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# The Undeclared Arsenal

## Israel's Nuclear Weapons and Missile Forces, Their Foreign Provenance, and the Deterrent Exposed by the 2026 Iran War


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# PREFACE

This report has a deliberately narrow focus. It concerns three things: Israel's nuclear weapons programme, its ballistic-missile forces, and the air and missile-defence architecture that shields it. It sets these against two facts that the war of 2026 has thrown into sharp relief. The first is that Israel is an undeclared nuclear-weapon state which stands outside the Nuclear Non-Proliferation Treaty (NPT) and the safeguards of the International Atomic Energy Agency (IAEA) yet has made the denial of a nuclear capability to Iran a central object of its policy. The second is that the same defensive architecture Israel presents as a guarantee of self-reliance has been shown, under the pressure of a prolonged war, to depend on a continuous American supply of interceptors, munitions, intelligence, and regional force presence without which it cannot function.

The argument is therefore organised around a question rather than a verdict. Israel's nuclear and missile capabilities plainly originated in foreign assistance: its plutonium reactor was built by France; its heavy water came from Norway; its uranium was gathered from South Africa, Argentina, and, by diversion, the United States (US); its first ballistic missiles were designed by a French company, and the sea-based leg of its arsenal sits in German-built hulls. But historical provenance is not the same as present dependence, and the report is careful to distinguish the two. The central question is this: to what extent has Israel transformed historically foreign-assisted capabilities into autonomous national ones, and where does meaningful dependence remain? The answer, developed across the sections that follow, is mixed. In the nuclear and ballistic-missile domains Israel has largely absorbed and nationalised what it once imported; in others, notably combat aircraft, submarine construction, high-end interceptor replenishment, intelligence, and wartime resupply, genuine and continuing dependence persists, and the 2026 war has placed it under strain.

Alongside this question of dependence, the report examines a normative one: the asymmetry by which the international system has tolerated and shielded an extra-treaty Israeli arsenal, outside the NPT and beyond inspection, while placing stringent demands on the region's treaty members. This is a real and consequential asymmetry, but it is a political and normative one rather than a matter of Israeli treaty violation, and the report is precise about the distinction.

A word on stance is also owed. This report is critical of Israel's nuclear and missile posture, and deliberately so, because the posture it examines has for too long been shielded from scrutiny by a policy of official silence that the rest of the world has been asked to respect. But criticism grounded in evidence is not polemic. Where Israel offers a justification, existential insecurity, the deterrent value of ambiguity, the conditionality of the zone on a comprehensive peace, the report records it

accurately and then weighs it. The judgement it reaches, that the arsenal is foreign in origin, opaque in operation, dependent in sustainment, and indefensible as a double standard, is a judgement drawn from the record, not imposed upon it. Readers are invited to test it against the sources cited throughout.

On evidence, care is owed to the reader on two points. Israel's programme is deliberately obscured, so figures for warhead numbers, fissile stocks, and missile ranges are open-source estimates by specialist institutions, presented as such. And battlefield claims from an ongoing war, including reported losses of advanced aircraft and the exact depletion of interceptor stocks, are contested; they are attributed to their sources and hedged, and the report's conclusions are built on the structural facts that hold regardless of any single disputed number. Sources are drawn from arms-control institutions, United Nations bodies, defence-industry and specialist reporting, and the public record of the suppliers themselves. Primary institutional sources are preferred throughout, and encyclopaedic aggregators are not used.

## EXECUTIVE SUMMARY

Israel is the Middle East's only nuclear-armed state, holding an estimated 80 to 90 warheads, yet it neither confirms nor denies their existence, remains outside the Non-Proliferation Treaty (NPT), refuses International Atomic Energy Agency (IAEA) safeguards on its weapons complex, and opposes the establishment of a Middle East zone free of weapons of mass destruction. At the same time, the confrontation with Iran that opened on 28 February 2026 has exposed the limits of the conventional shield that Israel presents as the guarantor of its security. This report examines the nuclear programme, the missile forces, and the missile-defence architecture together and reaches a single conclusion: Israel's deterrent is foreign in origin, opaque in operation, and dependent on the United States (US) for its endurance.

Five findings anchor the assessment. First, Israel's bomb is a plutonium-route weapon produced at the ageing, French-built heavy-water reactor at Dimona, from which analysts estimate a stockpile of roughly 960 kilogrammes of plutonium, enough for well over one hundred weapons; satellite imagery since 2019 shows the largest construction there in decades, which experts read as either a new reactor or a warhead-assembly facility.

Second, the arsenal originated in foreign assistance. France built the Dimona reactor and reprocessing plant and designed Israel's first ballistic missile; Norway supplied the heavy water; South Africa and Argentina supplied uranium; the US supplied heavy water and, according to a longstanding but legally unproven Central Intelligence Agency (CIA) assessment, was the source of diverted weapons-grade uranium; and Germany built the submarines that carry the sea-based deterrent. Israel has since absorbed much of this technology and now sustains its nuclear and ballistic-missile programmes largely from national resources, so the foreign fingerprints are clearest at the point of origin; continuing dependence is concentrated instead in other systems, examined below.

Third, Israel's missile forces share this foreign lineage. The Jericho line began as the French Dassault MD-620, developed for Israel from 1962 and continued by Israel Aerospace Industries after the 1967 French embargo, later with American assistance; the Jericho III now reaches an estimated 4,000 to 6,500 kilometres, placing every regional capital and much beyond within range.

Fourth, the 2026 war placed the shield under severe strain. Iran struck American bases across the Gulf, part of a US-led regional network from which Israel's defence benefits. Some US Patriot batteries were reported to have failed to intercept Iranian missiles, and the Center for Strategic and International Studies (CSIS) estimates that US stocks of the key interceptors fell to under 827 Patriots and under 278 THAADs by late July 2026, from roughly 2,200 and 452 before the war;

Israel itself reported running low. Israel could not sustain a prolonged war at the same defensive tempo without continuous American resupply, and the US, engaged in its own operations, prioritised its own needs.

Fifth, Israel's posture embodies a double standard visible across the region and the wider world. It maintains an undeclared arsenal outside all treaty constraints while treating an Iranian nuclear capability as an existential threat to be destroyed by force, and it has voted against and boycotted the United Nations (UN) process to establish a Middle East Weapons of Mass Destruction (WMD)-free zone. If the war moves to a ground phase, Iran's axis of resistance, though degraded, retains the multi-front reach to compound Israel's exposure, and the dependence on the United States would only deepen.

The through-line connecting these findings is the gap between capability and autonomy. Israel's nuclear and missile capabilities are formidable, and its defensive technology is genuinely advanced; but the capabilities are foreign in origin, the arsenal is opaque and unaccountable, and the shield is sustained by an external patron. The 2026 war has not shown Israel to be weak. It has shown Israel to be dependent, and it has shown that the deterrent Israel presents as the guarantee of its independence is, on inspection, the clearest measure of how much that independence relies on others.

## Key Findings

- Israel holds an estimated 80–90 nuclear warheads, is not an NPT party, and refuses IAEA safeguards on its weapons complex.
- The bomb is plutonium-routed, produced at the French-built Dimona heavy-water reactor; the estimated plutonium stock (~960 kg) is enough for well over 100 weapons.
- Foreign suppliers built the programme: France (reactor, reprocessing, and missile design), Norway (heavy water), the USA (heavy water; diverted HEU per CIA), South Africa and Argentina (uranium), and Germany (submarines).
- The Jericho missile began as France's Dassault MD-620; the Jericho III now ranges an estimated 4,000–6,500 km and is produced by Israel Aerospace Industries.
- In the 2026 war, Iran struck US Gulf bases that defend Israel; Patriot interceptors were filmed failing, and US Patriot/THAAD stocks fell to under 827 and 278, respectively (CSIS).
- Israel opposed and boycotted the UN Middle East WMD-Free Zone conference (2019) and voted against the 2018 resolution that convened it.

- Israel could not sustain a prolonged war at the same defensive tempo without US interceptors, munitions, intelligence, and a US-led regional network; this is a limit on autonomy, not an inability to fight.
- A ground phase would activate Iran's multi-front axis (Hezbollah, Iraqi militias, and the Houthis) and deepen Israel's dependence further.

## LIST OF ACRONYMS

ACPSS Al Ahram Center for Political and Strategic Studies
AFP Agence France-Presse
CEPA Center for European Policy Analysis
CIA Central Intelligence Agency
CRPA Controlled Radiation Pattern Antennas
CSIS Center for Strategic and International Studies
FAS Federation of American Scientists
IAEA International Atomic Energy Agency
ICJ International Court of Justice
NPT Non-Proliferation Treaty
RUSI Royal United Services Institute
SIPRI Stockholm International Peace Research Institute
UAE United Arab Emirates
UK United Kingdom
UN United Nations
US United States
WMD Weapons of Mass Destruction

# PART I: THE UNDECLARED ARSENAL

## 1. A Sword in the Shadows and a Shield on Loan

Israel presents itself to the world as a self-reliant power whose security rests on its own genius: an undefeated air force, a multi-layered missile shield, an intelligence service of long reach, and, in the background, an arsenal it will neither confirm nor deny. This report argues that the presentation obscures more than it reveals. Behind the shield stands a sword that Israel did not forge alone and will not acknowledge, and the shield itself, as the war of 2026 has shown, cannot be held up without the United States (US). The self-reliant power is, on examination, a more dependent one than its image allows, and the deterrent it guards so jealously is more foreign in its origins and more opaque than the presentation admits.

### Two Objects of Study, One Argument

The report confines itself to the hard core of Israeli military power: the nuclear weapons programme, the ballistic-missile forces that would deliver it, and the air and missile-defence architecture that protects the state from retaliation. These are treated together because they form a single system of deterrence and because the war with Iran has tested all three at once and found each of them wanting in a different way. The nuclear arsenal is opaque and, against a conventional missile war, unusable. The missile forces are capable but foreign in origin. And the shield, for all its sophistication, is expensive, finite, and externally supplied. The common thread is dependence: on foreign suppliers who built the arsenal and on an American patron who sustains the shield.

### The Double Standard in Plain View

Overlaying the analysis is a contradiction that the region has long noted, and the wider world increasingly remarks. Israel is the only nuclear-armed state in the Middle East and the only state in the region outside the Non-Proliferation Treaty (NPT), and it guards an undeclared arsenal beyond the reach of international inspection. Yet it has made the prevention of an Iranian nuclear capability a central object of policy, striking Iraq in 1981, Syria in 2007, and Iran in 2026 to deny others the very capability it maintains in secret, and it has declined to join or attend the United Nations (UN) process to establish a Middle East zone free of Weapons of Mass Destruction (WMD). Precision matters here, and the report is careful to observe it: because Israel never joined the NPT, it has not violated it, whereas Iran, as a party, carries treaty and safeguards

obligations, so the legal positions are not equivalent. The asymmetry is therefore normative and political rather than legal, a matter of the international system tolerating one extra-treaty arsenal while holding treaty members to strict account. This is not a marginal observation; it is central to how Israel's deterrent is perceived and to the legitimacy of the order it claims to defend. The report documents the asymmetry not as a polemic but as a fact and traces its strategic consequences.

**The Argument in Full**

Stated at its fullest, the report tests a single proposition: that formidable military capability does not, by itself, amount to complete strategic autonomy. Israel possesses an undeclared nuclear arsenal, a capable ballistic-missile force, and the most combat-tested missile defence in the world. The question the report pursues is how much of this is genuinely autonomous and where meaningful reliance on others remains, in origin, in design, in material sustainment, and in political consent. Its finding is not that Israel is weak or that its arsenal is merely borrowed but that a state can be highly capable and, in specific and identifiable respects, dependent and that the 2026 war has brought those respects into view. Each element of this finding is developed and sourced in the sections that follow.

**Four Kinds of Reliance: A Framework for the Argument**

Because the report repeatedly distinguishes historical provenance from present dependence, it is worth setting out the distinction at the start. External reliance can take at least four forms, which are analytically separate and carry very different strategic weight. The first is historical: foreign assistance enabled the programme's origin, but the capability is now sustained nationally. The second is design lineage: a current national system was developed from a foreign design or with foreign help but is now produced domestically. The third is material dependence: foreign servicing, components, or replenishment remain necessary for the system to function or to be sustained in war. The fourth is political dependence: continued access rests on another government's ongoing consent, which can be withheld. Only the third and fourth constitute meaningful present dependence; the first two describe an origin that a state may since have outgrown.

Applying these categories separately to Israel's principal systems yields a more precise picture than a blanket claim of foreign provenance. It shows that the nuclear and ballistic-missile programmes, though foreign in origin, are now largely autonomous, while the sharpest continuing

dependence lies in combat aircraft, submarine construction, high-end interceptor replenishment, intelligence, and wartime resupply – the areas the 2026 war has stressed most.

**Table 1.1: Four Kinds of Reliance, Applied to Israel's Principal Systems**

| System | Nature of the foreign role | Meaningful present dependence? |
|---|---|---|
| **Dimona/Fissile production** | Origin: French-built reactor and reprocessing | Low: operated and sustained nationally |
| **Jericho missiles** | Origin and early design: French MD-620; some US help | Low: designed and produced by IAI |
| **Combat aircraft (F-15/16/35)** | Material: US-built platforms | High: platforms, spares, sustainment, upgrades |
| **Submarines (Dolphin)** | Material: German construction | High: construction, servicing, replacement |
| **Missile defence (Arrow, D. Sling)** | Design and material: US co-development, co-funding | Moderate-high: high-end interceptor replenishment |
| **Intelligence / early warning** | Material and political: US sensors and sharing | High: ongoing |
| **Wartime resupply (munitions, WRSA-I)** | Material and political: US stocks, pre-positioning | High: acute in a prolonged war |

*Analysis: London Dialogue. "Origin" and "design lineage" describe how a capability began; "material" and "political" dependence describe present reliance. Only the latter two bear on current autonomy.*

The four parts of the report follow this argument in sequence. Part I examines the nuclear weapons programme: its size and opacity, its plutonium route and warhead designs, and the foreign suppliers who built it. Part II turns to the missile forces that deliver the arsenal, tracing the Jericho line to its French origin and setting out the triad and its modernisation. Part III addresses the missile-defence shield, its architecture and its foreign core, and then the exposure of that shield in the 2026 war and the American lifeline that sustains it. Part IV draws the threads together in the double standard, the arsenal and the refusal of the treaty and the zone and closes with the danger of a ground and multi-front phase and the deepening dependence it would bring. Throughout, the method is the same: to set the public image beside the documented record and to let the gap between them carry the argument.

**What this Report is and is Not**

This report is an assessment of capabilities, provenance, and dependence, not a comprehensive account of the 2026 war, nor a history of the Arab-Israeli conflict, nor an adjudication of the competing rights and wrongs of the belligerents. It confines itself to what can be established or reasonably estimated about Israel's nuclear and missile forces and its missile defences, and to what the war has revealed about their sustainability. Where it records Israel's stated justifications, it does so accurately and then subject them to analysis; where it relies on contested claims, it says so. The aim is not polemic but a clear-eyed account of a deterrent that is more foreign, more opaque, and more dependent than its public image allows, at a moment when a prolonged war has made those qualities impossible to ignore.

**Why the Stakes are High**

The questions this report addresses are not academic. An undeclared arsenal beyond inspection removes the transparency on which crisis stability depends, so that in a confrontation neither side can be certain what the other holds or how it might respond. A shield that cannot endure a long war invites miscalculation, because an adversary who believes the defender will eventually run short of interceptors has an incentive to prolong rather than to settle. A double standard that denies others what one holds oneself supplies a permanent motive for proliferation, the very outcome the standard is meant to prevent. And a deterrent sustained by a single patron ties the security of a state, and the stability of a region, to the domestic politics and competing priorities of a power an ocean away. The subject is narrow, but its consequences reach the deepest questions of war, escalation, and the nuclear order in the most volatile region on earth.

**A Note on Evidence**

Because Israel's programme is deliberately hidden, this report relies on convergent estimates from specialist institutions, the declassified record of suppliers, and the analyses of arms-control bodies, and it flags uncertainty rather than concealing it. Warhead counts, plutonium stocks, and missile ranges are external estimates. Claims arising from the ongoing war, in particular the exact state of interceptor stocks and reported losses of advanced aircraft, are contested and are attributed and hedged accordingly. The argument does not rest on any single disputed figure; it rests on structural facts, the foreign provenance of the arsenal, the opacity of the programme, the economics of the shield, and the dependence on the US, that hold whatever the exact numbers prove to be.

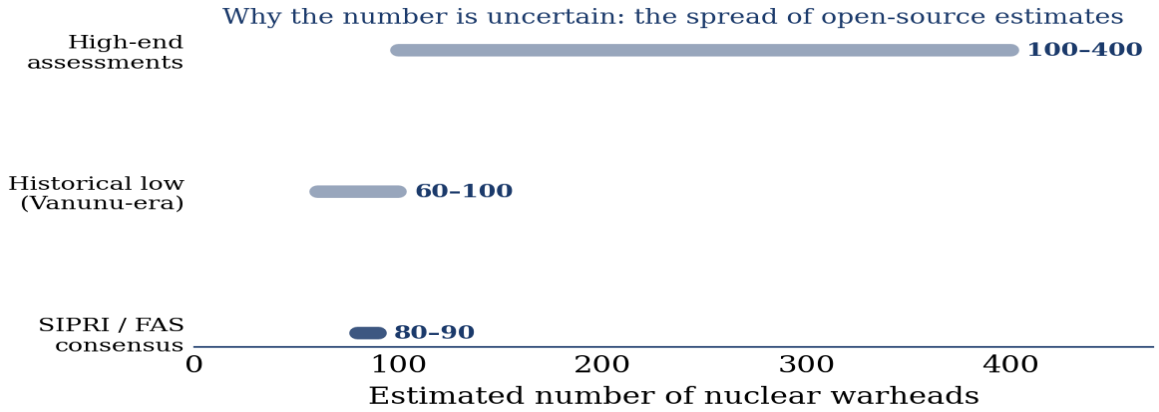
## 2. The Bomb in the Basement: The Nuclear Weapons Programme

Israel is universally assessed to possess nuclear weapons and universally denied the acknowledgement of them by Israel itself. It maintains a policy of deliberate ambiguity, the Hebrew amimut, under which it declares only that it will not be the first to "introduce" nuclear weapons to the Middle East, a formula carefully constructed to deter without admitting. It is one of only a handful of states never to have joined the NPT, and the IAEA has no access to its weapons complex.[1]

### The Size of the Arsenal

Open-source assessments by the Federation of American Scientists (FAS) and Stockholm International Peace Research Institute (SIPRI) converge on an estimate of roughly 80 to 90 warheads, inferred from plutonium production at Dimona and from observable delivery systems. Some assessments, citing six decades of production, place the potential considerably higher: the plutonium believed to have been produced would be sufficient, by several estimates, for well over one hundred weapons. That figure describes latent capacity, however, not an assembled arsenal, and the two should not be equated: the number of weapons actually built is a separate and unverifiable question, and much of the plutonium may be held in reserve rather than weaponised.[2]

**Figure 2.1. The Spread of Open-Source Estimates of Israel's Warhead Count. Opacity is deliberate; every figure is an external inference.**



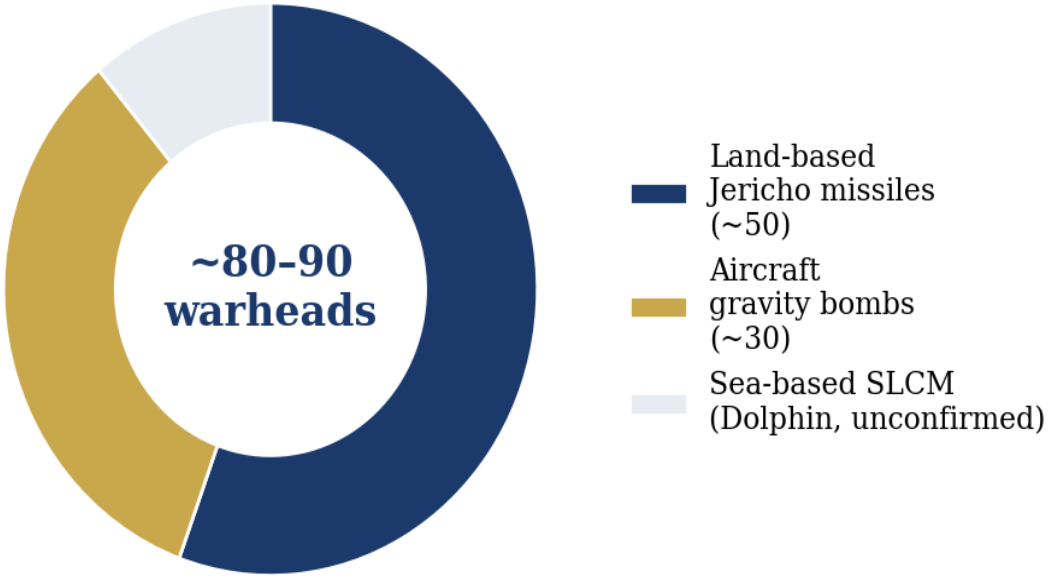

[1]The IAEA has stated that Israel is not obligated to provide information about nuclear facilities outside its Soreq research reactor; see reporting on Dimona construction, *Associated Press*, July 2025.

