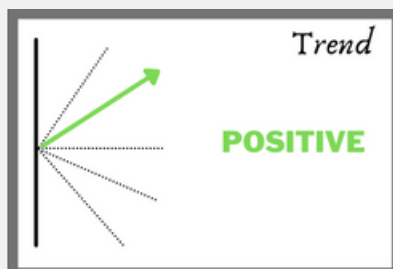


CAPS Nuclear Tracker

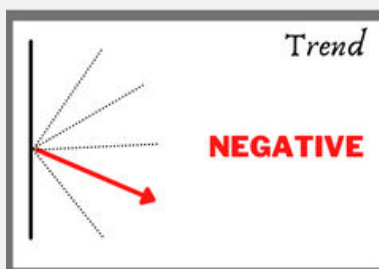
Issue 16: April - June 2025

This quarter of 2025 reflects the most significant negative trends since the NukeNerds at CAPS began mapping the trendlines across nine nuclear verticals. As major powers double down on nuclear modernisation, there is no interest in arms control or disarmament. Rather, new technologies and delivery platforms are being tested and deployed. This month, the situation took another deep dive after airstrikes against Iranian nuclear facilities by Israel and the US. It remains to be seen whether these will end Iran's nuclear programme. The impact of this will be felt at the 2026 NPT Review Conference. The only silver lining for now is in the nuclear energy segment. The World Bank has decided to lift its long-standing restriction on funding nuclear projects. But the trendlines on nuclear security must remain in the positive for this promise to be realised.

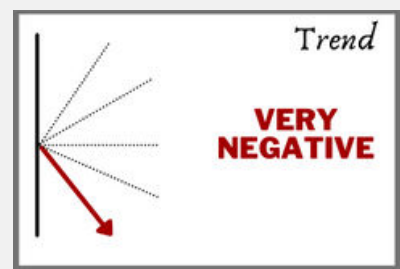
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Ms Sanaa Alvira
Ms Rishika Singh



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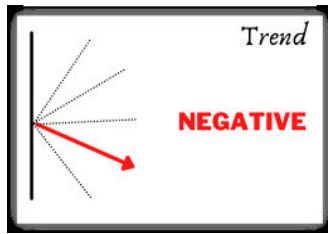


- **Iran**
Dr Silky Kaur

Missile Developments

Javed Alam

Previous Trend: Negative



The second quarter of 2025 witnessed a significant escalation in military activity and the use of offensive missile systems worldwide. On May 3, 2025, **Pakistan's** military successfully [test-fired](#) a ballistic missile. The surface-to-surface missile, named the Abdali Weapon System, with a range of 450km (280 miles), was successfully tested as part of an exercise. On May 5, Pakistan [announced](#) that it had successfully test-fired the Fatah surface-to-surface missile with a range of 120 kilometres, as part of its ongoing military drill, 'Exercise Indus'. The test occurred on the backdrop of escalating tensions with India, just before India conducted Op Sindoor. In the same exercise, Pakistan also successfully [tested](#) a surface-to-surface ballistic missile with a 450-km range on Saturday.

On Apr 25, 2025, **India** achieved a significant milestone in Scramjet Engine Development by [conducting](#) Active Cooled Scramjet Subscale Combustor ground testing for over 1,000 seconds. Defence Research and Development Laboratory, which is a Hyderabad-based laboratory of DRDO, conducted the ground testing at the newly built state-of-the-art Scramjet Connect Test Facility. The ground test is a continuation of the earlier test reported in January, which lasted 120 seconds. With the successful test, the system will soon be ready for full-scale flight-worthy combustor testing

Amid the ongoing war between **Russia** and Ukraine, both sides have tested new missile systems. On April 29, during scheduled naval exercises in the Pacific Ocean, the Russian Navy's nuclear-powered missile submarine Krasnoyarsk successfully [demonstrated](#) its long-range strike capabilities by launching a Kalibr cruise missile at a coastal target located at the Kura test site on the Kamchatka Peninsula, achieving a direct hit from a distance of more than 1,100 kilometers. This achievement was officially reported by the Russian Ministry of Defense on April 28, 2025, underscoring the growing reach and precision of Russia's strategic submarine forces. The Russian Navy Krasnoyarsk Project 885M "Yasen-M" class submarine executed a covert transition into a designated area of the Pacific Ocean

before conducting the Kalibr cruise missile launch. This maneuver showcased the submarine's stealth characteristics, enabling it to operate undetected over vast distances before delivering a precision strike. The Kalibr missile, launched from a submerged position, accurately struck the designated coastal target, with objective control data confirming the effectiveness of the operation. The success of the strike highlights Russia's ability to conduct strategic, long-range attacks from beneath the ocean's surface, reinforcing the importance of cruise-missile-armed submarines in modern naval warfare.

On May 22, Russia has [reportedly](#) developed and deployed a new air-to-air missile capable of carrying a nuclear warhead — a move that's drawing growing attention from Western defense analysts. According to a recent assessment by the Pentagon's Defense Intelligence Agency (DIA), this new capability is part of a broader expansion of Russia's nuclear arsenal. As reported, the nuclear-capable missile is believed to be a variant of the R-37M — a long-range air-to-air missile known to NATO as the AA-13 "Axehead." Developed by the Vympel Design Bureau, the R-37M is already a cornerstone of the Russian Aerospace Forces' (VKS) aerial combat capabilities. The R-37M boasts a range exceeding 300 kilometers and travels at hypersonic speeds surpassing Mach 6, making it one of the fastest and longest-range air-to-air missiles in active service. It uses an active radar homing system, with inertial navigation and mid-course updates, allowing it to track and destroy fast-moving targets including fighter jets, bombers, and airborne early warning aircraft (AWACS).

In the Korean Peninsula, on April 30, it was [reported](#) that **North Korea** had conducted a test-firing from its first 5,000-ton destroyer. On May 8, North Korea [fired](#) multiple short-range ballistic missiles toward the East Sea, South Korea's military said, in what could be a performance test aimed at exporting arms to Russia. The North's missile flew up to 800 kms before splashing into the East Sea, it said. The latest test is also believed to have involved the North's KN-25 super-large 600-millimeter multiple rocket launcher and the KN-23, which is similar to Russia's Iskander short-range ballistic missiles. With the latest launch, North Korea has conducted ballistic missile tests four times this year to date.

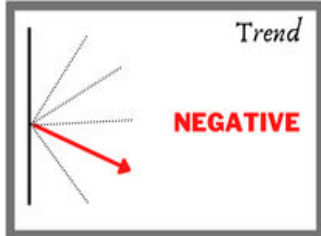
On May 27, a joint team of the US Air Force Global Strike Command Airmen [launched](#) an unarmed Minuteman III ICBM equipped with a single Mark-21 High Fidelity Re-Entry Vehicle from Vandenberg Space Force Base, California. The ICBM's reentry vehicle traveled approximately 4,200 miles to the U.S. Army Space and Missile Defense Command's Ronald Reagan Ballistic Missile Defense Test Site located within the Republic of

the Marshall Islands at the Kwajalein Atoll. Reagan Test Site sensors, including high-fidelity metric and signature radars, as well as optical sensors and telemetry, support the research, development, test, and evaluation of America's defense and space programs. For these tests, the RTS team members collect radar, optical, and telemetry data in the terminal phase of flight to evaluate system performance.

Vertical Nuclear Proliferation

Javed Alam and Prahlad Kumar Singh

Previous Trend: Negative



On April 16, 2025, it was [reported](#) that the US Navy's Naval Foundry and Propeller Center (NFPC) had delivered the final major propulsor component of the submarine to General Dynamics-Electric Boat (GDEB) to complete the development of the first Columbia-class SSBN. The delivery marks a historic milestone for NFPC and the culmination of a years-long project. Before the submarine's keel was laid in 2022, NFPC worked on the propulsor's patterns, molds, and castings, with the first sub-component pour in 2019 and the final large component cast in 2021.

On April 17, 2025, during a [speech](#) at the annual Defense Programs conference organized by McAleese and Associates, General Anthony Cotton, Commander of the United States Strategic Command (STRATCOM), publicly raised the possibility that the U.S. Navy could exceed its initial objective of building 12 Columbia-class ballistic missile submarines (SSBNs). If this happens, the Columbia class, designed to ensure the continuity of the U.S. undersea nuclear deterrent well beyond 2080, could see its fleet expanded beyond current projections.