[2]Kristensen and Korda, "Israeli nuclear weapons, 2022," Bulletin of the Atomic Scientists 78, no. 6 (2022); *SIPRI Yearbook 2025*, "World Nuclear Forces"; *International Panel on Fissile Materials, Global Fissile Material Report*. On the material sufficient for a larger arsenal, see Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998).

**The Triad in Outline**

Israel is widely assessed to possess aircraft- and missile-delivered nuclear options and a possible sea-based second-strike capability, although the operational configuration of the submarine leg remains unconfirmed. The common description of a full nuclear triad should therefore be treated with caution. External estimates, such as SIPRI's, allocate roughly thirty gravity bombs to aircraft and around fifty warheads to the Jericho missiles, but these figures are inferences rather than confirmed counts. The sea leg rests on the German-built Dolphin-class submarines, which are widely assessed as potentially capable of launching nuclear-armed cruise missiles; open sources do not, however, establish the missile, the warhead integration, the deployment pattern, the patrol frequency, the command arrangements, or any continuous at-sea readiness, so an assured second strike cannot be asserted. Each leg, as Section 4 shows, originated in foreign assistance.[3]

**Figure 2.2. Illustrative External Estimate of How Warheads Might be Allocated Across the Delivery Legs (SIPRI-type figures).**




*The allocation is uncertain, and the sea-based leg in particular is unconfirmed.*

[3]Nuclear Threat Initiative, "Israel," 2025; Center for Arms Control and Non-Proliferation, "Fact Sheet: Israel's Nuclear Inventory," 17 June 2025, which notes that even a nuclear-capable submarine "would not confirm that Israel would or could keep one nuclear submarine continuously deployed at-sea"; *SIPRI Yearbook 2025*.

**The Only Arsenal in the Region**

The significance of the arsenal is magnified by its uniqueness. Israel is not one nuclear power among several in its neighbourhood but the sole possessor of nuclear weapons in the entire Middle East and the only state in the region outside the NPT. This monopoly is the strategic fact around which regional security revolves: it gives Israel an ultimate guarantee no neighbour can match, and it gives every neighbour a permanent incentive to seek redress, whether through their own programmes, through alliances, or through the asymmetric and missile-based capabilities that the rest of this report examines. An undeclared regional monopoly is not a stable equilibrium but a standing provocation, and the confrontation with Iran is in large part its consequence.

**Dimona and the Whistle-Blower**

The heart of the programme is the Shimon Peres Negev Nuclear Research Center near Dimona, a French-built heavy-water reactor and adjacent reprocessing plant that has produced Israel's plutonium since the 1960s. The world learned the programme's outlines not from any official disclosure but from Mordechai Vanunu, a technician who worked at Dimona from the late 1970s to the mid-1980s and revealed its inner workings to the British press in 1986; he was lured abroad, seized by Israeli intelligence, and imprisoned for 18 years.[4]

**Origins: Ben-Gurion's Quest**

The programme was the deliberate project of the state's founders, above all David Ben-Gurion, who regarded a nuclear capability as the ultimate guarantee against a second catastrophe befalling the Jewish people. From the mid-1950s a small circle around Ben-Gurion, with Shimon Peres as its indispensable organiser, pursued the reactor and the bargain with France that made it possible, building the enterprise deliberately outside the normal machinery of government and largely hidden from the Israeli cabinet and public, and entirely from the Americans. The secrecy that still surrounds the arsenal is therefore not a later accretion but a founding characteristic: the programme was conceived in concealment and has remained there ever since.[5]

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[4]The disclosures appeared as "Revealed: the secrets of Israel's nuclear arsenal," *The Sunday Times* (London), 5 October 1986. For the authoritative scholarly account see Avner Cohen, Israel and the Bomb (New York: Columbia University Press, 1998), and Cohen, *The Worst-Kept Secret (2010)*. See also Seymour M. Hersh, *The Samson Option* (New York: Random House, 1991).

[5]Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), the standard history, based on extensive declassified and interview material.

This origin matters to the argument of this report because it establishes the pattern that Section 4 documents in detail. The bomb was not the product of a national laboratory complex built from Israeli resources; it was assembled through a foreign partnership and a series of quiet acquisitions, and the habit of concealment that surrounded its birth became the permanent policy of ambiguity that still surrounds it. A programme built in the dark has stayed in the dark, and the darkness is now presented as a virtue rather than a necessity.

The relationship with the US over the arsenal deserves a word here because it is the template for the dependence the whole report traces. When American intelligence discovered the Dimona project at the turn of the 1960s, a diplomatic accommodation was eventually reached under which the US conducted a series of visits to the site while Israel maintained that the reactor was peaceful, and Washington, for its own strategic reasons, chose not to force the issue. Out of this grew the settled understanding, formalised in later years, under which Israel keeps its arsenal undeclared, and the US refrains from pressing it to do otherwise. The opacity is thus not Israel's achievement alone but a joint Israeli-American arrangement, and it is the earliest instance of the pattern in which Israeli strategic autonomy rests, in fact, on an American accommodation.[6]

**The Vela Flash and the South African Connection**

The clearest external glimpse of the arsenal in action came not from Israel but from an American satellite. On 22 September 1979, a US Vela satellite detected the characteristic double flash of a nuclear explosion over the southern Atlantic or Indian Ocean, an event widely, though not conclusively, assessed by many analysts to have been a nuclear test associated with Israel and apartheid South Africa, the two states then engaged in close nuclear cooperation. The episode remains officially unresolved, and this report presents it as the contested matter it is; but the very existence of a plausible, unexplained flash, in a period of documented Israeli-South African nuclear collaboration, is a further indication of an active weapons programme that has never been acknowledged.[7]

[6]Avner Cohen, *The Worst-Kept Secret: Israel's Bargain with the Bomb* (New York: Columbia University Press, 2010); *National Security Archive,* Electronic Briefing Books ed. Avner Cohen and William Burr.

[7]The 1979 Vela incident remains officially unexplained; assessments differ. For the South African nuclear relationship see Sasha Polakow-Suransky, *The Unspoken Alliance: Israel's Secret Relationship with Apartheid South Africa* (New York: Pantheon, 2010).

**Amimut and the Samson Option: The Taxonomy of Opacity**

As the nuclear historian Avner Cohen establishes in *Israel and the Bomb* and *The Worst-Kept Secret*, Israel's nuclear posture rests on a delicate paradox between amimut, the policy of deliberate opacity, and the operational deterrence a nuclear arsenal is meant to provide. Cohen's analysis distinguishes two functions of amimut that are increasingly in tension. As diplomatic opacity, it has effectively protected Israel from international sanctions and from the regional treaty obligations that acknowledgement would trigger, allowing the state to hold an arsenal in peacetime without paying the political and legal price. As deterrence, however, opacity is self-limiting because classical nuclear deterrence is built on calculated transparency: the ability to signal capabilities, thresholds, and red lines openly enough that an adversary does not miscalculate.[8]

The tension becomes acute in precisely the kind of war fought in 2026. By maintaining opacity, Israel limits its ability to calibrate an explicit nuclear warning without abandoning the policy that secures its international legal immunity, so that against an attritional conventional campaign deliberately kept beneath the existential threshold, the arsenal does little visible work. This should not be overstated, however. Nuclear signalling need not be explicit: it can be conveyed through changes in readiness, through deployments, through private diplomatic messages, through deliberate leaks and elite statements, and through the adversary's own worst-case assumptions, and Israel may regard the resulting uncertainty as itself a form of deterrence. What the 2026 war demonstrates is the limited utility of nuclear weapons against calibrated conventional attrition, not that the arsenal is strategically irrelevant in every conflict below the existential threshold. Within that qualification, the core of Cohen's paradox holds: the weapons that guarantee against annihilation contribute little to the war actually being fought, and opacity narrows even the signalling that might otherwise extract some value from them.

**The Logic of Last Resort**

Israeli strategic writing and the wider literature have long associated the arsenal with a doctrine of last resort, sometimes called the Samson Option, under which nuclear weapons exist to guarantee that no combination of adversaries could ever destroy the state without suffering catastrophic retaliation in return. On this logic the arsenal is not a war-fighting instrument but an existential

[8]Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), pp. 273–296; and Cohen, *The Worst-Kept Secret: Israel's Bargain with the Bomb* (New York: Columbia University Press, 2010), pp. 45–68.

insurance policy, held in reserve against the gravest imaginable threat and never intended for use in an ordinary conflict. This is the most sympathetic construction of the arsenal, and it is fair to state it.[9]

But the doctrine of last resort has a consequence that the 2026 war has made vivid. If the arsenal exists only for the existential extremity, then it is irrelevant to every conflict short of that extremity, including the prolonged conventional missile war Israel is actually fighting. The bomb deters annihilation and nothing less, which means it does not work at all against the attritional campaign that this report shows to be the real threat to Israeli endurance. The most powerful weapons in the Israeli inventory are, for the purposes of the war actually under way, the least usable, and the security they provide is confined to a scenario the adversary has no intention of creating. This is a theme the report returns to in its analysis of the shield's exhaustion and in its conclusion.

Ambiguity has served Israel's purposes for half a century, but it is a choice with costs. Because Israel neither confirms nor denies, it cannot signal openly in a crisis without abandoning the policy that has shielded it; because it stays outside the treaty framework, it forfeits any standing in the non-proliferation order it invokes against its rivals; and because it refuses inspection, it asks the region to accept on trust an arsenal it will not describe. The basement in which the bomb is kept is not a place of modesty. It is a place from which Israel claims the benefits of a deterrent while accepting none of the obligations that every declared nuclear power has assumed.

The costs of opacity are best understood as one side of a genuine strategic trade-off, and a balanced account must weigh both. On one side, ambiguity has reduced the diplomatic pressure Israel would otherwise face, preserved its freedom of manoeuvre, and left adversaries to plan against an uncertain but assumed capability, which is a form of deterrence in itself. On the other, opacity clouds thresholds, weakens accountability, offers little reassurance to neighbours, and can drive worst-case planning on all sides: a declared arsenal can be used to signal resolve and restraint and to establish the mutual expectations on which crisis stability depends, whereas an undeclared one cannot do so openly without abandoning the very policy that defines it. The balance between these considerations is genuinely contested, and serious analysts weigh it differently. What can be said

[9]The phrase and the concept are most associated with Seymour M. Hersh, *The Samson Option: Israel's Nuclear Arsenal and American Foreign Policy* (New York: Random House, 1991).

with more confidence is narrower: in the specific circumstances of 2026, a calibrated conventional war fought beneath the nuclear threshold, the advantages of opacity did little to help, and its communicative limits were plainly on display.

## 3. Uranium or Plutonium? The Fissile Route, the Designs, and the Modernisation

The question of how Israel's bomb is made has a clear answer, and it matters both technically and politically. Israel's is a plutonium-route arsenal, produced in a heavy-water reactor and separated in a reprocessing plant, not a uranium enrichment programme of the kind that has been the focus of the international dispute with Iran. This distinction is worth stating plainly because it means that the fissile pathway the world has spent two decades trying to close off in Iran, enrichment, is not the pathway by which Israel built its own arsenal.

### The Plutonium Route

The Dimona reactor is a natural-uranium, heavy-water design. Such reactors are efficient producers of plutonium, and the adjacent reprocessing plant separates weapons-usable plutonium from the spent fuel. As of the beginning of 2019, the International Panel on Fissile Materials estimated Israel's plutonium stockpile at roughly 960 kilogrammes, with an uncertainty of about 130 kilogrammes, a quantity sufficient, on standard assumptions, for well over one hundred weapons.[10]

Israel's domestic uranium supply, a by-product of phosphate mining near the Dead Sea, amounts to only about ten tonnes a year, far short of its needs, which is why, as Section 4 details, the programme depended on imported and diverted uranium from abroad. The reactor also produces tritium, a hydrogen isotope used to boost the yield of fission weapons, and analysts assess that one purpose of the ageing reactor today may be tritium production, since tritium decays and must be replenished more often than the fissile core of a warhead.[11]

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[10] *International Panel on Fissile Materials, Global Fissile Material Report* (Princeton: IPFM), estimate for the start of 2019; see also Frank von Hippel et al., IPFM country assessments. Reactor characteristics per Cohen, *Israel and the Bomb* (1998).

[11] Arms Control Association, "New Work Underway at Israeli Nuclear Site," April 2021; nuclearweaponarchive.org, "Israel's Nuclear Weapons Program."

**Table 3.1: Israel's Fissile-Material Route at a Glance**

| Element | Detail | Significance |
|---|---|---|
| **Route** | Plutonium (not enrichment) | Different pathway from Iran's enrichment dispute |
| **Reactor** | Dimona heavy-water, natural uranium | French-built; operating since 1960s |
| **Separation** | Reprocessing plant at Dimona | Yields weapons-usable plutonium |
| **Plutonium stock** | ~960 ± 130 kg (2019 est.) | Sufficient for well over 100 weapons |
| **Tritium** | Produced in the reactor | Boosts warhead yield; must be replenished |
| **Uranium feed** | ~10 t/yr domestic; rest imported/diverted | Foreign dependence (see Section 4) |

*Sources: IPFM (2019/2021); Arms Control Association (2021); nuclearweaponarchive.org. Figures are external estimates.*

### The Weapon Designs

The designs themselves are, unsurprisingly, among the most closely held secrets in the programme, and here the report is careful to separate what is documented from what is inferred. The material revealed by Vanunu in 1986 indicated a sophisticated weapons effort, and analysts have long assessed that Israel fields boosted fission weapons, in which a small quantity of fusion fuel and tritium increases yield and efficiency. Beyond this, assessments that Israel possesses thermonuclear or two-stage weapons are inferences drawn from the scale of the programme and the Vanunu material rather than confirmed facts, and this report treats them as the informed speculation they are. What is not in doubt is that a programme sustained for six decades, with the plutonium and tritium capacity described above, has had every opportunity to develop advanced and miniaturised designs suitable for the full range of delivery systems in Part II.

The uncertainty about the designs is itself a product of the opacity, and it cuts against Israel's interest in an unexpected way. Because Israel will confirm nothing, external analysts must reason from fragments, and the resulting estimates span a wide range, from an arsenal of simple fission weapons to one including boosted and possibly thermonuclear designs across a family of yields. This range is wider than it would be for any declared power, whose broad parameters are known, and the uncertainty is not obviously to Israel's advantage: an adversary uncertain of the arsenal's sophistication may over-arm against the worst case, driving precisely the competition the arsenal was meant to forestall. Opacity purchases deniability at the price of the

predictability on which stable deterrence relationships are built, and the price is paid in the arms dynamics of the whole region.

**Why the Route Matters for the Iran Comparison**

The plutonium character of Israel's programme is not a technical footnote, but the hinge of the double standard examined in Part IV. The entire international confrontation with Iran has centred on uranium enrichment: the centrifuge cascades, the stockpiles of enriched uranium, the levels of enrichment, and the breakout time to weapons-grade material. Israel built its arsenal by an entirely different road, producing plutonium in a reactor and separating it in a reprocessing plant, a route that is in some respects the more direct path to a weapon and that Israel pursued free of any inspection whatsoever. A state that acquired the bomb by the plutonium road, unmonitored, is now the foremost advocate of denying another state the uranium road under the most intrusive monitoring ever devised. The asymmetry is not lost on Tehran, and it is not lost on the wider membership of the NPT.

The plutonium route also carries a specific technical implication for how the arsenal can be sustained and expanded, and it bears on the modernisation examined later in this section. A plutonium programme is anchored on a reactor and a reprocessing plant, so the continued operation, refurbishment, or replacement of those facilities is the visible signature of a living weapons effort, which is precisely why the construction observed at Dimona since 2019 has drawn such attention. An enrichment programme, by contrast, is anchored on centrifuge halls whose output can be scaled by adding machines. The distinction is not merely academic: it means that the key indicators of Israel's nuclear trajectory are the reactor and reprocessing activities at a single, long-known site and that the secrecy surrounding that site is therefore doing a great deal of work in keeping the trajectory obscure.

**Enrichment: The Marginal Second Path**

Israel is generally assessed to possess some uranium-enrichment capability as well, developed in part to stretch its limited uranium supply and to support its wider nuclear activities, but the weapons programme is understood to rest overwhelmingly on the plutonium produced at Dimona. The distinction reinforces rather than complicates the point: whichever fissile road is emphasised, Israel has travelled it outside the treaty regime and beyond inspection, while insisting that its neighbour travel a monitored road or none at all. The technical particulars differ;

the double standard does not.[12] It is worth dwelling on the comparison the international debate has been reluctant to draw. For two decades the world has treated Iranian enrichment as the paradigmatic proliferation threat, building an elaborate architecture of inspection, sanction, and, ultimately, military action around it. Throughout, the region's only actual nuclear arsenal, produced by a different route and subject to none of these instruments, has been treated as a fixed and unmentionable feature of the landscape. The selective attention is itself a political fact, and it is the mechanism by which the double standard is not merely maintained but rendered invisible.

**Modernisation in the Dark**

Israel is not standing still. Satellite imagery analysed from 2021 onwards, and again in 2025, shows the largest construction project at Dimona in decades: a deep, multi-level excavation of roughly 140 by 50 metres beside the ageing reactor. Analysts are divided on its purpose: some judge it a new heavy-water reactor to replace the sixty-year-old original; others a facility for assembling nuclear weapons. The programme's secrecy makes certainty impossible.[13] Either interpretation points the same way: a state modernising and extending an undeclared arsenal, beyond inspection, at the very moment it demands the forcible denial of any nuclear capability to its neighbour. The modernisation of the sea-based leg, through successive orders of German submarines, runs on the same track, and is examined in Section 6.

**Warhead Sustainment and the Ageing Reactor**

A nuclear arsenal is not a static possession but a stockpile that must be maintained. Warheads age; their components degrade; and, in boosted designs, the tritium that increases their yield decays with a half-life of roughly twelve years and must be periodically replenished. A state that intends to keep a credible arsenal over decades must therefore sustain the industrial base to service it, and the continued operation, and apparent expansion, of the Dimona complex is consistent with exactly this requirement. The construction observed since 2019 may serve the replacement of a reactor that is now among the oldest of its kind in operation anywhere, a reactor whose 60 years of service are themselves a measure of how long, and how quietly, the programme has run.

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[12] On Israeli fissile-material capabilities generally, *International Panel on Fissile Materials, Global Fissile Material Report*; and Cohen, *The Worst-Kept Secret* (2010).

[13] David Albright and Sarah Burkhard, Institute for Science and International Security (ISIS), *imagery analysis of Dimona construction*, 2021; *Associated Press*, satellite-imagery reporting, February 2021 and July 2025; Arms Control Association, Arms Control Today, April 2021.

The significance for this report is twofold. First, sustainment activity is further evidence of a living, modernising arsenal rather than a dormant or symbolic one. Second, it deepens the dependence traced elsewhere: sustaining and modernising warheads, missiles, and submarines over decades requires materials, components, and technologies that a small state cannot wholly supply from within, which is why the foreign fingerprints documented in the next section are not a historical curiosity but a continuing condition. The arsenal must be fed, and it cannot feed itself entirely.

## 4. Foreign Fingerprints: Who Built Israel's Bomb

The most closely guarded claim of the Israeli deterrent, that it is a sovereign national achievement, does not survive contact with the historical record. Every essential ingredient of the nuclear programme, the reactor, the heavy water that moderates it, the uranium that fuels it, and the reprocessing that extracts its plutonium, was supplied, sold, or diverted from abroad. The bomb in the basement was built with foreign hands, and the fingerprints are a matter of declassified record.

### France: The Reactor and the Reprocessing Plant

The foundation was French. Under a secret agreement reached in 1957, in the aftermath of the Suez Crisis, France built the Dimona reactor, a facility variously described as a 24-megawatt research reactor, and the adjacent reprocessing plant that is the true engine of a weapons programme, since reprocessing separates weapons-usable plutonium. To conceal the project, reactor components were reportedly declared to French customs as parts of a desalination plant bound for Latin America. French cooperation, and its supply of uranium, continued until President de Gaulle pressed for inspections and wound the relationship down in the early to mid-1960s.[14]

French archival disclosures confirm that the extent of the assistance far exceeded ordinary civil technical transfer. As documented by the French investigative journalist Pierre Péan in Les Deux Bombes (1982), the secret 1957 Franco-Israeli agreement, signed at Saint-Cyr, included the covert supply of an underground chemical reprocessing plant designed by the French firm Saint-Gobain Techniques Nouvelles, the very facility that separates weapons-usable plutonium. Péan's reading of the official French files further indicated that Dimona's cooling circuits were deliberately over-

[14] Avner Cohen, *Israel and the Bomb* (New York: Columbia University Press, 1998), chs. 2–4; *National Security Archive, Electronic Briefing Book*, ed. Avner Cohen and William Burr, "The U.S. Discovery of Israel's Secret Nuclear Project"; Wilson Center, *Nuclear Proliferation International History Project*. On the desalination cover story and de Gaulle's pressure, see also Pierre Péan, *Les deux bombes* (Paris: Fayard, 1982).

engineered to handle a thermal output of 70 megawatts or more, well beyond the officially declared 24-to-26-megawatt research threshold, enabling the reactor to yield upwards of 20 to 25 kilogrammes of weapons-grade plutonium annually.[15]

This technical capability was corroborated in 1986 by Francis Perrin, High Commissioner of the French Atomic Energy Commission (CEA) from 1951 to 1970, who acknowledged publicly that French and Israeli scientists had engaged in joint weapon-design research in the late 1950s, during which France shared technical data derived ultimately from Manhattan Project research. The record therefore demonstrates that the initial capability was not an indigenous breakthrough but a direct transfer of French nuclear-weapon architecture and industrial reprocessing engineering.[16]

Péan's account also revises the conventional picture of de Gaulle's role. Far from directing the cooperation, the French president was for years kept in the dark about the true nature of the project, which Shimon Peres organised and drove; the collaboration grew after 1958 despite de Gaulle's belief that he was curbing it, and it was only in 1967 that the veil was lifted for the head of the French state, who reacted with anger on learning both that the Israeli bomb had been operational since 1966 and how narrowly, in Péan's telling, Israel was spared from resorting to it in the crisis of 1973. Whatever the precise chronology, the episode confirms that the foundational nuclear partnership was conducted in a secrecy so deep that it concealed its full extent even from the supplier's own head of government.[17]

**Norway and the United States: The Heavy Water**

A heavy-water reactor cannot operate without heavy water, and Israel had none of its own. Norway supplied twenty tonnes to the Dimona reactor in 1959, routed through a surplus British stock, at a time when Norwegian heavy water was available, unlike the American product, without inspection rights. The United Kingdom (UK) itself suspected the material was destined for plutonium production. When the reactor started up, the US supplied four further tonnes. Norway's twenty

[15]Pierre Péan, *Les Deux Bombes* (Paris: Fayard, 1982), pp. 78–112.
[16]Francis Perrin, "Comment Israël a eu la bombe," Le Figaro, 12 October 1986; see also David Albright and Mark Hibbs, "Proliferation Primer: Israel's Nuclear Prowess," *Bulletin of the Atomic Scientists 45*, no. 5 (1989): 16–23.
[17]Péan, op. cit.

tonnes, one arms-control history notes, went into a reactor that has since produced enough plutonium for well over one hundred bombs.[18]

Declassified files from the Norwegian Ministry of Foreign Affairs, analysed by the historian Astrid Forland in *The Nonproliferation Review*, confirm that the 1959 sale of twenty tonnes of heavy water was negotiated through the Norwegian commercial entity Noratom specifically to bypass public and parliamentary oversight and that the contract contained no provision for IAEA safeguards or re-export monitoring. Although Israel represented the material as intended for a peaceful power programme, internal British and Norwegian diplomatic correspondence of 1961 acknowledged that it had been diverted entirely into the French-built Dimona reactor to initiate plutonium production. When Norwegian inspectors requested a site visit in 1988, following international media disclosures, Israel restricted access to the heavy-water storage tanks and declined a full-scope accounting. Norway's export thus functioned as the indispensable chemical moderator for an uninspected weapons-grade plutonium pipeline.[19]

**Uranium: South Africa, Argentina, and Diversion**

The uranium came from many hands, several of them illicit. Israel obtained yellowcake from apartheid South Africa, by some accounts several hundred tonnes, in a relationship of nuclear cooperation that included the reported exchange of tritium for uranium; it purchased roughly 100 tonnes from Argentina in 1963 to 1964 without IAEA safeguards; and in the 1968 "Plumbat affair", Israeli intelligence diverted some 200 tonnes of uranium ore at sea, routed through a front company. Most seriously, a longstanding assessment by the US CIA, articulated publicly by a former deputy director, held that weapons-grade uranium missing in the 1960s from the NUMEC plant in Apollo, Pennsylvania, had been diverted to Israel, though the case has never been proven in law.[20]

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[18]Wisconsin Project on Nuclear Arms Control, "Israeli A-Bombs and Norwegian Heavy Water"; on British involvement and the UK's own suspicions, drawn from declassified records, *BBC Newsnight*, "How Britain helped Israel get the bomb" (2005). See also Astrid Forland's scholarship on Norway's heavy-water exports.

[19]Norwegian Ministry of Foreign Affairs Archives (Oslo), Declassified Files on Noratom AS Heavy Water Export Contracts (1959–1960), Dossier 31.4/12; Astrid Forland, "Installing Heavy Water Safeguards: Norway and the Israeli Nuclear Programme 1956–1960," *The Nonproliferation Review 5*, no. 1 (1997): 11–22.

[20]On the NUMEC/Apollo case, Victor Gilinsky and Roger J. Mattson, "Revisiting the NUMEC affair," *Bulletin of the Atomic Scientists 66*, no. 2 (2010): 61–75, and Roger J. Mattson, *Stealing the Atom Bomb: How Denial and Deception Armed Israel (2016)*. On the Plumb at affair and South African and Argentine uranium, Middle East

**The Apartheid Alliance**

The South African connection deserves particular emphasis, because it was not a one-off purchase but a sustained strategic partnership between two isolated states, each pursuing a nuclear capability in defiance of international opinion. Israel obtained South African uranium; the two states are widely assessed to have cooperated on nuclear and missile technology; and the unexplained 1979 flash discussed in Section 2 falls within this period of close collaboration. That the region's undeclared nuclear power built part of its arsenal in partnership with the apartheid regime is a historical fact that sits uneasily beside its present posture as a guardian of non-proliferation, and it is documented in the declassified record and in the scholarship on the relationship.[21]

The declassified top-secret minutes of the South African Department of Defence, uncovered by Sasha Polakow-Suransky, put this trade on a firm documentary footing. At a bilateral meeting on 31 March 1975, the South African defence minister, P.W. Botha, and his Israeli counterpart, Shimon Peres, negotiated an exchange under which South Africa supplied over 600 tonnes of raw uranium yellowcake to fuel the Dimona reactor. In return, according to former South African intelligence officials, Israel supplied Pretoria with tritium, the heavy-water reactor by-product that enables boosted-yield warheads, assisting South Africa's own nascent weapons programme. This reciprocal trade of raw fissile feed for boosted-warhead technology extended to joint maritime surveillance in the South Atlantic, and it supplies the material background to the exo-atmospheric double flash recorded by the American Vela 6911 satellite on 22 September 1979, the episode discussed in Section 2.[22]

Research and Information Project (MERIP), "Recipe for an Israeli Nuclear Arsenal," MERIP Reports, 1986; and Cohen, *Israel and the Bomb* (1998).

[21] Sasha Polakow-Suransky, *The Unspoken Alliance: Israel's Secret Relationship with Apartheid South Africa* (New York: Pantheon Books, 2010).

[22] South African Department of Defence Archives (Pretoria), Top Secret Minutes of the Bilateral Defence Cooperation Meeting between Minister P.W. Botha and Minister Shimon Peres, 31 March 1975; Sasha Polakow-Suransky, *The Unspoken Alliance: Israel's Secret Relationship with Apartheid South Africa* (New York: Pantheon Books, 2010), pp. 74–91; James Sanders, *Apartheid's Friends: The Rise and Fall of South Africa's Secret Service* (London: John Murray, 2006), pp. 142–158.

**Table 4.1: The Foreign Provenance of Israel's Nuclear and Missile Programme**

| Supplier | Contribution | Period |
|---|---|---|
| **France** | Dimona reactor and reprocessing plant; Jericho missile design; initial uranium | 1957–1960s |
| **Norway** | 20 tonnes of heavy water for the reactor | 1959 |
| **United States** | 4 tonnes of heavy water; alleged HEU diversion (disputed) | 1960s |
| **South Africa** | Uranium (reported hundreds of tonnes); nuclear cooperation | 1960s–1970s |
| **Argentina** | ~100 tonnes of yellowcake, unsafeguarded | 1963–1964 |
| **United Kingdom** | Restricted-material shipments (per BBC, 2006) | 1950s–1960s |
| **Germany** | Dolphin-class submarines (sea-based leg) | 1990s–present |

*Sources: Wilson Center; Wisconsin Project; MERIP (1986); Nuclear Age Peace Foundation; Reuters (2022) on submarines. Disputed items, including the alleged NUMEC/Apollo HEU diversion and the 1979 Vela event, are labelled as such and are not treated as established.*

### Germany and the Submarine Pipeline

The foreign contribution did not end in the 1960s; it continues to the present in the form of the German-built submarines that are widely assessed to provide a possible sea-based nuclear capability. Since the 1990s, Germany has supplied Israel with successive batches of Dolphin-class boats, widely assessed to be capable of launching nuclear-armed cruise missiles, and has subsidised their cost substantially as a matter of historical responsibility. A further contract, worth around USD 3.4 billion, was signed in 2022. This element, widely regarded as the most survivable part of Israel's deterrent if the boats are so configured, is thus not merely of foreign origin but of continuing foreign manufacture and foreign subsidy, a dependence that is renewed with each new class of boat.[23]

### The Pattern: Acquisition by Secrecy

Taken together, the episodes trace a consistent method: the acquisition of a national deterrent through secrecy, subsidy, and, where necessary, deception. The reactor was disguised as a desalination plant; the heavy water was routed through third parties; the uranium was diverted at

[23]"Israel signs $3.4 bln submarines deal with Germany's Thyssenkrupp," *Reuters*, 20 January 2022; U.S. Naval Institute Proceedings, June 2024.

sea and, by the CIA's assessment, syphoned from an American facility; the missiles were designed abroad and continued after an embargo; and the submarines were and are built in a foreign yard. This is not the profile of a self-reliant power that happened to buy some components. It is the profile of an arsenal whose every critical element was obtained from others, often by means that the same state would condemn as proliferation if practised by an adversary. The method is the message, and the message is the double standard that Part IV examines.

**The Meaning of the Fingerprints**

Two conclusions follow, and both must be stated with care. The first is historical: the Israeli programme originated overwhelmingly in foreign assistance, assembled from French engineering, Norwegian and American heavy water, South African, Argentine, and, by a disputed CIA assessment, diverted American uranium, and German submarines. The claim that the arsenal was a purely sovereign, self-made achievement does not survive the record. The second is normative, and it is the subject of Part IV: a state that acquired its arsenal through secret deals, front companies, and, in several contested cases, the diversion of others' material occupies an awkward position as an advocate of non-proliferation in its region. Neither conclusion, however, settles the distinct question of present dependence, to which the framework of Section 1 and the next section are addressed.

There is also a matter of historical memory. The suppliers who enabled the programme, France above all, but also Norway, the US, and the others, largely escaped consequences, and the acquisition was quietly absorbed into the settled order of the region. Recovering that history is a precondition for honest analysis, because a deterrent presented as wholly sovereign and self-made supports a claim to autonomy that the origins do not sustain. What the origins do not by themselves establish, however, is that Israel remains dependent today, and it is to that question that the discussion now turns.

**From Foreign Assistance to Domestic Absorption**

The provenance documented in this section describes how Israel's programmes began, not the extent of its capabilities today, and the two must not be conflated. Over the intervening decades Israel has absorbed much of the technology it once imported and has built a defence-industrial and scientific base of genuine depth. It designs and produces its own ballistic missiles and space-launch vehicles; it sustains the Dimona complex and its fissile-material cycle from national

resources; and it leads the world in several fields directly relevant to this report, among them solid-propellant rocketry, satellite launch and reconnaissance, radar and seeker technology, battle-management software, electronic warfare, and the development of missile-defence interceptors. Foreign assistance enabled the origin; it did not condemn the recipient to permanent dependence, and to read the fingerprints of the 1950s and 1960s as a description of Israel in 2026 would be an error.

The honest picture is therefore mixed, and the framework of Section 1 is designed to capture it. In the nuclear and ballistic-missile domains, where the foreign role was greatest at the outset, Israel has largely nationalised the capability and now sustains it independently. Meaningful present dependence is concentrated elsewhere and in identifiable places: in combat-aircraft platforms, which Israel does not build; in submarine construction, which it cannot perform at home; in the replenishment of the most advanced interceptors, which is slow and partly American; in the intelligence and early-warning feeds examined in Part III; and, most acutely, in the wartime resupply of munitions that a prolonged conflict consumes faster than any national stock can bear. To say that Israel is dependent is meaningful only if one specifies on what, and the remainder of this report is an attempt to do exactly that.

# PART II: THE SWORD: ISRAEL'S MISSILE FORCES

## 5. The Jericho Line: A French-Born Ballistic Missile Force

The delivery system at the centre of Israel's nuclear deterrent is the Jericho family of ballistic missiles, and its origin is the same as the reactor's: France. The story of Jericho is a second illustration of the report's theme, a capability presented as national that was in fact designed abroad and only later domesticated after a supplier turned off the tap.

### Designed in France as the MD-620

In 1962 the French government asked the aviation company Dassault to develop a ballistic missile on behalf of Israel. The result was the MD-620, designed to carry a warhead over a range of some 500 kilometres; it was, by Dassault's own account, France's first ballistic missile to feature an airborne digital computer. A single-stage version was first tested in 1965 and a two-stage version in 1966, from a launch site on an island off the French coast. When France imposed a full arms embargo on Israel in 1968 to 1969, roughly a dozen missiles had already been delivered, and Israel continued the programme itself.[24]

Israel Aerospace Industries took the French design forward, producing an estimated fifty additional Jericho I missiles through the 1970s, and the programme, which cost close to a billion dollars by 1980, incorporated some American technology as it matured. The Jericho I, Israel's first nuclear-capable missile, entered service around 1973. The point is not that Israel lacked the talent to develop missiles but that it did not do so from a standing start: it built on a French design, French engineering drawings, and French-supplied test articles, exactly as it built its reactor on French engineering.[25]

### Jericho II, Jericho III, and the Reach Across the Region

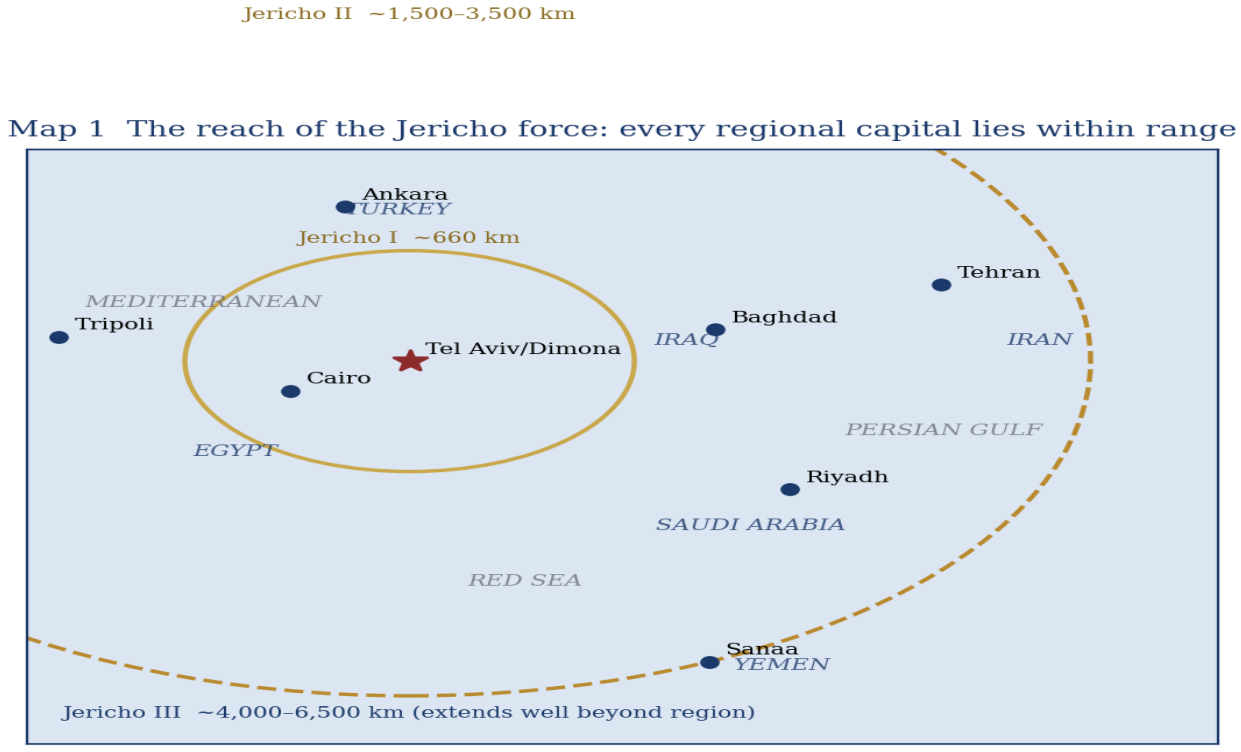
From this foundation, Israel developed longer-ranged systems, reportedly with American assistance in the case of the Jericho II, a two-stage intermediate-range missile developed through the 1970s and 1980s with a range in the order of 1,500 to 3,500 kilometres. The Jericho III, in

[24]Dassault Aviation, official company history, "MD 620 Jericho"; "Jericho 1," CSIS Missile Threat, Center for Strategic and International Studies, https://missilethreat.csis.org/missile/jericho-1/. On the French embargo of 1967–69, see *Cohen, Israel and the Bomb* (1998).

[25]GlobalSecurity.org, "Jericho 1"; *The War Zone (TWZ)*, "Could Israel Use Conventionally-Armed Jericho Ballistic Missiles to Strike Iran?" 2024.

service from around 2011, is assessed to reach some 4,000 to 6,500 kilometres, and by some accounts further still, which places not only every capital in the Middle East but targets far beyond it within range. The missiles are produced by Israel Aerospace Industries and are reported to be based on mobile launchers and in hardened sites; the associated Shavit space launch vehicle, which places Israel's Ofeq satellites in orbit, shares the heavy-lift technology and underlines the dual-use character of the programme.[26]

**Map 1: The reach of the Jericho force.**




*Range rings are representative open-source estimates; positions are schematic.*

[26]CSIS Missile Threat, "Jericho" series; *TWZ* (2024). Ranges are open-source estimates and vary between sources.

**Table 5.1: The Jericho Ballistic-Missile Family**

| System | Class/range | Status | Origin |
|---|---|---|---|
| **Jericho I** | SRBM, ~500–660 km | Retired (1990s) | French MD-620 design; IAI-produced |
| **Jericho II** | MRBM/IRBM, ~1,500–3,500 km | In service (from 1989) | IAI, with reported US assistance |
| **Jericho III** | IRBM, ~4,000–6,500 km | In service (from ~2011) | IAI; Shavit-related technology |

*Sources: Dassault Aviation; CSIS Missile Threat; GlobalSecurity.org; TWZ (2024). Ranges are external estimates.*

### The Jericho in Regional Perspective

Israel's ballistic-missile force is qualitatively distinct from those of its neighbours in one decisive respect: it is nuclear-capable and widely assessed to have a nuclear role. Other regional actors, Iran above all, field large and increasingly precise conventional missile arsenals, but none pairs them with acknowledged nuclear warheads. The Jericho force therefore occupies a category of its own, and its reach, extending across the entire region and well beyond, is a standing reminder of the asymmetry at the heart of Middle Eastern security. The very existence of this force, unacknowledged yet unmistakable, is part of what drives the missile competition that the rest of this report examines, since states that cannot match Israel's nuclear-tipped reach have every incentive to invest instead in the mass and precision of conventional missiles and drones.

This dynamic is central to understanding the war of 2026 and the exposure it produced. Denied the nuclear road by Israel's monopoly and its preventive strikes, Iran and others have poured their resources into exactly the conventional capabilities, cheap, numerous, and increasingly precise, that the later sections show to be so corrosive of Israel's expensive defensive architecture. The Jericho force, in other words, is not only a capability but a cause: its existence, and the monopoly it symbolises, has helped to shape the missile competition that now threatens to exhaust the shield. The sword and the threat it provokes are two ends of the same regional dynamic, and the report's later analysis of the shield's exhaustion cannot be separated from the asymmetry that this section has described.