On May 7, it was [reported](#) that instead of upgrading existing silos (missile launch facility), the military will now build new ones to house the next-generation Sentinel ICBMs. This is a shift from the original approach, where the initial plan was to reuse 450 silos currently holding Minuteman III missiles. But after running into serious engineering and cost hurdles during a test project in California, officials concluded that retrofitting the old silos would be more trouble than it's worth.

On May 19, the U.S. Secretary of Energy Chris Wright [announced](#) at the Pantex Plant that the Department of Energy's National Nuclear Security Administration (DOE/NNSA) has completed the manufacture of the first B61-13 gravity bomb, the latest modification to the B61 family of nuclear weapons. The first unit was assembled almost a year before the original target date and less than two years after the program was first announced, making the B61-13 one of the most rapidly developed and fielded weapons since the Cold War.

On June 12, it was [reported](#) that an ongoing restructuring of the beleaguered Sentinel ICBM program has left its flight-testing schedule up in the air, and a new date for the missile's first flight is not known. The US previously planned to fly the missile for the first time in 2026, itself a delay of over two years. But as part of the program's overhaul, mandated after an 81 percent cost spike last year, "the team is actively assessing the overall schedule, including potential impacts on the timeline for the first full-system flight," the Air Force official stated.

On June 16, 2025, the Stockholm International Peace Research Institute (SIPRI) [released](#) its 2025 annual yearbook, assessing the state of armaments, disarmament, and international security. The yearbook mentioned that the USA's nuclear modernization programme covers both its strategic and nonstrategic nuclear forces. In terms of strategic forces, it includes the LGM-35A Sentinel intercontinental ballistic missile (ICBM) to replace the LGM-30G Minuteman III ICBM; the Columbia-class nuclear-powered ballistic missile submarine (SSBN) to replace the Ohio-class SSBN; and the B-21 Raider heavy bomber aircraft to replace the B-2A. The year also stated that the USA is modernizing each of these delivery systems' associated nuclear warheads and the overarching nuclear command, control, and communication infrastructure.

On 2nd June 2025, the UK [announced](#) a significant expansion of the country's nuclear-powered, conventionally armed submarine fleet, with plans for up to 12 new SSN-AUKUS submarines. This comes after a £15 billion investment in the UK's nuclear warhead programme.

The **SIPRI Yearbook 2025**, released on June 16, [stated](#) that **France's** nuclear arsenal has remained stable, at around 290 warheads as of January 2025. Its nuclear modernization programme progressed during 2024. France continued to develop a third-generation SSBN and a new air-launched cruise missile (ALCM)—the ASN4G—as well as to refurbish and upgrade existing systems.

The Yearbook reports that **China** is [rapidly expanding](#) its nuclear arsenal. Since 2023, China has added around 100 warheads yearly, bringing its current total to at least 600. SIPRI notes that this number is expected to continue rising in the coming decade, making China's nuclear arsenal the fastest-growing in the world.

The report also [mentions](#) that **India** currently holds 180 nuclear warheads, slightly more than **Pakistan's** estimated 170. India has continued to gradually expand its arsenal and develop new types of nuclear delivery systems. The report briefly refers to India's Operation Sindoor, noting that “the combination of strikes on nuclear-related military infrastructure and third-party disinformation risked turning a conventional conflict into a nuclear crisis.”

On **Israel**, the Yearbook highlighted its long-standing policy of nuclear ambiguity, leaving significant uncertainty about the number and characteristics of its nuclear weapons. SIPRI estimates that Israel's stockpile probably remained stable at around 90 warheads as of January 2025. Israel is believed to be modernizing its nuclear arsenal and, in 2024, conducted a test of a missile propulsion system, possibly related to its Jericho family of missiles. It is also upgrading its plutonium production reactor facility at the Negev Nuclear Research Center (NNRC) near Dimona