**Basing, Mobility, and Survivability**

The Jericho force is reported to be based at Sdot Micha, east of the coastal launch site at Palmachim, in a combination of hardened silos and road- and rail-mobile launchers concealed in the surrounding terrain. Mobility and concealment are the land leg's principal contributions to survivability: a missile that can be moved and hidden is harder to destroy in a first strike than one in a fixed and known location. Yet the land leg is also the most exposed to the pre-emption that Israel itself practises against others, which is precisely why the sea-based leg, examined in the next section, matters so much to the credibility of an assured second strike. The survivability of the deterrent, in other words, rests ultimately not on the Israeli-based missiles but on the German-built submarines and thus on a foreign supplier.

**The Shavit Overlap and the Intercontinental Question**

The Jericho programme is inseparable from Israel's space-launch capability. The Shavit rocket that places Israel's Ofeq reconnaissance satellites in orbit is a close technological relative of the Jericho, sharing solid-propellant heavy-lift stages, and a state that can orbit a satellite has demonstrated much of the propulsion and staging competence a long-range missile requires. This overlap should not be pressed too far. A space-launch capability demonstrates relevant technology, but it does not by itself amount to a tested, deployable intercontinental ballistic missile, which additionally requires re-entry vehicles, terminal guidance, and operational integration that a satellite launcher needs not have. What can be said is that the Jericho and Shavit programmes share a technological foundation, and that some assessments, on that basis, credit the Jericho III with a reach beyond the figures cited here; these remain external estimates rather than settled specifications. The space programme is the civil face of a capability whose military parameters Israel will not describe.[27]

**A Conventional Option**

The Jericho force is usually discussed as a nuclear delivery system, but in a prolonged conventional war it also represents a latent conventional-strike option, a way to reach distant targets without committing crewed aircraft to the contested airspace discussed in Section 9. Whether Israel has used or would use conventionally-armed Jericho missiles is not publicly established, and the

[27]CSIS Missile Threat, Center for Strategic and International Studies; and on the Shavit–Jericho technological relationship, standard open-source assessments of Israel's launch vehicles.

question is beyond the scope of this report, but the existence of the option underlines the point that the same programme serves several purposes at once, nuclear deterrence, conventional reach, and space launch, all resting on the French-derived foundation with which the section began.

The Jericho force is real, capable, and widely assessed to have a nuclear role, and it gives Israel a reach no other Middle Eastern state possesses. Its origins are foreign, and that lineage matters for the question of provenance; but the force is now designed and produced within Israel, so it is better understood as a capability of foreign origin that Israel has since nationalised than as one on which it remains dependent. On the framework of Section 1, the Jericho illustrates historical provenance and design lineage rather than meaningful present dependence, and the distinction is central to a fair assessment of Israeli autonomy.

The wider significance of the Jericho story is that it disproves the myth of self-reliance at the level of the delivery system as decisively as the reactor disproves it at the level of the warhead. A state that presents its missile force as a national achievement built that force on a French design, matured it with American assistance, and pairs it with satellites launched by a rocket of the same lineage. None of this diminishes the engineering skill that Israel has since brought to bear, which is considerable; it locates that skill accurately, as the development of a foreign foundation rather than the creation of something from nothing. The pattern established with the reactor and repeated with the missile will appear once more with the shield, and it is the through-line of the whole report: capability that is real and provenance that is foreign.

## 6. Modernising the Strike Force: Triad, Submarines, and Reach

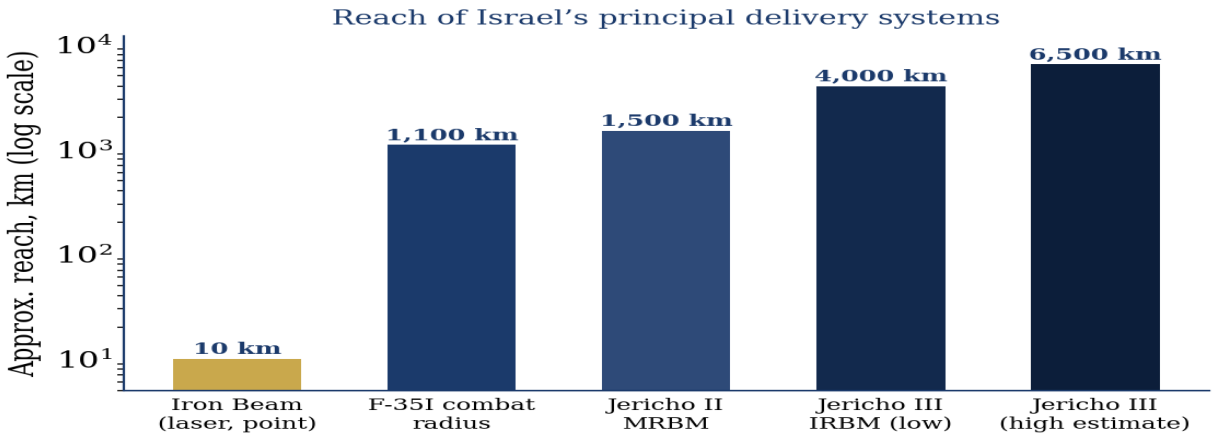
Israel is not merely maintaining its delivery systems but extending them across all three legs of the triad, and here too the foreign dependence is structural rather than incidental. This section sets out the delivery architecture and the modernisation under way and shows that the most survivable and most secretive leg, the sea-based one, is the most foreign of all.

### The Three Legs

The airborne leg rests on Israel's American combat aircraft, historically the F-15 and F-16 and potentially the stealthy F-35I, capable of delivering gravity bombs. The land leg is the Jericho force of Section 5, on mobile launchers and in hardened sites, which provides range and a measure of survivability through mobility and concealment. A possible sea leg rests on the Dolphin-class

submarines, which are widely assessed as potentially capable of carrying nuclear-armed cruise missiles; if so configured, and if kept on patrol, they would furnish the survivable second-strike capability that mature nuclear forces seek, since a submarine at sea is the hardest of all platforms to find and destroy. Whether the leg is in fact so configured and so operated is, as Section 2 noted, unconfirmed, and the language of a settled triad overstates what the open record establishes.

**Figure 6.1: Approximate Reach of Israel's Principal Delivery Systems (Log Scale)**




### The German Submarines

The sea-based deterrent, if it exists in the assessed form, is a German product. Israel's Dolphin-class boats are built by the German shipbuilder now within ThyssenKrupp, and their acquisition has been heavily subsidised by Berlin as a matter of historical responsibility; a further order was signed in a deal worth around USD 3.4 billion in 2022. If the submarines do carry a nuclear-armed cruise missile, then the element widely regarded as the most survivable part of Israel's deterrent is built in and part-funded by a foreign state, a clear instance of continuing material dependence in submarine construction, servicing, and replacement. The point should nonetheless be kept in proportion: the sea leg's nuclear role is inferred rather than established, and a hull built abroad is not one a foreign government can switch off at will, since the boats, once delivered, are Israel's to operate.[28]

[28]"Israel signs $3.4 bln submarines deal with Germany's Thyssenkrupp," *Reuters*, 20 January 2022; U.S. Naval Institute Proceedings, "Dolphin-Class Submarines: Israel's Undersea Arsenal," June 2024.

**The Logic of the Second Strike**

The purpose of a survivable leg, and above all of a sea-based one, is to guarantee that a nuclear force could ride out a first strike and retaliate, since it is the credibility of retaliation, not the mere possession of weapons, that deters. A submarine on patrol is the hardest of all platforms to locate and destroy, and a credible undersea leg would therefore convert a potentially vulnerable arsenal into a more secure one. This is why the Dolphin boats attract analytical attention out of all proportion to the thin public evidence about them. But the evidence is thin, and this report does not treat the second strike as assured. What can reasonably be said is that the submarines give Israel a plausible path to a survivable deterrent, that this path runs through a German shipyard, and that the actual operational status of the leg, its missiles, warheads, patrols, and command arrangements, is among the least verifiable claims in the entire account.

The dependence is doubly binding because a submarine is not a one-time purchase but a decades-long relationship. The boats require the builder's support for maintenance, spare parts, upgrades, and eventual replacement across a service life measured in decades, so the reliance on the German yard renews itself continuously rather than ending at delivery. A state that could, in principle, manufacture its own missiles and assemble its own warheads cannot build its own submarines, and so the most strategically important leg of its deterrent is tethered to the industrial capacity and the political consent of a foreign government in perpetuity. No clearer illustration exists of the report's central claim that Israeli strategic autonomy is, at its foundation, a set of foreign relationships maintained over time.

**Ofeq, Targeting, and the Space Dimension**

Modernisation of the strike force runs through space as well as through the three physical legs. Israel's Ofeq reconnaissance satellites, launched on the Shavit rocket related to the Jericho, provide the independent surveillance and targeting that a credible deterrent and a precision-strike capability require, and Israel is one of a small number of states able to build and orbit its own military satellites. Yet even here the autonomy is partial: Israel's wider intelligence picture, its missile early warning, and its access to the American space-based sensors described in Section 9 remain heavily entangled with the US. The space leg extends the reach of the strike force and, like every other leg, extends the dependence that comes with it.

**Modernisation and its Limits**

Across all three legs, Israel is upgrading: extending the range and accuracy of the Jericho force, sustaining the airborne leg through the F-35I, and renewing the submarine flotilla through successive German orders, while the construction at Dimona examined in Section 3 points to the modernisation of the warheads themselves. This is the behaviour of a committed and expanding nuclear power, not a reluctant or vestigial one. But every axis of modernisation runs through a foreign supplier, French-derived missiles, American aircraft, German submarines, and the German and American political permission on which each depends. Israel can modernise its deterrent only so far as its suppliers allow, and that is the quiet constraint beneath the loud capability. A deterrent that must be renewed abroad is a deterrent held partly in trust.

There is a further asymmetry worth drawing out. The declared nuclear-weapon states modernise their arsenals under at least the nominal constraint of the NPT's disarmament obligation and, in several cases, under bilateral arms-control agreements and a measure of transparency. Israel modernises entirely outside this framework: no treaty limits its numbers, no agreement caps its delivery systems, and no inspection verifies its activities. It is thus the one nuclear power in the world enhancing its forces under no external constraint whatsoever, while simultaneously insisting that its regional rival accept the most stringent constraints ever devised. The modernisation traced in this section is, in that sense, the material expression of the double standard: an unbound arsenal being quietly improved by a state that will not be bound in a region where it demands that others be.

# PART III: THE SHIELD AND ITS EXPOSURE

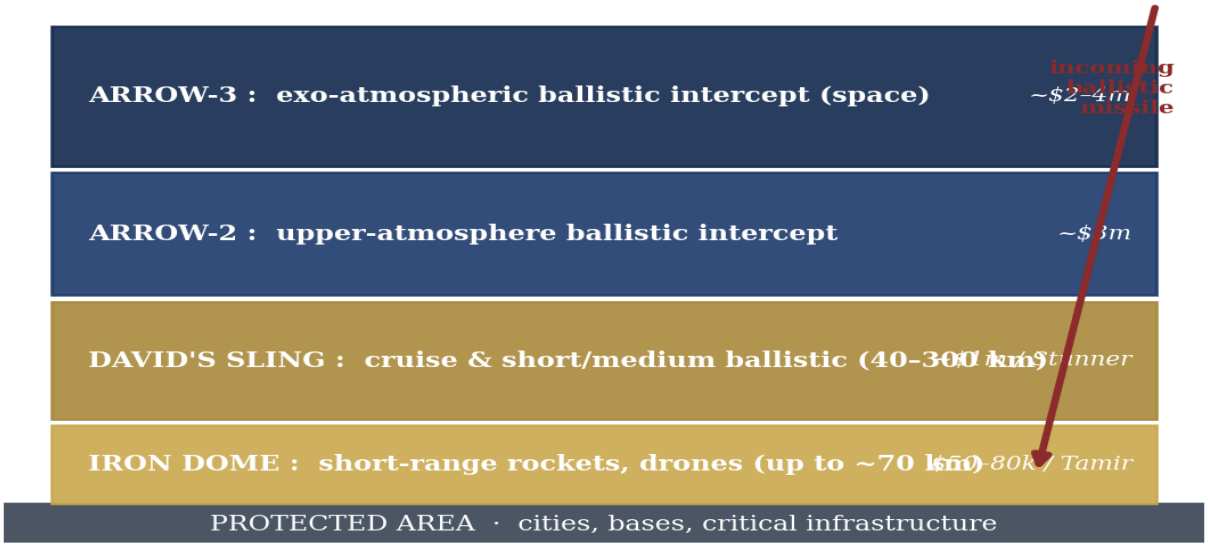
## 7. The Layered Shield and Its Foreign Core

If the sword is foreign, so is the shield. Israel's air and missile defence is organised as a set of overlapping layers, each tuned to a band of the threat, and it is genuinely the most combat-tested such network in the world. But its upper tiers are co-developed and co-produced with the US, its interceptors are drawn from a shared and finite pool, and its performance, as the next section shows, has been overtaken by the economics of a long war.

### The Layers

At the lowest tier, Iron Dome engages short-range rockets, artillery, and drones with the Tamir interceptor. Above it, David's Sling addresses cruise missiles and short-to-medium-range ballistic threats with the Stunner. The upper tiers belong to the Arrow family: Arrow-2 intercepts ballistic missiles in the upper atmosphere and Arrow-3 above it in space. From December 2025, Israel began fielding the Iron Beam high-energy laser against low-end threats, and at the regional level, American THAAD and Patriot batteries add depth.[29]

**Figure 7.1: Israel's Multi-Layered Air and Missile-Defence Architecture, by Interception Band and Approximate Interceptor Cost.**




[29]International Institute for Strategic Studies (IISS), *The Military Balance 2025* (London: Routledge, 2025), "Middle East and North Africa"; "What is Israel's multi-layered defence against Iranian missiles?" *Reuters*, 16 June 2025; Alma Research and Education Center, July 2026.

**Table 7.1: Israel's Principal Air and Missile-Defence Layers**

| System | Threat band | Interceptor | Origin/partner |
|---|---|---|---|
| **Iron Dome** | Rockets, artillery, drones | Tamir | Rafael; RTX (US) |
| **David's Sling** | Cruise, short/medium ballistic | Stunner | Rafael–Raytheon (US) |
| **Arrow-2** | Upper-atmosphere ballistic | Arrow-2 | Israel–US |
| **Arrow-3** | Exo-atmospheric ballistic | Arrow-3 | Israel–US (STARK) |
| **Iron Beam** | Rockets, drones (point defence) | Laser | Rafael |
| **Patriot / THAAD** | Terminal ballistic (regional) | PAC-3 / THAAD | US (wartime reinforcement) |

*Sources: Reuters (Jun. 2025); Alma Research Center (Jul. 2026). Interception envelopes are approximate.*

Read down the final column of the table with care. The systems that engage the ballistic threat are joint Israeli-American developments, not American systems with an Israeli veneer: Israel conceived them, designed much of them, and operates all of them, while the US funds and co-produces them. The dependence is real but specific. It lies not in ownership or operation, which are Israeli, but in the replenishment of the most advanced interceptors, whose production is shared and cannot be surged by Israel alone. Patriot and THAAD are separate matters again, American systems that reinforce the Israeli architecture in wartime rather than forming part of it. The precise claim, then, is not that the shield is foreign, but that its magazines, at the high end, cannot be refilled without the US.

### Iron Beam and the Limits of the Laser

The newest layer, the Iron Beam high-energy laser fielded from late 2025, is often presented as the answer to the cost problem, and in one respect it is. A laser engages incoming rockets and drones for the negligible cost of the electricity it consumes, and its magazine cannot be exhausted in the way a stock of interceptors can, because its ammunition is power rather than missiles. For the class of low-end threats it can reach, directed energy is the first technology that puts the cost-exchange back in the defender's favour, and Israel has pushed hard to field it.[30]

[30] Alma Research and Education Center, July 2026; and open-source reporting on the operational debut of Iron Beam.

The limits, however, are as important as the promise, and they are easily overlooked in the enthusiasm for a novel weapon. A laser's reach is short; its performance degrades in cloud, dust, and rain; and, decisively, it cannot engage the high-end ballistic missiles that consume the most expensive interceptors and constitute the gravest element of the threat. Iron Beam therefore relieves the bottom of the threat spectrum while leaving the top, where the magazine problem is deepest, essentially untouched. It is a genuine and valuable advance, and it is not a solution to the exposure the next section describes, only a partial mitigation of its least dangerous portion. The decisive contest remains at the upper tiers, where the interceptors are dear, the magazines are shallow, and the supply runs through Washington.

**The Economics Designed into the Shield**

The layered design is elegant, but it embeds a structural economic weakness that the next section shows the war has exposed. Each tier is more expensive than the one below, so the interceptor that stops a ballistic missile in space costs orders of magnitude more than the rocket or drone stopped at the lowest tier, and every one of these interceptors costs far more than the threat it destroys. A defence built as a stack of increasingly costly layers becomes more expensive to operate exactly as the threat becomes more dangerous, and against an adversary who can fire cheap projectiles in volume, the defender is drawn into an exchange it cannot win on cost. The architecture is a marvel of engineering and a liability of economics, and the two cannot be separated.

**Sensors, Command, and the American Backbone**

What turns the separate layers into a single shield is the network of radars, sensors, and battle-management systems that detect, track, and assign each threat to the right interceptor in the seconds available. This is the genuine locus of Israeli excellence, and it is also the point of deepest entanglement with the US, because the shared early-warning data, the American radar coverage in the region, and the space-based sensors that cue the upper tiers are not wholly Israel's own. A shield is only as good as the picture it is given, and Israel's picture is drawn in part by American eyes. When those eyes are themselves targeted, as the strikes on the American radar in Qatar showed in 2026, the shield is degraded before a single interceptor is fired.[31]

[31] International Institute for Strategic Studies, *The Military Balance 2025*; and reporting on strikes against US regional radar in 2026 (see Chapter 9).

### A Shield Israel Does Not Wholly Own

The layered architecture was developed over four decades in close partnership with the US, but the partnership should not be mistaken for American ownership. The Arrow programme grew out of American-Israeli cooperation after the Scud attacks of 1991 and is co-developed and co-funded; David's Sling is a joint Rafael and Raytheon project; and Iron Dome, a Rafael design, is co-produced in the US. In each case, the systems were conceived, designed, and are operated by Israel, with American funding and, for some components, co-production: they are Israeli systems built in partnership, not American systems with an Israeli badge. The genuine and substantial Israeli contribution lies in the concept, the sensors, much of the interceptor design, the battle-management software, and the operational doctrine that binds the layers into the most combat-tested network in the world. What Israel cannot readily do alone is replenish the most advanced interceptors at the rate a long war demands, because their production is shared and slow, and that, as the next section shows, is where the dependence actually bites. Patriot and THAAD, by contrast, are American systems that reinforce this architecture in wartime rather than permanent Israeli layers, and the two should be kept distinct.

## 8. Under Prolonged Pressure: What the Iran War Revealed About the Shield

The 2026 war placed Israel's and its partners' missile shield under a test no exercise could reproduce: a real adversary firing in volume over months. The war, which began on 28 February 2026 following the collapse of US-Iran nuclear talks and the joint US-Israeli strike on Iranian nuclear facilities, subjected Israel's multi-layered missile defence architecture, Iron Dome, David's Sling, Arrow-2/3, and US-operated THAAD batteries, to sustained combat stress unmatched by any prior exercise or short conflict. Over roughly 40 days of active hostilities through the 8 April ceasefire, Iran launched an estimated 650 ballistic missiles at Israel, the majority fitted with cluster warheads, alongside thousands of missiles and drones directed at Gulf states hosting US and allied forces. This report compiles findings from Israeli, non-Israeli and independent open-source outlets, Al Jazeera, Xinhua, Airwars, RUSI, the Institute for the Study of War, France 24, CNN, Reuters, and other monitoring bodies, to assess the physical scope of damage in Tel Aviv, Dimona and beyond and the operational condition of Israel's shield.