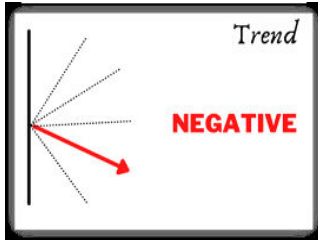
On May 13, the Nuclear Notebook [released](#) its Russian nuclear weapons 2025 report. It reports that **Russia** is in the late stages of a multi-decade-long modernization program to replace all of its Soviet-era nuclear-capable systems with newer versions. However, this program is facing significant challenges that will delay the entry of newer systems. As of early 2025, Russia is estimated to have a stockpile of approximately 4,309 nuclear warheads assigned for use by long-range strategic launchers and shorter-range tactical nuclear forces. This is a net decrease of approximately 71 warheads from last year, largely due to a change in Nuclear Notebook's estimate of warheads assigned to non-strategic nuclear forces. Of the stockpiled warheads, approximately 1,718 strategic warheads are deployed: about 870 on land-based ballistic missiles, about 640 on SLBMs, and possibly slightly over 200 at heavy

bomber bases. Another approximately 1,114 strategic warheads are in storage, along with about 1,477 nonstrategic warheads. In addition to the military stockpile for operational forces, a large number—approximately 1,150—of retired but still largely intact warheads await dismantlement, for a total inventory of approximately 5,459 warheads.

Nuclear Non-proliferation

Manpreet Sethi

Previous Trend: Negative



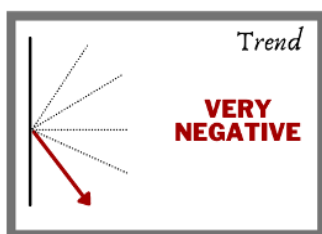
The third Preparatory Committee (PrepCom) of the NPT was held from 28 April 2025 to 09 May 2025 at New York. This marked the last milestone in the current review cycle. It brought together governments, civil society, and experts to assess progress on the NPT's three pillars: disarmament, non-proliferation, and peaceful uses of nuclear energy and make recommendations to the 2026 NPT Review Conference. However, the meeting concluded [without a consensus outcome](#) document as the states failed to bridge significant divisions, particularly between nuclear and non-nuclear states parties to the treaty. Therefore, no unanimous recommendations have been forwarded for the 2026 RevCon. Such a state of affairs points to the growing lack of trust and cooperation within the NPT framework, casting uncertainty on the future of the treaty and its effectiveness in preventing nuclear proliferation and promoting disarmament.

The talks between **USA** and **Iran** that started on April 12, 2025, after President Trump had written a letter to Iran's Supreme Leader Khamenei in March this year, stalled after four rounds when Israel launched attacks on Iranian nuclear sites on June 13, 2025. Verification on the enrichment programme and other weaponisation capabilities such as missiles were among the main issues being discussed at the talks. The US' Operation Midnight Hammer [attacked three key Iranian nuclear facilities](#), [Fordow](#), Natanz and Isfahan on Jun 22, 2025. President Donald Trump claimed the operation "obliterated" the sites, but officials are [still assessing how significant of a blow](#) it dealt to Tehran's program. Whether this attempt at counter-proliferation will mark the end of Iran's nuclear weapon ambitions or strengthen it further remains to be seen.

Iran

Silky Kaur

Previous Trend: Negative



In April 2025, the United States and Iran [resumed](#) indirect nuclear negotiations through intermediaries in Oman and Italy. Despite holding five rounds by May 23, the talks made little progress as Iran refused to halt its uranium enrichment activities. Tehran emphasized its right to peaceful nuclear development, complicating diplomatic efforts.

On June 1, 2025, the United States officially [presented](#) a revised nuclear proposal to Iran, aiming to limit its enrichment activities. Around the same time, the International Atomic Energy Agency (IAEA) [reported](#) a significant increase in Iran's stockpile of highly enriched uranium.

On June 4, 2025, Iran's Supreme Leader Ayatollah Ali Khamenei publicly [dismissed](#) the U.S. nuclear proposal, stating it was "entirely contrary to Iran's interests" and reaffirming Iran's commitment to uranium enrichment. On June 12, 2025, the IAEA formally [declared](#) Iran non-compliant with its nuclear safeguards—marking the first such determination in over twenty years. In response, Iran announced plans to expand its nuclear infrastructure, including new enrichment facilities and advanced centrifuges, heightening tensions with Western nations.

On June 13, 2025, Israel [carried out](#) a series of coordinated airstrikes against key Iranian nuclear and military sites in what it described as a pre-emptive action to halt Tehran's nuclear advancements. The strikes targeted uranium enrichment facilities at Natanz, Fordow, and Isfahan, as well as infrastructure linked to Iran's missile program and homes of senior nuclear scientists. Iranian state media reported casualties among personnel linked to Iran's nuclear program, though exact numbers and details remain unconfirmed.