**Damage in Tel Aviv and the Central Coastal Belt**

Tel Aviv and its metropolitan suburbs (Ramat Gan, Bnei Brak, Bat Yam, Holon, and Petah Tikva) absorbed the most sustained bombardment of the war. "In recent days", reported *Future Warfare Magazine,* "**Iranian missiles have been breaching Israel's defensive shield with increasing frequency."**[32]

The first fatal strike came on 28 February, when a missile hit a residential building in central Tel Aviv, killing one woman and injuring more than two dozen people; sirens reportedly failed to sound with the standard 90-second warning margin. Xinhua's photojournalism from early March documented direct impacts on residential, commercial, and infrastructure targets across the city,[33] including a fatal strike on a construction worker in Yehud. By 9 March, cluster munitions were dispersing 30 to 80 submunitions across radii of up to 10 kilometres, spreading damage into Or Yehuda, Holon, and Bat Yam. Waves on 18-19 March produced at least eight separate impact points across Tel Aviv, Ramat Gan, and Bnei Brak, and further barrages between 21 and 24 March struck an upscale northern Tel Aviv neighbourhood, tearing open the facade of a three-storey residential building.[34] Video evidence from trusted combat footage sources shows missiles successfully getting past interceptor attacks and hitting buildings directly, including one case where a missile went through two interceptor attempts before hitting its target.

Across the war, Airwars independently reports 650 missile attacks in 40 days,[35] of which, roughly 16 missiles with conventional warheads and about 50 with cluster munitions, successfully penetrated Israeli defences, killing 24 civilians and injuring more than 7,000. Airwars' independent monitoring tracked 128 civilian-harm incidents,[36] inside Israel and the occupied West Bank, stemming from Iranian and Hezbollah fire during the same period.

[32] Iran War: first cracks in Israel's missile shield. *Future Warfare Magazine*. 26/03/2026. Pietro Batacchi. https://www.fw-mag.com/shownews/986/iran-war-first-cracks-in-israel-s-missile-shield

[33] Mideast in Pictures: Tel Aviv under fire. *Xinhua*:2026-03-09. https://english.news.cn/20260309/b3f27a43fb114ef5b923756867b5b2ba/c.html

[34] Tel Aviv Before VS After: Iran's 1 Ton Ballistic Missiles Leave Trail Of Damage in Chilling Video: https://www.youtube.com/watch?v=g3iwBdxWWgo

[35] The Iran War (Feb-April 2026): The Civilian Harm Watchdog https://airwars.org/conflict/israeli-iranian-and-us-forces-2026/

[36] Airwars: The human cost of the 40-day Iran war: https://airwars.org/the-human-cost-of-the-40-day-iran-war/

**The Dimona and Arad Strikes**

The most symbolically significant strikes of the war landed on 21 March near Dimona, home to the undeclared Shimon Peres Negev Nuclear Research Center, and the neighbouring town of Arad. Al Jazeera reported at least 180 people wounded across the two towns after Iran said the strikes were retaliation for an alleged US/Israeli attack on Iran's Natanz enrichment site earlier that day.[37] 64 people were wounded in Dimona and 116 in Arad, with several residential buildings destroyed and a 10-year-old boy among the injured.[38] Al Jazeera's Ramallah correspondent identified three separate impact sites in Dimona, including a collapsed three-storey building and multiple fires. Agence France-Presse (AFP), reporting from Dimona, filed via the Times of Israel, described the physical devastation in stark terms: debris “stretched as far as the eye could see”, with nearby houses 'blown apart’, leaving only load-bearing walls standing as hollow shells.[39] Crucially, an Israeli military spokesman conceded that "interceptors were launched that failed to hit the threats, resulting in two direct hits by ballistic missiles with warheads weighing hundreds of kilograms" in both towns, even though the incoming missiles were not "special or unfamiliar",[40] undercutting the IDF's own attempt to frame the failures as “unrelated coincidences.”[41]

The IAEA confirmed it detected no abnormal radiation levels and no indication of damage to the underground Negev nuclear research centre itself, distinguishing the destroyed civilian residential buildings from the hardened nuclear facility, which is roughly 10 kilometres away. Different military studies from public sources estimated that 6 to 8 accurate hits with strong warheads would be needed to damage the six-floor underground structure at Dimona and 10 to 12 coordinated strikes for complete destruction—something Iran's limited missile supply probably couldn't accomplish by the end of the war.[42]

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[37] Iran strikes towns near Israel’s key nuclear site, at least 180 wounded. *Al Jazeera*. 21 Mar 2026. https://www.aljazeera.com/news/2026/3/21/iran-strikes-towns-near-israels-nuclear-site-in-escalating-tit-for-tat

[38] Ibid.

[39] Iranian strike in southern town near nuclear facility rocks residents’ sense of security. *The Times of Israel*. 22 March 2026. https://www.timesofisrael.com/iranian-strike-in-town-near-dimona-nuclear-facility-rocks-residents-sense-of-security/

[40] Al Jazeera. 21 Mar 2026. Op. Cit.

[41] *The Times of Israel*. 22 March 2026. Op.Cit.

[42] *What If: Iran Attacked the Dimona Reactor?* AI Habtoor Research Centre. 22 Jun 2025. https://www.habtoorresearch.com/programmes/what-if-iran-attacked-the-dimona-reactor/

**Interceptor Depletion: What Independent Analysts Found**

Beyond the visible wreckage, the more consequential open-source finding concerns the exhaustion of interceptor stockpiles. The Royal United Services Institute (RUSI) calculated that in just the first 16 days of the war, US, Israeli, and allied forces expended 11,294 munitions at a cost of approximately USD 26 billion.[43] RUSI's analysis found that by late March, Israel had used 81.33 per cent of its pre-war Arrow-2/Arrow-3 interceptor stock, 54 per cent of David's Sling STUNNER interceptors, and 46 per cent of THAAD TALON interceptors deployed in-country, with the Arrow situation deemed "genuinely critical".[44] A follow-up investigation by Drop Site News, using information from a source in the Trump administration,[45] reported that just before the 8 April ceasefire, Israel had only a few ballistic missile interceptors left,[46] comparing these figures with pre-war numbers from the Payne Institute, RUSI found that Israel had used 122 of its 150 Arrow 2/3 missiles and 22 of its 48 THAAD missiles that were deployed.[47] This left Israel "increasingly dependent" on US Navy missile-defence ships operating offshore to fill the gap. The pattern of depletion recurred at the US level too: an August 2026 CNN report,[48] drawing on Pentagon inventory data, found the US military had burnt through nearly 80 per cent of its THAAD interceptor stock and roughly half its Patriot interceptors since the war began, with reports estimating three-plus years to rebuild THAAD stocks to pre-war levels.[49]

Israeli officials publicly denied any operational shortage throughout, with one military official telling reporters in mid-March, "We prepared for a prolonged conflict. We are monitoring the situation at all times."[50] Independent defence analysts were split on how alarmed to be: some

[43] *Over 11,000 munitions in 16 Days of the Iran War: 'Command of the Reload' Governs Endurance.* RUSI. 24 March 2026. https://www.rusi.org/explore-our-research/publications/commentary/over-11000-munitions-16-days-iran-war-command-reload-governs-endurance

[44] Ibid.

[45] Israeli Missile Interceptors Have Dwindled to "Double Digits": Trump Administration Official. Drop Site News. Apr 09, 2026. https://www.dropsitenews.com/p/israeli-missile-interceptors-iran-war

[46] Questions over Israel's interceptor stockpiles as Mideast war drags on. France 24 *(AFP)*. 28/03/2026. https://www.france24.com/en/live-news/20260328-questions-over-israel-s-interceptor-stockpiles-as-mideast-war-drags-on

[47] RUSI. 24 March 2026. Op.Cit.

[48] Nearly 80% of interceptors for a key missile defense system depleted, sources say. CNN. Aug 4, 2026. https://edition.cnn.com/2026/08/04/politics/us-iran-key-missile-interceptors-low

[49] Interceptor Crisis: Israel Days From Running Out of Arrow-3 as US THAAD Stocks Drain in Iran War, RUSI Warns 'Years Needed to Rebuild. Mar 26, 2026. Defence Security Asia. https://defencesecurityasia.com/en/israel-arrow3-thaad-shortage-iran-war-rusi-interceptor-crisis-2026/

[50] *The Times of Israel*. 18 March 2026, op.Cit.

experts told the Times of Israel that concerns were overstated given US resupply capacity, while RUSI and Drop Site's sourcing suggested the shortage was materially affecting operational choices by the ceasefire.[51]

**Interception Rate: A Contested but Declining Metric**

Open, non-Israeli reporting on the interception rate is fragmentary because Israel restricts disclosure of precise operational data, but the trajectory is nonetheless discernible. *Military Watch Magazine*, citing Haaretz's own reporting (not IDF public affairs), stated that roughly 8 out of 10 Iranian missiles were "reaching their targets" at one point in late March[52] a figure implying an interception rate far below the roughly 90 per cent baseline claimed for prior, shorter Iran-Israel exchanges. Centre for European Policy Analysis defence expert Federico Borsari told *The New Arab* that IDF statements indicated an approximately 92 per cent interception rate as of 27 March but cautioned that "Israeli authorities have provided only fragmentary data about interception rates; therefore, a high-confidence assessment remains difficult."[53] *The New York Times* separately reported that out of roughly 400 ballistic missiles fired over the war's first three weeks, only four penetrated Israeli defences fully intact, though this figure counts only missiles that struck with warheads functioning as designed, excluding cluster-munition dispersal and debris-related harm, which caused the bulk of documented casualties.[54] The difference between "missiles that were completely stopped", "missiles that caused damage through debris or smaller explosives", and "missiles that hit their targets directly" is the main reason for conflicting public statements about how well the shield is working.

[51] Drop Site News. Apr 09, 2026, op. Cit.

[52] Israeli Sources Confirm Iranian Missile Strikes Have 80 Percent Success Rates as Air Defences Falter. *Military Watch Magazine*. March-27th-2026. https://militarywatchmagazine.com/article/israel-confirm-iranian-missile-80pct-success

[53] How did Israel's air defences perform against Iran's missiles? *The New Arab*. 16 April, 2026. https://www.newarab.com/analysis/how-did-israels-air-defences-perform-against-irans-missiles

[54] Isabel Kershner, "Israel's Missile Defence Under Scrutiny after Iranian Attack," 22 March 2026, https://www.nytimes.com/2026/03/22/world/middleeast/israel-missile-defense-iran.html

**Table 8.1: Comparative Context: 2025 Twelve-Day War vs. 2026 War**

| Metric | June 2025 Twelve-Day War | 2026 Iran War (Feb-Apr) |
|---|---|---|
| Duration | 12 days | ~40 days |
| Iranian missiles launched at Israel | 525 | 650 |
| Missiles that struck Israeli territory | 50-60 | ~66 (16 conventional + 50 cluster) |
| Reported interception rate | ~85 per cent[55] | Disputed: 80-92per cent depending on source[56] |
| Israeli civilian deaths | 28[57] | ~ 24 (in-war civilian toll) |
| Homes/buildings destroyed | 2,305 homes, 240 buildings[58] | Not yet independently tallied at comparable granularity |
| Interceptor stock strain | Drained, but not publicly quantified as critical | RUSI: Arrow stock ~81-100 per cent depleted by ceasefire |

The 2026 war was different from the 2025 12-Day War, mainly not because of how intense any single attack was, but because it lasted longer and had a steady pace. Iran launched missiles daily (about 10 missiles per day by late March, spaced out to not overload radar systems) for six weeks instead of just 12 days. This pacing, combined with the systematic use of cluster warheads (roughly half of Iranian missiles by mid-March), was explicitly designed to maximise the dispersed damage per missile that reached Israeli airspace while conserving Iran's own depleting missile-launcher inventory.[59]

### The "Broken Shield" Question

Independent, non-Israeli defence reporting supports a nuanced rather than binary conclusion. The evidence does not show Israel's shield collapsing outright or Iran achieving unimpeded strategic

[55] Is Israel running low on missile interceptors? How long can it withstand Iran's retaliatory attacks? *The Conversation*. 16 mars 2026. https://theconversation.com/is-israel-running-low-on-missile-interceptors-how-long-can-it-withstand-irans-retaliatory-attacks-278404

[56] *Military Watch Magazine*. March-27th-2026, op. Cit.

[57] *Twelve Days Under Fire: A Comprehensive Report on the Iran-Israel War*. HRANA. June 28, 2025. https://www.en-hrana.org/twelve-days-under-fire-a-comprehensive-report-on-the-iran-israel-war/

[58] Various sources.

[59] *Iran Update Special Report*, March 27, 2026. The Institute for the Study of War. https://understandingwar.org/research/middle-east/iran-update-special-report-march-27-2026/

strikes: the IAEA confirmed no radiological or structural damage to Israel's undeclared nuclear site at Dimona despite direct hits nearby, and the vast majority of the roughly 650 Iranian missiles were engaged by defences of some kind. Iran did not "break" the shield in the sense of neutralising it entirely or achieving unrestricted strategic penetration comparable to, say, a state with no missile defence.

However, the open-source record, independent of Israel's military messaging, does show something materially different from prior conflicts: sustained attrition warfare against a finite interceptor stockpile produced a measurable and admitted decline in defensive reliability over time, culminating in Israel's interceptor stock reportedly falling to "double digits" by the ceasefire and requiring direct US Navy backstopping. Direct hits on residential neighbourhoods in Dimona and Arad, explicitly acknowledged by Israeli military spokesmen as interceptor failures rather than deliberate leakage, mark a qualitative escalation from earlier conflicts, where strikes near a sensitive nuclear site of this character had not previously succeeded. The RUSI-documented depletion rate (81 per cent of Arrow stock by late March, nearing full exhaustion by ceasefire) represents the first time in the Iran-Israel confrontation's modern history that independent analysts have assessed Israel's top-tier exo-atmospheric interceptor layer as approaching operational exhaustion under sustained fire, rather than merely absorbing a short, intense barrage. In that specific sense, not “was Israel defenceless”, but “was the shield's endurance capacity, not just its permissible accuracy, tested and found finite for the first time”, the 2026 war constitutes an unprecedented stress event on Israel's missile defence architecture, distinguishing it from the shorter, higher-intensity but less protracted 2025, 12-Day War.

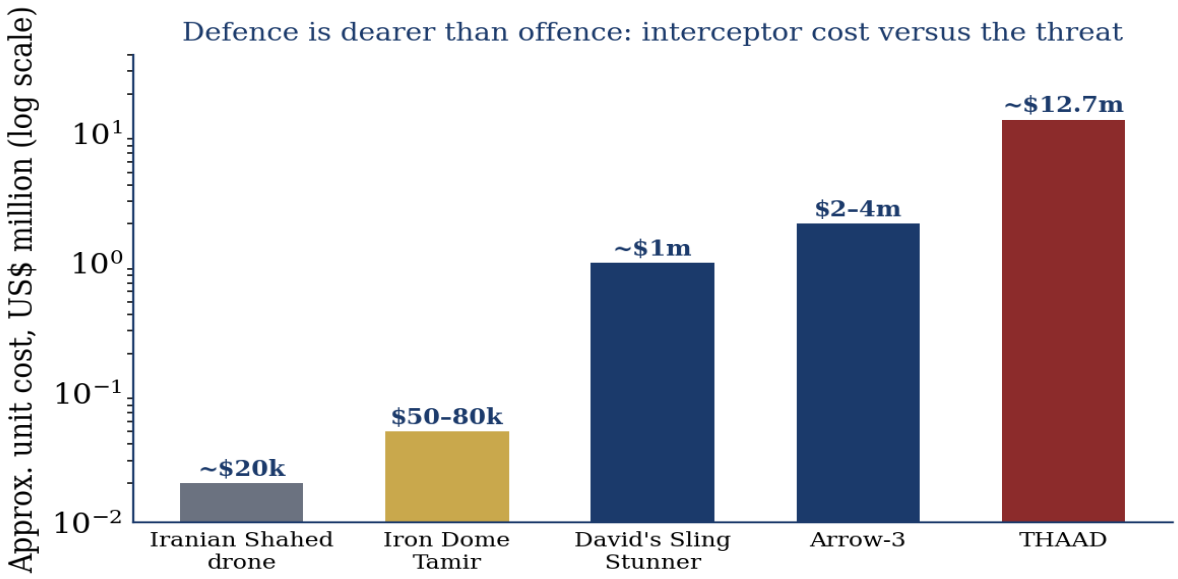
The defence continued to intercept, and it prevented a greater deal of damage; what the war revealed was not outright failure but the limits of sustainability in three dimensions, which we will now analyse: the economics of interception, the depletion of the magazines, and a reported erosion of Israel’s electronic-warfare advantage. The problem the war exposed is one of endurance under prolonged pressure and of dependence on external replenishment, rather than of a completely broken shield.

**The Economics Run Against the Defender**

The cost-exchange ratio favours the attacker. An Iron Dome interceptor costs an estimated 50,000 to 80,000 dollars, a David’s Sling interceptor, about a million, and an Arrow-3,

which engages ballistic missiles in space, some two to US $4 million, while the Iranian ballistic missiles and Shahed-type drones they stop cost a fraction as much.[60] A single intense barrage can impose an interception bill in the range of hundreds of millions of dollars, so in narrow unit terms the defender pays more to survive than the attacker pays to threaten. This comparison, however, is incomplete, and the report is careful not to press it too far. The relevant figure is not the interceptor set against the incoming missile, but the interceptor set against the value of what it defends: spending several million dollars to protect an airbase, a command centre, an energy facility, or a populated area is often entirely rational, and a defence that prevents such damage is doing its job even at an unfavourable unit ratio. The strategic problem is therefore not that interception is uneconomic in any single engagement but that finite magazines cannot sustain a very high rate of such engagements over a long war, so that time favours whoever can keep firing the cheaper munition.

**Figure 8.1: Approximate Unit Cost of the Threat vs the Interceptor (Log Scale).**




*Defence is structurally dearer than offence.*

[60] *Foundation for Defense of Democracies* (March 2026); Gulf Research Center, "The Price of Escalation," 18 June 2025.

**The Cost of a Barrage**

The arithmetic can be made concrete. When Iran launches a mixed barrage of ballistic missiles, cruise missiles, and drones, the defender must meet the higher-end threats with the higher-end interceptors, spending David's Sling and Arrow rounds worth between roughly one and four million dollars each against missiles that may have cost the attacker a small fraction of that. A single large barrage can thus impose an interception bill running into the hundreds of millions, or beyond, and can do so repeatedly, whereas the attacker replaces its expended projectiles far more cheaply and quickly. Over weeks and months of such exchanges, the cumulative cost and the cumulative depletion move inexorably against the defender, and no improvement in interception rate reverses the underlying economics. A defence that wins every engagement can still lose the campaign, because the campaign is a contest of magazines and treasuries, not of hit probabilities.

This inverts the intuition that most observers bring to missile defence. The televised image of interceptors rising to meet incoming missiles reads as a demonstration of strength, and in the moment, it is one. But the same image, repeated night after night, is a picture of a defender spending its scarcest and most expensive assets to destroy its adversary's cheapest and most plentiful ones and doing so faster than it can replace them. The spectacle of successful interception is, over a long war, the spectacle of a magazine emptying. The measure of the shield's strategic health is therefore not the interception rate, which may remain high to the end, but the depth of the magazines behind it, which the next section shows to be the true casualty of the war.

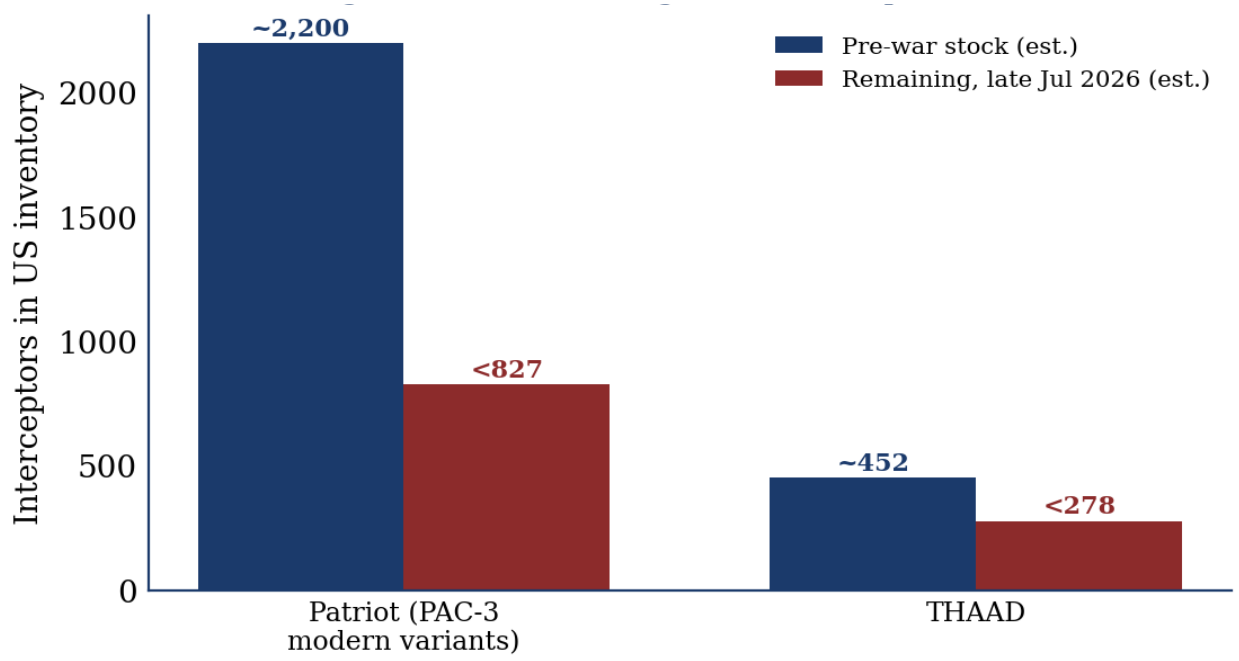
Two qualifications keep this argument from becoming too linear. First, the cost of an interceptor cannot be weighed against the cost of the incoming missile alone, because what the interceptor buys is the protection of the target beneath it. Spending USD 2 or 3 million dollars to defeat a missile aimed at an airbase, a command centre, an energy node, or a populated district may be entirely rational, since the value preserved far exceeds the round expended; a defence is not meant to win a price war with the attacker but to keep the defended asset intact. Second, a high interception rate genuinely matters to the people and installations under the shield, and it is not a trivial achievement. The magazine problem, properly stated, is therefore not that interception is a poor bargain in any single engagement, but that a favourable bargain cannot be sustained indefinitely against an adversary firing in volume: the binding constraint is stock and production

over time, not cost in the moment. It is sustainability, not the economic rationality of any one interception, that the war placed in doubt.

**The Magazines Drain**

Effectiveness became inventory in 2026. Israel informed the US that it was running critically low on ballistic-missile interceptors, and the American stocks on which it relies fell sharply. In late July 2026, CSIS estimated that fewer than 827 of the most modern Patriot interceptors and fewer than 278 THAAD interceptors remained in US inventories, down from roughly 2,200 and 452, respectively, before the war, figures that officials told CNN were close to internal government numbers.[61] Replenishment is a multi-year project, not a wartime fix, because high-end interceptors are among the most complex objects in manufacture, and their production cannot be scaled at the speed of an emergency. The RUSI described the phenomenon as a "magazine abyss", in which precision munitions are consumed faster than they can be built.

**Figure 8.2: The Magazines Drain: Estimated US High-End Interceptor Stocks Before the War and by Late July 2026.**




*Source: CSIS estimates reported by CNN, 29 Jul 2026 (close to internal US figures per officials).*

[61] "US weapons stockpiles continue to dwindle," CNN, 29 July 2026; "Israel is running critically low on interceptors, US officials say," Semafor, 14 March 2026.

**The Reported Erosion of Israel's Electronic-Warfare Advantage**

A third development, harder to establish than the magazine arithmetic and reported here with corresponding caution, concerns the electromagnetic domain. In earlier fighting, Israel made effective use of Western electronic warfare to jam and spoof the satellite-navigation signals guiding Iranian drones and missiles. Several analysts report that Iran responded by shifting to China's jam-resistant BeiDou-3 military signal, and some cite a positioning reliability under jamming as high as around 98 per cent. These are analyst estimates rather than confirmed measurements; they are contested, and this report does not treat them as established fact. What can be said more safely is that Israel's electronic-warfare advantage appears to have been eroded rather than that it was decisively defeated.[62] These figures are contested analyst claims, but the direction is clear: an adversary with access to a rival great power's navigation constellation can buy its way around the electronic-warfare advantage on which the cost-effectiveness of the shield depended. The most sophisticated defence in the world can be defeated not by a better missile but by a better satellite signal.

**The Technical Claims, and Their Limits**

Some analysts have offered a more detailed technical reconstruction, which is set out here as a reported account rather than an established one, since much of it rests on partial open-source telemetry and debris analysis. On this account, Israeli spoofing before 2025 relied on overriding the commercial GPS signals, the L1 and L2 bands, across the conflict zone, while second-generation Iranian munitions, among them the Kheibar Shekan and Fattah variants, are said to have integrated multi-frequency receiver units operating on the Chinese BeiDou-3 constellation, specifically its B1C and B2a signals, alongside localised inertial navigation units. Coupled with four- to eight-element controlled-radiation-pattern antennas (CRPA) mounted on the re-entry vehicles, these munitions are reported to have rendered Western ground-based jamming largely ineffective.[63]

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[62] "Iran turns to China's BeiDou satellites to outfox Israeli anti-drone electronic warfare defences," *bne IntelliNews*, 10 March 2026; "GPS Crippled, BeiDou Takes Over," Defence Security Asia, 7 March 2026. These are reported analyst estimates and are contested.

[63] *Jane's International Defence Review 58*, no. 4 (2025): 34–39, "Electronic Counter-Countermeasures and Satellite Navigation Resilience in Second-Generation Iranian PGMs"; Center for Strategic and International Studies (CSIS) Missile Defense Project, *Complex Air Defense: Countering Unmanned Aerial Systems and Precision Ballistic Threats* (Washington, DC: CSIS, 2025).

These technical claims should be handled with care, because they concern several distinct capabilities that do not automatically travel together. Navigation accuracy, resistance to jamming, targeting intelligence, penetration of missile defences, radar cueing, and interceptor performance are separate matters: a more resilient navigation signal may improve a missile's accuracy, for instance, without by itself allowing it to evade an interceptor, which is a different problem again. It is nonetheless reported that Iranian salvos degraded target-acquisition by striking forward-deployed early-warning sensors, including American-operated AN/TPY-2 X-band radars in the region, and that this affected the cueing on which the Arrow-3 interceptor depends. Here too a caveat is required, because damage to one radar does not automatically create a decisive gap in a distributed and partly redundant sensor network. The defensible conclusion is therefore narrower than a claim of electromagnetic defeat: Israel's electronic-warfare and sensor advantages appear to have been eroded and locally degraded, adding to the pressure on the shield, without amounting, on the available evidence, to a wholesale collapse of the defence.

**Iran's Acquired Advantage**

The exposure of the shield is not only a story of Israeli and American limits but also of Iranian gains. Over the past decade Iran has transformed itself from a state reliant on ageing and inaccurate systems into one fielding large numbers of increasingly precise ballistic and cruise missiles and a mature domestic drone industry, and it has done so partly through its own development and partly through cooperation with other powers. The switch to China's BeiDou navigation signal described above is one instance of a wider pattern in which Iran has acquired, adapted, or been granted access to advanced technologies that erode the qualitative edge on which Israel's defence depends. The adversary the shield now faces is not the adversary it was designed against, and the gap in sophistication that once made interception straightforward has narrowed.[64]

This matters because a defence is a relationship between a shield and a threat, and the threat has been improving faster than the shield can be replenished. Precision allows the attacker to concentrate fire on the points that matter, the airfields, the radars, and the batteries themselves, rather than spraying an area; resilient navigation defeats the electronic-warfare defences that once neutralised guided weapons; and mass, sustained by cheap production, keeps the pressure on the

[64] On the growth and increasing precision of Iran's missile and drone forces, International Institute for Strategic Studies, *The Military Balance 2025*; CSIS Missile Threat, Iran profiles.

magazines. The combination of precision, resilience, and mass is precisely the combination that the layered shield, optimised for an earlier and less capable threat, is least able to absorb over time. Iran has not out-built Israel's technology; it has bypassed the need to by acquiring enough capability to make the defender's advantages too expensive to sustain.

The involvement of outside powers in Iran's improvement is itself a strategic development the war has revealed. Access to a great power's navigation constellation and the wider deepening of Iran's technological relationships mean that a war ostensibly between Israel and Iran imports, on the Iranian side, capabilities that neither Israel nor its American patron can easily counter because they originate with a power that is not a formal belligerent. This is the mirror image of Israel's own dependence: just as Israel's shield draws on the United States, Iran's sword increasingly draws on China and others, and the regional war becomes, in part, a contest between the supply lines of rival great powers. For a small state that had assumed a durable technological edge, the arrival of great-power-enabled capabilities on the adversary's side is among the most consequential shifts the war has exposed.

**The Other Side of the Ledger: Iran's Deep Magazine**

The attrition equation has two sides, and the adversary's is the more favourable. Iran's offensive inventory is measured in the thousands of ballistic and cruise missiles and in a large and expanding fleet of one-way attack drones, many of them cheap enough to be treated as expendable. Where each Israeli or American interceptor is a scarce and costly asset that must be husbanded, each Iranian projectile is a low-cost round that can be spent to force the defender to spend a dearer one. This is the essence of the unfavourable cost exchange from the defender's point of view: the attacker trades cheap for dear and wins the exchange even when most of its projectiles are intercepted, because the campaign is decided by the accounting, not by the airspace.[65]

The 2026 barrages bore this logic out. Iran sustained waves of fire over an extended period, probing for the moments when defensive magazines thinned and forcing the defenders into an anxious calculus of which threats to engage and which to risk letting through. A defence that must choose what to protect is a defence already rationing itself, and rationing is the first visible symptom of

[65] On the scale of Iran's missile and drone forces, International Institute for Strategic Studies, *The Military Balance 2025*; CSIS Missile Threat, Iran profiles.

the magazine problem. The side with the deeper and cheaper magazine sets the tempo, and in this war that side is not the one with the better technology.

### The Rebuild Horizon

The obvious response to a magazine problem is to make more, and both Israel and the United States have moved to expand interceptor production. But high-end interceptors are among the most complex manufactured objects in existence, drawn from long and narrow supply chains of specialised seekers, propellants, and microelectronics, and their output cannot be scaled at the speed of a wartime emergency; lead times run to many months even before bottlenecks are counted. This is why officials describe replenishment as a project of years and why a surge in orders does not translate into a surge in deliveries on any timescale relevant to the war being fought now. Israel's partial answer, the Iron Beam laser fielded from late 2025, relieves the lowest tier of the threat for the cost of the electricity it consumes, but its short reach and its inability to engage high-end ballistic missiles mean it leaves the deepest part of the magazine problem untouched.[66]

## 9. The American Lifeline and the Limits of Wartime Autonomy

The deepest lesson of the war is not any single failed interception but the extent to which Israel's defence draws on a US-led regional network. The US funds and co-produces the upper-tier interceptors, provides much of the intelligence and early warning, and maintains across the Gulf a network of bases whose sensors, air defences, and forces contribute, among their many other missions, to engaging Iranian fires before they reach Israel. These bases were not established principally to defend Israel, and they serve wider American and regional purposes, but Israel benefits materially from the network they form, and when parts of it were struck in 2026, the degree of that benefit and of the reliance that comes with it became visible.

### The Regional Network Israel Draws on

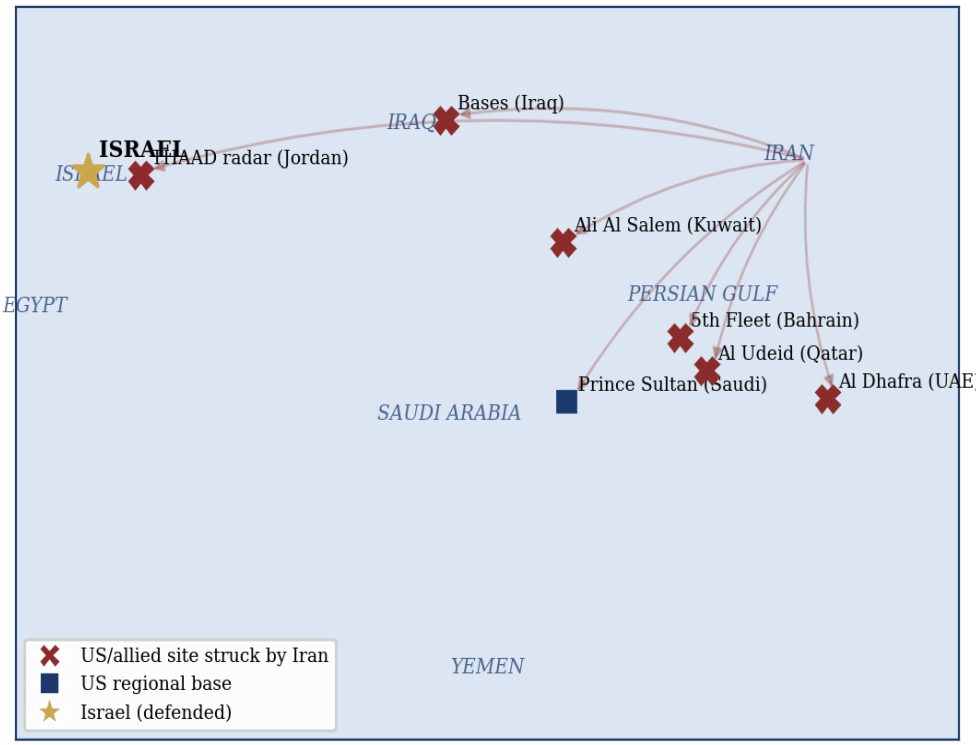
Part of Israel's defensive depth is provided by American installations hundreds of kilometres from its borders, though those installations serve many missions and were not established chiefly on Israel's behalf. When the war opened on 28 February 2026, Iran struck American bases across the region, Al Udeid in Qatar, Al Dhafra in the United Arab Emirates (UAE), Ali Al Salem in Kuwait,

[66]CSIS, "Rebuilding U.S. Missile Inventory: A Multiyear Project," 27 May 2026; on Iron Beam, Alma Research and Education Center, July 2026.

and the Fifth Fleet headquarters in Bahrain, and damaged radars associated with THAAD missile-defence systems in Jordan, the UAE, and Saudi Arabia.[67]At Al Udeid, the largest American base outside the US, footage showed Patriot interceptors failing to stop incoming Iranian ballistic missiles, and Iranian strikes had reached the base even during the earlier 12-day war with lower-end missiles. The bases that shield Israel are themselves vulnerable, and when they are struck, more of the burden falls back onto Israel's own finite magazines.

**Map 2: A US-Led Regional Network**

Map 2 The outer layer: US regional bases that defend Israel, and Iran's strikes on them (2025–2026)




*Schematic; based on reported strikes (Al Udeid, Al Dhafra, Ali Al Salem, Bahrain, THAAD radars). Positions approximate.*

*American bases from which Israel's defence benefits and Iran's reported strikes on them (2025–2026).*

[67] 'Ynet English Newsletter ARTICLE Makecode 555', https://p.ynet.co.il/POoUUXCDj/c/JmVbo.

**The Coalition Nobody Names**

What the war has revealed, in effect, is that Israel's defence is not a national system at all but a coalition one, in which the US and, at the level of basing and overflight, several Gulf states play indispensable parts. The interceptors are co-owned; the outer layer is American; the early warning is shared; the resupply is American; and the regional bases that engage Iranian missiles before they reach Israel sit on the territory of American partners. This is a coalition defence in everything but name, and its unspoken character is itself a source of fragility, because a coalition that is never acknowledged is never formally managed, and its members' competing interests, the US' own war, the Gulf states' desire to avoid being drawn in- surface only under the pressure of a crisis. The 2026 war has forced the coalition into the open, and with it the recognition that Israel's vaunted independence in this domain was always a collective enterprise.

**Quantifying the Dependence**

The scale of the reliance can be measured. According to SIPRI, the US has in recent years supplied roughly two-thirds of Israel's major arms imports, and American assistance is structured by a 10-year memorandum of understanding, signed in 2016 and covering the 2019 to 2028 period, worth USD 38 billion, the largest such pledge in American history. Cumulative American military aid to Israel runs well into the hundreds of billions of dollars over the life of the relationship, and it was supplemented after October 2023 by additional wartime packages. This is not a normal supplier relationship but a structural underwriting of Israeli military power, and it means that the interceptors, munitions, and aircraft on which the architecture depends are, in large part, American-funded as well as American-made.[68]

A dependence of this depth is not only a vulnerability to supply failure; it is also a channel of influence. A supplier that provides two-thirds of a client's major arms, underwrites its missile defences, and positions munitions on its soil holds, in principle, considerable leverage over how those arms are used, even where it has been reluctant to exercise it. For most of the relationship's history, this leverage stayed latent because American and Israeli preferences were aligned and the political consensus behind the relationship was near total. The significance of the present period

[68] *SIPRI Arms Transfers Database and SIPRI fact sheets* on international arms transfers; U.S. Congressional Research Service, "U.S. Foreign Aid to Israel" (RL33222); Council on Foreign Relations, "U.S. Aid to Israel in Four Charts."

is that a prolonged war has, for the first time, made the extent and the limits of the dependence visible at once.

**The Stockpile on Israeli Soil**

The dependence has a specific and little-appreciated logistical form. Beyond the annual Foreign Military Financing, Israel's immediate operational sustainability rests on a unique legal and logistical mechanism, the War Reserve Stockpile Ammunition–Israel (WRSA-I): a large cache of precision-guided munitions, tank ammunition, and air-defence interceptors maintained on Israeli soil, held by US European Command and authorised by the US Congress. Under emergency provisions, the American president can approve the transfer of these stocks to the Israel Defence Forces immediately, without the usual foreign military sales procurement procedures.[69]

The 2026 war exposed the limits of even this pre-positioned reserve. The WRSA-I stock was drawn down so heavily that Washington was reported to be pulling from it directly to meet the needs of active US Central Command (CENTCOM) and European Command operations so that the same magazine served the American and the Israeli war at once. This logistical fact shows that Israel's strategic durability is not merely supported by American financial assistance but is directly tied to the physical depth of current American military war reserves, and it poses a stark zero-sum question for Washington: in a prolonged war, every interceptor released to Israel is one unavailable to American forces or to other allies elsewhere. A stockpile intended to guarantee Israeli autonomy in a crisis turns out, when the crisis is large enough, to bind Israel and its patron to the same finite pile.

**The Queue: A Supplier that serves itself first**

When the supplier is itself at war, the client joins a queue. As American inventories of Patriot and THAAD interceptors fell, the US re-sequenced deliveries to prioritise its own forces, an entirely rational choice for Washington and a decisive vulnerability for a client whose architecture is built around it. The lesson of 2026 is that American support, reliable in every ordinary case, is finite and shared in the extreme case, and that the extreme case is precisely the prolonged high-intensity

[69] Jeremy M. Sharp, *U.S. Foreign Aid to Israel*, *Congressional Research Service Report RL33229* (Washington, DC: Library of Congress, updated 2025), pp. 18–25; U.S. Department of Defense, *War Reserve Stockpiles for Allies: Israel (WRSA-I) Inventory and Authorization Review*, Defense Logistics Agency Operational Assessment (Washington, DC: DoD, 2025).

war for which a deterrent is supposed to prepare. A dependence that holds in peacetime and in short wars but frays in a long one is exactly the dependence a strategy for the long war cannot safely assume.[70]

**Intelligence and Early Warning**

Beyond hardware, Israel depends on the US for the intelligence and early warning that make the shield work. American satellites provide missile-launch detection; American radars in the region extend the tracking picture; and American intelligence-sharing underpins the targeting on which Israel's much-praised precision depends. That this connective tissue is partly American is why the strikes on the American early-warning radar in Qatar in 2026 mattered beyond the immediate damage: they degraded the shared picture on which Israel, not only the US, relies. The eyes of the shield, like its upper-tier interceptors, are not wholly Israel's own.

The intelligence dependence is the least visible of the reliance catalogued in this section and among the most consequential, because it conditions the others. The precision that defines the Israeli way of war, the ability to strike a specific commander, a specific launcher, or a specific facility, rests on a fusion of Israeli and American collection that no single national system supplies in full. Degrade the shared picture, as the strikes on the American early-warning radar in the Gulf began to do in 2026, and the precision degrades with it, the warning time shortens, and the interceptors must be committed earlier and less discriminately against a less certain track. The connective tissue of the whole architecture is partly American, and an adversary that learns to attack that tissue can weaken every layer at once without defeating any of them individually.

**Air power, Aircraft, and the Vulnerability of the Base**

The same lesson reaches the air force in which Israel takes the greatest pride. Israel has claimed successes with the F-35I in the war, and its air arm remains formidable, but the exposure of forward air bases to Iranian missiles, demonstrated repeatedly against the American installations that host advanced aircraft, shows that even the most capable air force is only as secure as the bases from which it flies. Iranian claims to have downed advanced aircraft, including the F-35, are unverified and disputed, and this report does not treat them as established; what is established is that the era of uncontested basing is over, that Iranian precision fires can reach the airfields on which air power

[70]"US weapons stockpiles continue to dwindle," CNN, 29 July 2026; CSIS, 27 May 2026.

depends, and that an air campaign at 1,500 kilometres against a large adversary cannot be sustained on the tempo a short war allows. The airframe may survive; the assumption of sanctuary that made it decisive has not.