On June 21, 2025, the United States [launched](#) a large-scale airstrike, codenamed Operation Midnight Hammer, against Iran's primary nuclear facilities—Fordow, Natanz, and Isfahan. The operation involved stealth bombers deploying specialized munitions to target deeply buried sites and cruise missiles striking surface infrastructure. The strikes aimed to disrupt Iran's nuclear capabilities, with dozens of aircraft reportedly involved.

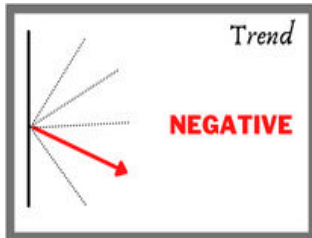
On June 22–24, 2025, Iran [responded](#) by launching missile and drone attacks on American military bases located in Iraq and Qatar. This retaliation heightened regional tensions and caused direct diplomatic negotiations between Iran and the United States to come to a halt. Despite the breakdown in talks with Washington, nuclear discussions continued under European mediation shortly before the strikes and efforts persisted to avoid further escalation and reach a diplomatic agreement.

On June 26–27, 2025, Iran announced it was [suspending](#) cooperation with the IAEA and condemned international sanctions. Despite this, Tehran insisted its nuclear program remained intact. Meanwhile, U.S. and Israeli officials described the recent strikes as major setbacks for Iran's nuclear ambitions, though experts cautioned that Iran still retained enriched uranium stockpiles and could potentially rebuild its capabilities.

North Korea

Silky Kaur

Previous Trend: Negative



In April 2025 the International Atomic Energy Agency (IAEA) [reported](#) ongoing construction and operations at North Korea's Yongbyon nuclear complex, including the uranium centrifuge enrichment plant and activities at the Radiochemical Laboratory and Experimental Light Water 5MW(e) Reactor. The IAEA also noted potential undeclared enrichment facilities at both Yongbyon and Kangson, as well as uranium mining and milling at Pyongsan

On May 8, 2025, North Korean leader Kim Jong Un [supervised](#) tests of short-range ballistic missiles and long-range artillery, stressing nuclear force readiness, per state media. The drills tested the reliability of the "nuclear trigger" system to counter regional tensions. South Korea and Japan confirmed the launches as tests of deployed short-range missiles, consistent with North Korea's ongoing efforts to enhance its missile capabilities.

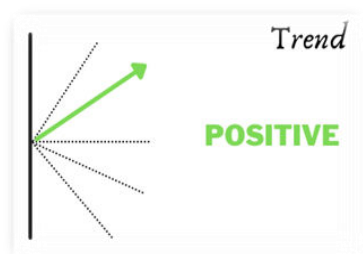
On June 9, 2025, IAEA Director General Rafael Mariano Grossi briefed the Agency's Board of Governors, warning that North Korea's nuclear program continues to violate UN Security Council resolutions. Grossi highlighted a new construction resembling a suspected uranium enrichment site west of Pyongyang, signaling North Korea's intent to expand its nuclear arsenal. On June 10, 2025, The New York Times [reported](#) that North Korea has likely expanded its uranium enrichment capabilities, as indicated by satellite imagery and expert analysis. This development suggests an increased capacity to produce weapons-grade uranium, violating UN sanctions.

On June 12, 2025, North Korean state media [reported](#) Kim Jong Un's visit to a shipyard for the launch of a new destroyer, during which he emphasized the need to bolster nuclear capabilities. This followed his earlier calls for increased centrifuge production, underscoring ongoing efforts to enhance nuclear material production.

Nuclear Energy

Ngangom Dhruba Tara Singh, Sana Alvira, Rishika Singh

Previous Trend: Positive



Global interest in nuclear energy is surging, driven by the need for reliable, low-carbon energy. Countries globally are actively pursuing nuclear energy programs, reflecting a renewed commitment to this important power source. From policy overhauls and technological advancements to international collaborations, countries are taking significant steps to expand their nuclear energy capacities. At global institutional level, the **World Bank** [decided](#) to lift its long-standing restriction on funding nuclear energy projects and consider backing efforts to extend the life of current reactors and accelerate the potential of small modular reactors in developing countries. On June 26, 2025, the World Bank Group and the **International Atomic Energy Agency (IAEA)** [signed](#) a cooperation agreement to promote the safe, secure, and responsible use of nuclear energy in developing countries. The agreement also highlights the World Bank Group's a new approach to electrification, which prioritises accessibility, affordability, and reliability while regulating emissions responsibly.