The deeper point is that the value of a fifth-generation aircraft such as the F-35I is realised only if it can fly, and it can fly only from bases that are themselves defended and intact. The 2026 war has shown that Iranian precision fires can reach the airfields, fuel, munitions, and support infrastructure on which air power depends and that the defence of those airfields draws on the same finite pool of interceptors that everything else competes for. An air force is a system, not a set of airframes, and the system's weakest points are the fixed installations on the ground, not the aircraft in the sky. This is why the exposure of the American bases in the Gulf and of Israel's own airfields to sustained missile attack matters more to the future of Israeli air power than any claim or counter-claim about individual aircraft. The airframe endures; the sanctuary does not.

**Table 9.1: Instruments of Israeli Dependence on the United States**

| Instrument | Role | Exposure in 2026 |
|---|---|---|
| **Interceptor co-production** | Arrow, David's Sling, Iron Dome | Shared, finite magazines; US rationing |
| **Regional bases** | Outer defensive layer vs Iran | Struck across the Gulf; radars destroyed |
| **Munitions resupply** | Bombs, interceptors, spares | Deliveries re-sequenced to US needs first |
| **Intelligence / early warning** | Targeting and missile warning | US radar in Qatar among first targets |

*Sources: CNN (Jul. 2026); CSIS (May 2026); ynet English Newsletter (Jul. 2026); reporting on 2026 strikes on US bases.*

The lifeline can be stated with care. Israel can fight, and fight well, on national resources; what it cannot do, on national resources alone, is sustain a prolonged, high-intensity, multi-directional war at the same defensive tempo and coverage, because that depends on American interceptors, munitions, intelligence, and the regional network described above, and the 2026 war has stressed each of these in turn. The distinction matters: an inability to sustain the same tempo indefinitely is not the same as an inability to continue fighting. This is not a criticism of the alliance, which is the closest of its kind in the world, but a description of a strategic condition in which

the binding constraint is not the patron's will, which has held, but the finitude of the patron's means, which a long war reveals.

# PART IV: DOUBLE STANDARDS AND THE NEXT PHASE

## 10. The Double Standard: An Undeclared Arsenal and the War on Iran's Programme

At the core of Israel's strategic posture lies a fundamental contradiction that this report has examined from multiple analytical perspectives and now addresses directly. Israel maintains an undeclared nuclear arsenal outside all treaty-based constraints, while simultaneously treating the prevention of nuclear acquisition by other regional actors as a central and recurrent objective of its security policy. As the sole nuclear-armed state in the Middle East, acting as a self-appointed enforcer against regional nuclear proliferation, Israel occupies a position widely recognised by Middle Eastern governments and publics as inherently paradoxical.

Legal precision is essential. The claim that Israel's non-membership in the Nuclear Non-Proliferation Treaty (NPT) renders its acquisition of nuclear weapons "legal" is difficult to sustain within established frameworks of international relations. Non-participation in a treaty does not, in itself, legitimise actions that undermine broader normative regimes governing state behaviour. Israel's historical conduct further illustrates a pattern in which international legal constraints have not been decisive; its territorial expansion beyond the boundaries envisaged in the 1947 UN partition plan exemplifies this broader tendency.

The direct answer to the question of Israel's NPT status is straightforward. Israel declined to join the NPT because it had already initiated the covert development of a nuclear arsenal during the 1950s and 1960s and adopted a doctrine of nuclear opacity (amimut)—neither confirming nor denying possession—rather than accept the inspections, disclosures, and verification obligations required of treaty members. The resulting disparity between Israel's undeclared arsenal and Iran's inspected, treaty-bound nuclear programme has been extensively documented. It is widely interpreted as a structural double standard rooted in geopolitical alignments rather than a coherent legal principle. This interpretation coexists with separately substantiated findings that Iran breached specific NPT safeguards obligations, underscoring the complexity of applying legal and normative standards consistently across divergent strategic contexts.

## The Origins of Israel's Nuclear Program

Israel's nuclear project began in the mid-to-late 1950s under founding prime minister David Ben-Gurion, with technical assistance from France, and centred on the Dimona reactor complex in the Negev desert. Construction started in 1958, and the heavy-water reactor became critical between 1962 and 1964, with weapons-grade plutonium production underway by 1966. Ben-Gurion publicly described Dimona to the Knesset in 1960 as a "research reactor" serving "industry, agriculture, health and science", obscuring its true purpose from the outset.[71] Israeli officials reportedly assembled their first nuclear weapons before the 1967 Six-Day War, and by 1986, when technician Mordechai Vanunu leaked photographs and details to the press, Israel was believed to rank as the world's sixth nuclear power, with an arsenal estimated between 80 and 400 warheads depending on the source.[72] Thanks to its deceptive behaviour[73] and, later on, to a 1969 agreement between Golda Meir and Richard Nixon,[74] Israel exercised a freedom that NPT treaty membership would have foreclosed.

Iran, by contrast, is a non-nuclear-weapon state party to the treaty and therefore carries its safeguards and non-acquisition obligations. The two legal histories are thus not equivalent, and this report does not allege an Israeli treaty violation. The asymmetry it describes is real but normative and political, not legal: the strongest and most defensible formulation is not that Israel broke the rules, but that the international system has tolerated and shielded an extra-treaty Israeli arsenal, outside the NPT and beyond inspection, while placing stringent demands, and, in Iran's case, the threat of force, on the region's treaty members. That asymmetry of treatment, rather than an Israeli illegality, is the double standard this report examines.

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[71] A brief history of the Israeli nuclear program, the open secret at the heart of the Iran war. Mondoweiss. April 5, 2026. https://mondoweiss.net/2026/04/a-brief-history-of-the-israeli-nuclear-program-the-open-secret-at-the-heart-of-the-iran-war/

[72] *The US Discovery of Israel's Secret Nuclear Project*. Wilson Center. April 15, 2015. https://www.wilsoncenter.org/publication/the-us-discovery-israels-secret-nuclear-project

[73] *Nuclear Disarmament: Israel*. NTI. Sep 10, 2024. https://www.nti.org/analysis/articles/israel-nuclear-disarmament/

[74] *National Security Archive*. Israel Crosses the Threshold II: The Nixon Administration Debates the Emergence of the Israeli Nuclear Program. https://nsarchive2.gwu.edu/nukevault/ebb485/

### A Doctrine of Prevention, from Osirak to Iran

The pattern is consistent across four decades. In 1981 Israel destroyed Iraq's Osirak reactor; in 2007 it destroyed a suspected reactor in Syria; and in 2026, alongside the US, it launched a war whose central aim was the destruction of Iran's nuclear programme.[75] This doctrine of counter-proliferation by force, often named for Prime Minister Begin, is presented by Israel as existential self-defence: a small state denying its enemies a weapon that could destroy it. Israel's defenders add that it faces adversaries who have questioned its right to exist, that its ambiguity is stabilising rather than provocative, and that it will discuss regional disarmament only in the context of a comprehensive peace. These arguments are real and deserve to be stated.

**Table 10.1: Israel's Counter-Proliferation Strikes**

| Year | Target | Stated rationale |
|---|---|---|
| **1981** | Osirak reactor, Iraq | Deny Iraq a nuclear capability |
| **2007** | Suspected reactor, Syria | Deny Syria a nuclear capability |
| **2026** | Iran's nuclear programme (with US) | Deny Iran a nuclear capability |

*Analysis: London Dialogue, from the public record. Strikes conducted by an undeclared nuclear-weapon state outside the NPT.*

### The Bargain Israel Refuses

The NPT rests on a bargain: the non-nuclear-weapon states forgo nuclear weapons and accept international inspection in return for the nuclear-weapon states' commitment to disarmament and for access to peaceful nuclear technology. Nearly every state on earth has joined this bargain. Israel is one of a tiny handful that have not and the only one in its region, so it holds nuclear weapons while standing outside the treaty's obligations of inspection and disarmament, even as it presses its treaty-bound adversary to the strictest interpretation of commitments Israel itself never undertook.

[75] On the doctrine of preventive counter-proliferation strikes, see Whitney Raas and Austin Long, "Osirak Redux? Assessing Israeli Capabilities to Destroy Iranian Nuclear Facilities," *International Security 31*, no. 4 (2007): 7–33; and Sarah E. Kreps and Matthew Fuhrmann, "Attacking the Atom: Does Bombing Nuclear Facilities Affect Proliferation?" *Journal of Strategic Studies 34*, no. 2 (2011): 161–187.

**Why Israel Never Signed the NPT**

Israel's refusal rests on several intertwined justifications. Ambassador Dennis Ross has explained that Ben-Gurion's founding logic held that Israel would always be "outnumbered" by hostile neighbours, requiring an "ultimate deterrent" that would be implicitly understood but never formally acknowledged. Signing the NPT would have obligated Israel to open Dimona and related facilities to comprehensive IAEA inspections, something officials judged incompatible with both the deterrence strategy and a broader claim of sovereign prerogative. Israel has additionally cited distrust in the treaty's verification mechanisms and concerns about its three-month withdrawal clause as technical objections.[76]

The decisive diplomatic turning point came in 1969, when Prime Minister Golda Meir and US President Richard Nixon struck a secret accord:[77] Israel would maintain its "non-introduction" pledge, publicly promising not to be the "first to introduce nuclear weapons" into the region, although it did the opposite[78] — while Washington would halt inspection visits to Dimona, cease pressuring Israel to sign the NPT, and provide diplomatic cover for the arrangement. This bargain effectively created what analysts call Israel's unique "nuclear exemption".[79] a status under which no NPT member state or nuclear power group formally holds Israel accountable for its arsenal.[80]

**The Structure of "Nuclear Opacity"**

Israel's doctrine of amimut is distinctive among the world's nuclear-armed states. Other nuclear powers (the US, Russia, China, the UK, France, India, Pakistan, and North Korea) have openly declared and, in most cases, tested their weapons, but Israel has never conducted a declared nuclear test and keeps its capability secret even from its own citizens, who are discouraged by law and custom from discussing it. Scholar Avner Cohen[81] has argued this posture is fundamentally

[76] Nuclear Weapon-Free Zone in the Middle East.Savita Pande. *Strategic Analysis*: A Monthly Journal of the IDSA. December 1998 (Vol. XXII No. 9). https://ciaotest.cc.columbia.edu/olj/sa/sa_98pns02.html

[77] Inter-Office Memorandum for the Record by Deputy Director, JCAE, George F. Murphy, "Israel Nuclear Weapon Capability," 21 January 1969, Secret, excised copy under appeal. *National Security Archive*. https://nsarchive.gwu.edu/document/32667-document-10-inter-office-memorandum-record-deputy-director-jcae-george-f-murphy

[78] *Israel nuclear history*. Center for Arms Control and Non-Proliferation. https://armscontrolcenter.org/countries/israel/

[79] *Bomb, Opacity, Democracy*. About: A. Cohen, *The Worst-Kept Secret. Israel's Bargain with the Bomb*, Columbia University Press. https://laviedesidees.fr/Bomb-Opacity-Democracy

[80] Israel's Nuclear Opacity/Exemption: Should the World Continue to Support it? A Policy Statement Prepared for the British House of Lords. https://committees.parliament.uk/writtenevidence/100021/pdf/

[81] *National Security Archive*. Israeli Nuclear History. Introduction by Avner Cohen. https://nsarchive2.gwu.edu/nukevault/israel/

incompatible with liberal-democratic norms of public accountability since Israelis themselves were never consulted on acquiring the weapons that define their state's deterrence posture. Israel has also refused to join the Treaty on the Prohibition of Nuclear Weapons and opposes a Fissile Material Cutoff Treaty, arguing the latter would undermine opacity itself. Table 10.2 below compares the nuclear opacity between Israel and Iran. The comparison explains that Israel is far more relaxed than Iran regarding nuclear opacity.

**Table 10.2: Comparison of Nuclear Opacity Between Israel and Iran**

| Dimension | Israel | Iran |
|---|---|---|
| NPT status | Never signed; one of only four states (with India, Pakistan, South Sudan) never a party | NPT member since 1970, subject to IAEA safeguards [82] |
| Declared nuclear status | Neither confirms nor denies; policy of "opacity" | Officially denies pursuing weapons; enrichment activities monitored (if access permitted).[83] |
| IAEA inspections | Not subject to comprehensive safeguards; halted even limited US inspections after 1969 [84] | Subject to safeguards agreement, though currently found in violation and non-cooperative [85] |
| US intelligence assessment (2025) | Long presumed to possess 80-400 warheads | US DNI testified in March 2025 that Iran was not building a weapon and had not resumed the program suspended in 2003 |
| Recent military action | Struck Iranian nuclear/military sites in 2025 and 2026 | Retaliated with missile/drone strikes; facilities at Natanz, Fordow, Isfahan damaged |

[82]. Board of Governors, International Atomic Energy Agency (IAEA). https://www.eeas.europa.eu/delegations/vienna-international-organisations/board-governors-international-atomic-energy-agency-iaea-agenda-item-5f-implementation-npt-safeguards_en?s=66

[83] Double standards? Why Israel's nukes get a pass while Iran is scrutinised. *Al Jazeera*. 15 Apr 2026. https://www.aljazeera.com/news/2026/4/15/double-standards-why-irans-nukes-are-scrutinised-israel-gets-a-pass

[84] Israel's Nuclear Opacity/Exemption: Should the World Continue to Support it? Avner Cohen. A Policy Statement Prepared for the British House of Lords. https://committees.parliament.uk/writtenevidence/100021/pdf/

[85] NPT Safeguards Agreement with Iran: Quad statement to the IAEA Board of Governors, June 2026. https://www.gov.uk/government/speeches/npt-safeguards-agreement-with-iran-quad-statement-to-the-iaea-board-of-governors-june-2026

**The Legitimacy Cost**

The double standard is not cost-free for Israel, and this is the point most often missed by its defenders. Every strike to deny a neighbour a nuclear capability, conducted by an undeclared nuclear power outside the treaty, hands that neighbour and the wider region a durable grievance and a ready-made argument. It strains the very non-proliferation norm that Israel invokes, because it reinforces the perception that the norm is applied by power rather than by principle. And it supplies Iran, and others, with the most effective possible justification for their own programmes: the observation that the region already contains an unmonitored arsenal whose owner is prepared to use force to preserve its monopoly. A monopoly maintained by force and secrecy is inherently unstable, because it gives every excluded state both the motive and the argument to break it.

There is a historical irony worth marking. The Begin Doctrine of preventive strikes was intended to freeze the regional nuclear balance in Israel's favour permanently by destroying rival programmes in their infancy. Its long-run effect may be the opposite. Each strike advertises both the value Israel places on its monopoly and the vulnerability of any nascent programme to pre-emption, teaching would-be proliferators two lessons at once: that a nuclear capability is worth having and that it must be pursued in ways that are dispersed, concealed, and hardened against attack. The doctrine that was meant to prevent proliferation has, over four decades, taught the region how proliferation must be pursued to succeed, and the missile and drone competition examined in this report is in part the fruit of that education.

**The Question of Legality: Can it be Asymmetric?**

Israel launched large-scale strikes on Iranian nuclear and military facilities in the 12-Day War of June 2025, killing nuclear scientists and military commanders and prompting Iranian missile retaliation against Israeli cities and regional US-aligned states. The US joined by striking Fordow, Natanz, and Isfahan with bunker-buster munitions. Hostilities resumed on February 28, 2026, in what became known as the 2026 Iran war, again targeting nuclear and military infrastructure. Legal scholars have argued these operations violated Article 2(4) of the UN Charter's prohibition on the use of force, since they occurred without UN Security Council authorisation and without a clearly established right of self-defence against an imminent attack, also breaching the NPT and the Convention on the Physical Protection of Nuclear Material by targeting IAEA-safeguarded

facilities.[86] Analysts at the German Institute of Development and Sustainability have posed the pointed question of "what grants Israel the authority to act as the enforcer of a treaty to which it does not even adhere," noting the asymmetry of a non-NPT, undeclared nuclear state using force against an NPT member over proliferation suspicions.[87]

**Is This a Double Standard? The Analytical Case**

Multiple independent analyses converge on the conclusion that the international system applies structurally different standards to Israel and Iran, though they differ on causal explanation. Al Jazeera's April 2026 analysis quotes regional experts arguing that Israel has been "granted an exemption from the global non-proliferation regime because of its role as a Western-aligned power," while Iran's status as a perceived adversary "invites maximum pressure" — concluding that "international norms are applied selectively. " Academic research from Guelma University similarly finds that the US applies "completely different standards based on geopolitical considerations rather than consistent legal or moral standards," a pattern that "undermines global non-proliferation goals" and "erodes trust in US leadership." Canada's own diplomatic record illustrates the mechanism concretely: Ottawa has repeatedly blocked UN resolutions calling on Israel to join the NPT and has vetoed proposed regional Nuclear-Weapon-Free Zone conferences, while simultaneously professing support for such a zone in principle. The 1995, 2010, 2012, and 2015 NPT Review Conference processes each attempted to convene a Middle East WMD-free zone conference; each collapsed, with UN documentation explicitly attributing the failure to "Israel's refusal to join the [NPT]... and subject all its nuclear facilities... to comprehensive safeguards."

Critics extend the double-standard argument to the broader conduct of war. Commentary published during the peace and health blog and Middle East Monitor sources argues that Israel has been permitted to conduct large-scale military operations in Gaza — subject to an ongoing International Court of Justice (ICJ) case brought by South Africa alleging violations of the Genocide

[86] Dehshiri, M., & Ahmadi, Z. (2026). The Unlawful Israeli-U.S. Attacks on Iran: A Doctrinal Legal Analysis under International Law. *Journal of World Sociopolitical Studies*, 10(2), 319-369. https://doi.org/10.22059/wsps.2026.397613.1537

[87] *Europe's Double Standards in the Face of International Law*. El-Haddad, Amirah / Aboushady, Nora. Bonn: German Institute of Development and Sustainability (IDOS), The Current Column of 24 June 2025. https://www.idos-research.de/en/the-current-column/article/europes-double-standards-in-the-face-of-international-law/

Convention, while facing no comparable sanctions regime or arms embargo, even as it simultaneously conducts strikes against a treaty member state. The ICJ's January 2024 provisional measures order did not rule that genocide had occurred but did find Palestinians possessed a plausible right to protection under the Genocide Convention and ordered Israel to take measures to prevent genocidal acts, prevent incitement, and enable humanitarian access. That case remains unresolved, and Israel rejects the underlying allegations as "baseless" and a "blood libel".

**Counter-Arguments and Complicating Factors**

Not all commentators accept the double-standard framing without qualification. The Middle East Forum (a US right-wing pro-Israeli website) has argued that the legal case against the US-Israeli strikes "collapses under any basic reading of international law",[88] positioning the strikes as a response to a genuine and verified NPT safeguards violation by Iran rather than an act of unprovoked aggression. Proponents of Israel's position also note that Iran's active suspension of IAEA access since mid-2025, its unaccounted-for 440 kg of 60 per cent-enriched uranium, and its history of undeclared sites constitute a materially different compliance record than a state merely suspected of ambiguity. This does not resolve the deeper structural question, a non-signatory with an undeclared arsenal enforcing non-proliferation against a signatory under IAEA scrutiny is, by definition, an asymmetric arrangement, but it complicates any simple equivalence between "Israel is opaque" and "Iran is transparent", since Iran's own conduct toward inspectors has been documented as obstructive by the same UN body cited throughout this analysis.

**The Grievance, the Standard Creates**

From the perspective of Tehran, and of much of the wider region, the logic is straightforward and difficult to answer. A neighbouring state possesses an undeclared nuclear arsenal, refuses all inspection, stands outside the treaty everyone else has joined, and has repeatedly used force to prevent any other regional power from acquiring a comparable capability. Whatever one makes of Iran's own conduct, the existence of this arsenal supplies the most powerful available argument for the very programmes the international community seeks to prevent because it demonstrates that in this region security has ultimately been sought and found through the bomb. A non-proliferation order that tolerates one unaccountable exception invites others to seek the same

[88] The West's International-Law Double Standard on America and Israel. MEF. March 6, 2026. https://www.meforum.org/mef-observer/the-wests-international-law-double-standard-on-america-and-israel

exception, and the harder that order presses on the have-nots while exempting the one that has, the more it looks, to those it constrains, like an instrument of power rather than of principle.

This is why the double standard is a strategic liability and not merely a moral one. It corrodes the legitimacy of the non-proliferation regime at the very moment that regime is most needed; it hands Israel's adversaries a durable and effective grievance; and it makes the region's nuclear order rest on a monopoly that the excluded have every incentive to challenge. A settlement that leaves the underlying asymmetry untouched settles nothing, because the asymmetry is itself the engine of the competition. The arsenal that was meant to guarantee security thus becomes, through the standard it enforces, a source of the very insecurity it was built to prevent.