In Asia, on April 28, 2025, the Consultative Committee of **India's** Ministry of Power discussed the procedures required to meet the country's aim of increasing nuclear energy capacity by more than tenfold to 100 GW by 2047. The Committee [outlined](#) steps such as modifying the Atomic Energy Act of 1962 and the Civil Liability for Nuclear Damage Act of 2010 to allow greater engagement by the state and private sectors; improving public perception and awareness of nuclear energy's safety and benefits; accelerating land acquisition through brownfield expansions and repurposing abandoned thermal sites; introducing tax rebates, green electricity classification, and long-term funding to assure competitive nuclear tariffs; diversify technology options through competitive bidding and promote indigenous manufacturing through Make in India; secure diverse uranium fuel sources, expand the vendor base for specialised nuclear equipment, and strengthen nuclear

education and training infrastructure. **Kazakhstan's** Atomic Energy Agency has [announced](#) that Rosatom (Russia) and China National Nuclear Corporation (CNNC) will lead different consortiums to develop Kazakhstan's first nuclear power stations. Rosatom will therefore construct Kazakhstan's first nuclear power station, which will be built in Ulken. In addition, the CNNC was chosen to lead another consortium that would build the country's second nuclear power facility.

In Africa, **Uganda** is [pushing](#) its nuclear energy ambitions. With a firm objective of generating power by 2031, on May 27, 2025, the government has awarded a contract to Korea Hydro and Nuclear Power Company Ltd (KHNP) to conduct site appraisal studies for the country's first nuclear power plant in Buyende.

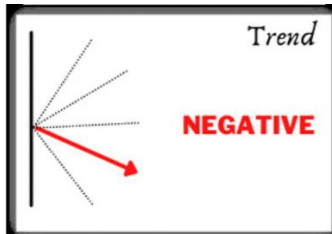
In North America, on May 23, 2025, aiming to increase nuclear energy production and reduce regulatory burdens, the US' President Donald Trump [signed](#) new executive orders urging the independent Nuclear Regulatory Commission to streamline regulations and expedite licensing for nuclear reactors and power plants. The US' Southern Nuclear has [taken](#) a bold step forward in nuclear innovation by being the first US company to test enriched nuclear fuel containing more than 5 per cent uranium-235. **Canada** has [approved](#) a C\$20.9 billion (\$15 billion) plan to build a new, smaller type of nuclear facility. Ontario Power Generation Inc. has received authority to construct the first of four small modular reactors built by GE Vernova Inc. The Darlington project, as it is known, is set to be the first to be implemented in a Group of Seven country.

In Europe, on May 15, 2025, **Belgium's** parliament [ended](#) the country's two-decade-old nuclear phaseout plan. The parliamentarians voted 102 to 8, with 31 abstentions, to preserve nuclear power as part of their energy policy. Energy Minister Mathieu Bihet hailed this as a critical step for Belgium's future, describing it as more than just an energy reform but also an important move for the country's economy, environment, and strategic positioning. **Germany**, under Chancellor Friedrich Merz, has [abandoned](#) its long-standing opposition to nuclear power. This decision implies a thaw in relations with France, as Berlin has indicated that it will no longer oppose French efforts to grant nuclear power the same status as renewable energy in EU legislation. This resolves a major area of concern between the two countries that had previously blocked EU energy policy decisions.

Nuclear Security

Sanaa Alvira

Previous Trend: Neutral



Developments in nuclear security have taken a sharp turn for the worse, given the recent and ongoing conflict in West Asia and Israel's military attacks on nuclear infrastructure in Iran. This is compounded by the existing stresses on the Zaporizhzhia nuclear power plant that is in close proximity to the frontline fighting between Russia and Ukraine, along with cuts in funding to nuclear security establishments by the US government. The following is an overview of these trends.

Between 12 and 13 June 2025, Israel [launched](#) a series of coordinated airstrikes targeting critical components of Iran's nuclear and military infrastructure. According to reports, the strikes focused on nuclear facilities, senior figures within Iran's Islamic Revolutionary Guard Corps (IRGC) and nuclear scientists. The attacks caused significant destruction, including damage to critical installations, and reportedly resulted in dozens of civilian casualties. In the aftermath, airspace across the region was largely closed and security forces in several countries were placed on high alert.

In response to these events, Rafael Mariano Grossi, Director General of the International Atomic Energy Agency (IAEA), [voiced](#) serious concerns about the attacks. Addressing the [IAEA Board of Governors](#), he emphasised that nuclear facilities must never be subject to military action, citing the risks to human life and the environment that such attacks pose. He warned that these developments have grave implications for nuclear safety, security and safeguards, as well as for regional and international peace. DG Grossi also referenced past IAEA General Conference resolutions (in particular, GC(XXIX)/RES/444 and GC(XXXIV)/RES/533) that have called for the avoidance of military action against nuclear facilities. He urged all parties involved to exercise maximum restraint to prevent the situation from escalating further.

Regarding the Zaporizhzhia nuclear power plant, tensions continue. At a recent [meeting](#), DG Grossi and Rosatom Director General Alexei Likhachev discussed the ongoing security challenges at the Zaporizhzhia Nuclear Power Plant (ZNPP), as well as issues relating to the potential future restart of its units. In his latest update, Grossi noted that the ZNPP, Europe's largest nuclear power plant, has not produced electricity for almost three years. He emphasised that its location on the frontline of the conflict continues to endanger nuclear safety.

Meanwhile, [reports](#) have indicated that Russia may be considering restarting the facility, which is currently offline, despite ongoing concerns about the security situation and calls for the plant's status to be addressed through peace negotiations. According to media sources, including *The New York Times*, satellite imagery shows that, since early February, Russia has constructed more than 50 miles of electricity lines and pylons between the Ukrainian cities of Mariupol and Berdyansk, on the coast of the Azov Sea. This infrastructure development appears to be aimed at connecting areas in south-eastern Ukraine to Russia's power grid.

The broader international nuclear security landscape is facing additional [challenges](#) beyond the situation at Zaporizhzhia. In March 2025, the US Congress approved a reduction of \$185 million to the defence nuclear non-proliferation budget overseen by the National Nuclear Security Administration (NNSA). This funding cut represents a 7.2 percent decrease in NNSA non-proliferation programmes. Analysts from the Center for Arms Control and Non-Proliferation have assessed that this reduction will affect various initiatives. These include efforts to prevent nuclear smuggling, enhance radiological security, strengthen export controls, secure and eliminate nuclear materials, and advance research into the potential impact of artificial intelligence on nuclear threats.

Amid wider nuclear security challenges, international attention has immediately turned to the status of Iran's stockpile of uranium enriched to 60 percent following recent Israeli military strikes. Analysts such as Ian J. Stewart have [emphasised](#) that this situation has significant implications for regional and global security, given that more than 400 kilograms of this material (probably enough for 10 nuclear weapons) remains outside of international oversight.

Prior to the strikes, the IAEA regularly monitored Iran's enriched uranium through inspections at key sites. Most of the 60 percent enriched uranium was reportedly stored at the Esfahan nuclear facility, with smaller quantities believed to have been held or processed at the Pilot Fuel Enrichment Plant at Natanz and the Fordow Enrichment Plant, where enrichment to 60 percent occurs. Since the start of military operations on 12–13 June 2025, however, the IAEA has been unable to verify the presence of this material at these locations, nor can it confirm that Iran has refrained from enriching uranium to weapons-grade levels (90 percent) at Fordow. There have also been unconfirmed [reports](#) from Iranian officials that some of the material at Fordow may have been moved, but its current location and status remain unclear as of 13 June 2025. This situation poses a serious threat to nuclear security and emphasises the urgent need for measures to be taken immediately to restore oversight and prevent the potential misuse of enriched material.

Disclaimer: The views and opinions expressed in this document are those of the authors and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS].



Centre for Air Power Studies (CAPS) was established in 2001 as an autonomous defence research and analysis body for research and focused analyses on issues related to national security, defence, and aerospace issues in the evolving strategic and international security environment. Its objective is to facilitate a greater understanding of these issues amongst the Armed Forces, the strategic community, and the public besides contributing to policy generation and decision-making.

CAPS research faculty comprises senior retired and serving Armed Forces officers from the three services besides academic scholars from national universities and retired members from the diplomatic community. CAPS also conducts nuclear strategy capsules for the Armed Forces and officers of security and technological organisations.