None of this is to equate the two programmes or to endorse Iran's conduct, which raises its own serious concerns and is subject to its own extensive analysis elsewhere. The point is narrower and concerns Israel's posture specifically: that a policy of enforcing on others, by force, a prohibition one exempts oneself from is not a stable foundation for regional security, whatever the merits of the enforcer's wider case. A rule applied by the strong to the weak but not to the strong is not experienced as a rule at all but as a hierarchy, and hierarchies in the possession of ultimate weapons are precisely what the non-proliferation order exists to dissolve. Israel's double standard is thus not only a moral vulnerability but a structural one, corrosive of the very order that its own long-term security, like the region's, ultimately requires.

**Why the Region Calls it a Double Standard**

The evidence supports two distinct but compatible conclusions. First, Israel's non-membership in the NPT is not an oversight but a deliberate strategic choice, formalised through a secret 1969 US-Israel accord that has been sustained for over five decades through Western, chiefly American, diplomatic protection. Second, the resulting asymmetry, an undeclared nuclear state outside any inspection regime conducting military strikes against a treaty member under IAEA scrutiny, constitutes a genuine structural double standard in the non-proliferation order, one openly acknowledged by multiple independent scholarly and journalistic sources across the political spectrum. This does not, however, erase the separately documented and IAEA-verified compliance failures on Iran's side since 2025, which mean the situation is better described as a system that combines legitimate proliferation concerns about Iran with an unaccountable exemption for Israel, rather than one side being simply blameless.

But the arguments do not dissolve the contradiction; they explain it from one side only. The same reasoning, an existential threat environment justifying a nuclear deterrent, is precisely the reasoning Israel denies to its neighbours. A state that built its own arsenal in secret, through the diversions and front companies documented in Section 4, and that refuses inspection, treaty membership, and even acknowledgement, is not well positioned as a neutral guardian of non-proliferation but stands as an exception that the international system has permitted to remain outside the rules it presses on others. Iran's programme is subject to the most intrusive inspection regime ever devised and to the constant threat of attack; Israel's is subject to neither. Whatever one concludes about the security merits, the asymmetry is real, it is visible, and it corrodes the legitimacy of the non-proliferation order on which regional stability is supposed to rest. The double standard is not an accusation this report invents; it is the settled perception of much of the region and a recurring theme of the United Nations disarmament fora, and it is the subject of the next section.

## 11. Opposing the Zone: Israel and the Middle East WMD-Free Zone

Nowhere is the double standard more concretely visible than in Israel's posture toward the proposal for a Middle East zone free of nuclear weapons and other weapons of mass destruction. The idea is not a fringe demand but a decades-old objective of international diplomacy, endorsed in principle by every government in the world and repeatedly reaffirmed in the review process of the Non-Proliferation Treaty. Israel has, nonetheless, stood outside it and, in 2019, boycotted the United Nations conference convened to pursue it.

### A Decades-Old Objective

The proposal originated in a 1974 UN resolution, and the modern process dates from 1995, when the indefinite extension of the NPT was accompanied by a resolution, co-sponsored by the US, the United Kingdom, and Russia, calling for the establishment of such a zone in the Middle East. The 2010 NPT Review Conference called for a regional conference in 2012; it was postponed indefinitely. Informal consultations in Switzerland in 2013 to 2014, in which Israel participated,

were abandoned for lack of progress, and the 2015 Review Conference collapsed in part over the zone.[89]

### The Vote and the Boycott

In 2018, the UN First Committee, on a resolution introduced by Egypt on behalf of the Arab League, decided to convene a conference on the zone in 2019 and annually thereafter until it is achieved. Israel, the US, and Micronesia voted against; seventy-one states abstained. The inaugural conference duly met at UN headquarters in November 2019, without Israel and without the US. Israel refused to accept the UN's auspices, insisting it would engage only in direct regional dialogue and only after a comprehensive regional peace; delegates noted pointedly that the region's only nuclear-armed state and its only non-party to the NPT had declined to attend.[90]

**Table 11.1: The Middle East WMD-Free Zone Process and Israel's Position**

| Milestone | Event | Israel's stance |
|---|---|---|
| **1974** | First UNGA resolution proposing the zone | Not a mover; conditional at most |
| **1995** | NPT resolution on the zone (US/UK/Russia) | Outside the NPT; unbound |
| **2010** | RevCon calls for 2012 conference | Conference postponed indefinitely |
| **2013–14** | Glion/Geneva consultations | Participated; process abandoned |
| **2018** | UNGA First Committee convenes conference | Voted against |
| **2019** | Inaugural UN conference held | Boycotted; rejects UN auspices |

*Sources: Arms Control Association; UNODA; UN press release DC/3818 (2019); VCDNP (2019).*

### What a Zone Would Require

A Middle East zone free of weapons of mass destruction would require its members to forswear nuclear, chemical, and biological weapons, to join the relevant treaties, and to place their nuclear facilities under the safeguards of the IAEA. For most states of the region, which are already parties

[89] *UN General Assembly Resolution 3263 (XXIX)*, 9 December 1974; "Resolution on the Middle East," 1995 Review and Extension Conference of the Parties to the NPT (NPT/CONF.1995/32); 2010 NPT Review Conference Final Document (NPT/CONF.2010/50). See Arms Control Association, "The Middle Eastern WMD-Free Zone and the NPT"; and the Nonproliferation Review's coverage of the Glion consultations.

[90] UN General Assembly decision 73/546 (2018), convening the Conference; United Nations, "Conference on the Establishment of a Middle East Zone Free of Nuclear Weapons and Other Weapons of Mass Destruction," press release DC/3818, 18 November 2019; UN Office for Disarmament Affairs, "Middle East WMD-Free Zone"; Arms Control Association, "WMD-Free Middle East Proposal at a Glance."

to the NPT, the principal new obligation would be modest. For Israel alone, it would mean the end of the arsenal: the acknowledgement, inspection, and ultimately the dismantlement of the very capability this report has described. This asymmetry explains both the Arab states' persistence, since the zone is the one instrument that would reach Israel's otherwise untouchable arsenal, and Israel's resistance, since it is the one state with something concrete to give up. The zone is, in effect, the multilateral mirror image of the double standard.

It would be wrong, however, to present the zone as blocked only by Israeli obstruction, and the report does not. The practical obstacles are genuine and formidable, and they would confront any negotiator regardless of political will. They include the design of a verification regime intrusive enough to satisfy mutually suspicious states; the sequencing of dismantlement and inspection and who moves first; the absence of mutual diplomatic recognition among several prospective members; the need to cover chemical and biological weapons and delivery missiles as well as warheads; the conventional imbalances that make some states reluctant to surrender a deterrent; the question of external security guarantees; and the problem of enforcement if a party cheats. A zone is therefore not a simple matter of Israeli accession, and a fair account acknowledges that its realisation is genuinely difficult, even as it notes that the present impasse leaves one arsenal uniquely unconstrained.

It is worth being precise about what the zone would and would not demand, because Israel's objections often blur the distinction. A zone would not require Israel to disarm unilaterally or in advance; it would require it to enter a negotiated, verified, and reciprocal regime in which all regional states, including Iran, accepted the same prohibitions and the same inspections. The security concern Israel cites, that it would give up its ultimate guarantee among hostile neighbours, is met within the design of such zones by their reciprocity and verification: no state disarms except as others do, and compliance is checked. To reject the process outright, rather than to negotiate its terms and safeguards, is therefore not obviously a security necessity so much as a preference for retaining an unmatched advantage. That preference is understandable in raw power terms, but it is not the same thing as an argument that the zone is unworkable, and the two are frequently conflated.

**A Global Norm Israel Resists**

Nuclear-weapon-free zones are not a utopian aspiration but an established feature of the international order. Such zones already cover Latin America and the Caribbean under the Treaty of Tlatelolco, Africa under the Treaty of Pelindaba, the South Pacific, South-East Asia, and Central Asia, together encompassing much of the inhabited southern hemisphere. The Middle East is the conspicuous gap, and it is a gap for one structural reason: it is the region that contains an undeclared nuclear-weapon state unwilling to be bound. The global spread of these zones underlines that the obstacle in the Middle East is not the concept, which is well precedented and widely embraced, but the presence of a single unaccountable arsenal.[91] The obstruction has real diplomatic costs for the wider treaty regime. The 2015 NPT Review Conference ended without a consensus document, its failure driven in significant part by the impasse over convening the Middle East zone conference, with the US, acting in support of Israel's position, among those blocking agreement. A single unresolved regional exception thus periodically paralyses the central review process of the global non-proliferation order, which is a measure of how far the consequences of one state's refusal reach beyond the region itself.

**The Safeguards Battle at the IAEA**

The institutional battle over Israel's nuclear status has a long history at the General Conference of the IAEA. Beginning in 1988, the League of Arab States consistently introduced resolutions entitled "Application of IAEA Safeguards in the Middle East" and "Israeli Nuclear Capabilities". The Agency's own 1989 technical study, Modality of Safeguards in the Middle East, recorded that while twenty-one of the region's twenty-three non-nuclear Arab states had concluded comprehensive safeguards agreements and, in many cases, additional protocols with the Agency, Israel alone operated an unsafeguarded nuclear fuel cycle.[92]

By voting repeatedly against these resolutions, and by rejecting the General Conference's calls to place Dimona under full-scope safeguards, Israel has held itself apart from the global non-proliferation verification machinery. The effect, whatever the security rationale, is to reinforce the

[91] On the existing nuclear-weapon-free zones (Tlatelolco 1967, Rarotonga 1985, Bangkok 1995, Pelindaba 1996, Semipalatinsk 2006), see UN Office for Disarmament Affairs, treaty texts and status.

[92] International Atomic Energy Agency, *Modality of Safeguards in the Middle East, Technical Report IAEA-GC(XXXIII)/RES/508* (Vienna: IAEA, September 1989); IAEA General Conference, Application of IAEA Safeguards in the Middle East, Resolution GC(68)/RES/12 (Vienna: IAEA, September 2024).

regional perception that international arms-control frameworks are applied selectively, with enforcement pressed against NPT signatories such as Iran while an undeclared nuclear state outside the treaty framework is shielded. The safeguards battle at the IAEA is the institutional expression of the same double standard that the zone process, examined above, expresses diplomatically.

**Conditionality as Deferral**

Israel's stated position is that it supports the goal of a zone in principle but that it can be realised only through direct regional negotiation following a comprehensive peace and mutual recognition, not through a UN process it regards as hostile. This is a coherent position, and it is fair to record it. But its practical effect is indefinite deferral: by conditioning the zone on a comprehensive peace that does not exist, and by rejecting the only multilateral process that does, Israel ensures that the one arsenal the zone would constrain, its own, remains beyond constraint for as long as it chooses. The Arab states, for their part, insist that Israel join the NPT and place its facilities under IAEA safeguards, which would require it to give up its arsenal. Between these positions the process is frozen, and the freezing serves the interests of the state that will neither declare its weapons nor submit them to any rule. Opposition to the zone is the diplomatic expression of the double standard: the same refusal to be bound that defines the arsenal itself.

It is worth naming plainly whom the frozen process serves. A zone that cannot be established leaves exactly one arsenal in place, and that arsenal is Israel's. Every year the process is deferred is another year in which the region's sole nuclear-weapon state retains its monopoly free of any obligation, while the states that would join the treaty regime, and largely already have, gain nothing in return for their restraint. The stalemate is therefore not a symmetrical failure for which all parties share the blame equally; it is an outcome that preserves the position of the one state with weapons to keep at the expense of the many that have forsworn them. To insist, as Israel does, that the zone await a comprehensive peace is to make the elimination of the arsenal hostage to the most difficult political achievement in the region, which is another way of placing it permanently out of reach. Conditionality, in practice, is refusal by other means.

## 12. If the War Goes to the Ground: Proxies and Multi-Front Peril

The war so far has been fought largely at range, through missiles, drones, and air strikes. Its next phase might be different. This section is deliberately conditional: it examines what a ground or widened war could mean, not what must happen, and it should be read as a scenario

resting on stated assumptions rather than as a forecast. The central assumption is that a ground phase would likely draw in some of Iran's allied forces around Israel's borders; the analysis then asks how far that could compound the structural weaknesses the report has described.

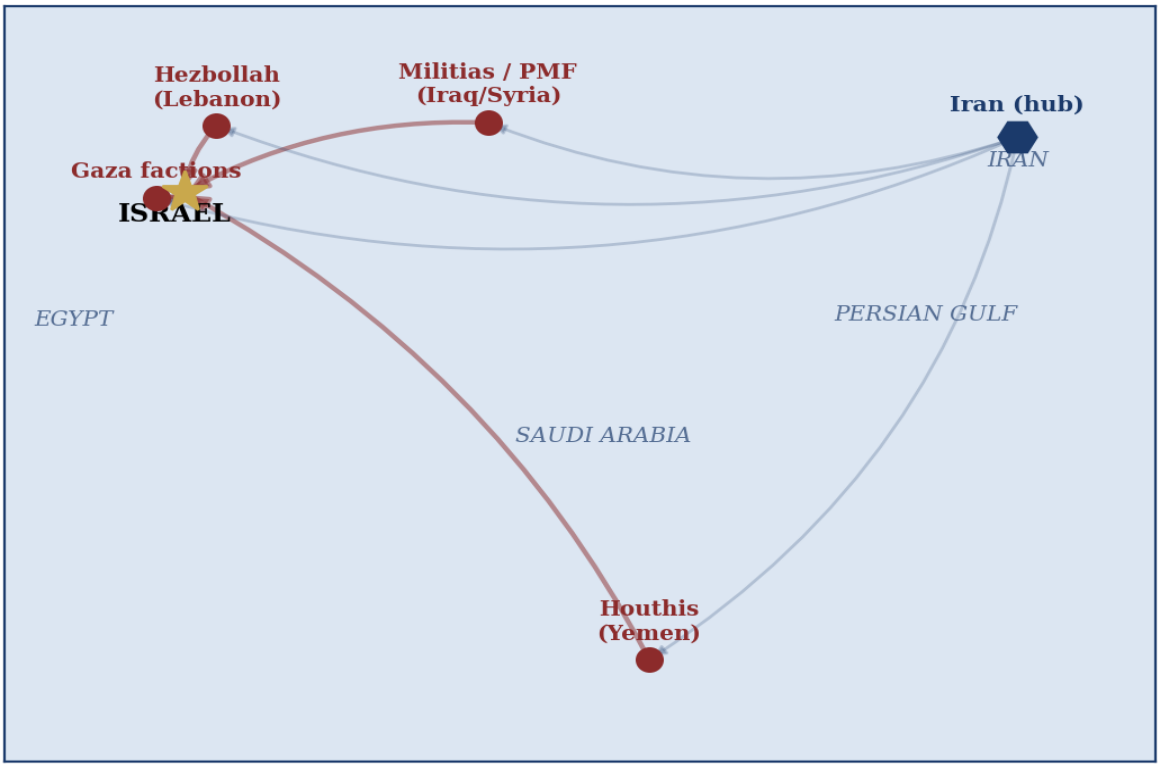
That assumption should not be taken for granted, and the report does not treat multi-front activation as automatic. Hezbollah, the Iraqi militias, the Houthis, and the Gaza factions are distinct actors with distinct interests, capabilities, and constraints, and each would weigh its own survival, its domestic position, and Iranian direction before committing to a wider war. Several alternative outcomes are equally plausible: a limited or phased response in which only one front activates; deterrence or exhaustion keeping the degraded axis largely on the sidelines; or a negotiated pause that forecloses the ground phase altogether. The scenario examined below is the more demanding one for Israel, and it is worth analysing precisely because it is demanding, but it is a contingency to be weighed, not a certainty to be assumed.

**The Axis of Resistance, Degraded but Not Gone**

Iran's "axis of resistance" spans Lebanese Hezbollah, the Popular Mobilisation Forces and allied militias in Iraq, the Houthi movement in Yemen, and factions in Gaza. The axis has been battered, Hezbollah suffered heavy losses in 2024, including the killing of its leadership, and its Radwan special forces are being rebuilt rather than fielded at full strength. However, it retains formidable mass. The Alma Research and Education Center estimates Hezbollah still fields some 40,000 to 50,000 active fighters and a comparable body of reservists; Iraqi militias have repeatedly struck US bases and Gulf states; and in July 2026, the Houthis sank two commercial vessels in the Red Sea, reopening a front across one of the world's busiest trade routes.[93]

[93] Alma Research and Education Center estimates cited in Fox News, 28 February 2026; The Soufan Center, IntelBrief, 3 April 2026; on the Houthis, Mideast Journal / regional reporting, July 2026.

**Map 3: The Multi-Front Ring**




*Schematic. The axis was degraded in 2024–2025 but retains multi-front reach in a prolonged or ground war.*

*Iran's Axis of Resistance around Israel. Degraded in 2024–2025, it retains multi-front reach in a prolonged or ground war.*

**Hezbollah: Battered but Rebuilding**

Hezbollah remains the most militarily capable member of the axis and the one most dangerous to Israel in a ground war. The movement suffered severe losses in the 2024 fighting, including the killing of its long-time leader and much of its senior command and the degradation of its elite Radwan units, and it has since been engaged in reconstitution rather than operating at full strength. However, reconstitution is not destruction. With a fighting strength still estimated in the tens of thousands and a residual arsenal of rockets and missiles, Hezbollah retains the capacity to open a northern front that could draw Israeli ground forces into southern Lebanon, the terrain of the inconclusive campaigns of 2006 and 2024, and to bring the Israeli home front under sustained fire from close range. A ground war with Iran that reactivated this front would likely confront Israel with precisely the protracted, close-quarters attrition its doctrine is least suited to.

**The Houthis and the Maritime Front**

The Houthi movement in Yemen has demonstrated an ability to hold one of the world's principal maritime arteries at risk, disrupting Red Sea shipping and, in July 2026, sinking two commercial vessels. This front is significant less for any direct threat to Israeli territory than for its capacity to impose economic and logistical costs across a wide area, to draw in naval forces, and to keep a distant theatre active while Israel is engaged elsewhere. It is a further illustration of the axis's defining characteristic: the ability to impose dispersed, asymmetric costs that a small state cannot easily concentrate against.

**Iraqi Militias and the American Tripwire**

The Popular Mobilisation Forces (PMF) and allied Iranian-aligned militias in Iraq have repeatedly struck at American bases and at Gulf states, and their significance in a ground war lies in the connection between Israel's war and the American presence on which it depends. Attacks by these militias on American installations draw the US more deeply into the conflict and simultaneously strain the American stockpiles that Israel needs, linking the Iraqi front directly to the interceptor arithmetic of Section 8. The axis functions as a system, and a blow struck on one front is felt on another.

It is important not to overstate the axis's current strength, and this report does not. The network is weaker in 2026 than at any point in the preceding decade, Hezbollah is reconstituting, the land bridge through Syria is disrupted, and the cumulative losses of the 2024 to 2025 fighting are real. The argument is not that the axis is ascendant but that it does not need to be. A degraded network that can still open several fronts at once, impose dispersed costs, and prolong a war is likely sufficient to exploit Israel's structural weaknesses, because those weaknesses, small size, no strategic depth, a citizen-soldier economy, and dependence on external resupply, are exposed by duration and dispersion rather than by the adversary's peak strength. Therefore, it can be inferred that against a small state configured for short wars, even a diminished Axis is dangerous, precisely because the danger lies in the character of the war it might substantially impose rather than in the scale of the force it can field.

**Why the Ground War Favours the Adversary**

Were the scenario to materialise, a multi-front ground war would play to Israel's structural weaknesses and away from its strengths. It would deny Israel the short, decisive

campaign its doctrine and its small mobilised population favour and impose a protracted war of attrition instead across several theatres at once. It would draw the finite reserve army in multiple directions, straining a manpower base that cannot be rotated like a large state. It would likely multiply the demand on the interceptor magazines already depleted in the missile war. And it could bring the fighting to the Israeli home front, which, lacking strategic depth, is itself the front line. As analysts of the war have observed, protracted, multi-front fighting tests endurance, stockpiles, and logistics precisely where a small state is weakest.[94]

**The Short-War Doctrine Meets the Long War**

Israel's way of war was built for short, sharp, decisive campaigns: mobilise the reserves quickly, carry the fighting to the enemy, win a rapid battlefield decision, and demobilise before the small economy and society are exhausted. This doctrine was rational against adjacent conventional armies that could be defeated in the field. It is poorly suited to the war the Axis is designed to impose: a protracted, multi-front war of attrition in which no single decisive blow can end a conflict with many heads and in which the adversary's aim is not victory in the field but the exhaustion of Israeli endurance and American patience. The mismatch between Israel's doctrine and the war it faces is the deepest reason a ground phase would likely be so dangerous, and it is a mismatch that no amount of technological superiority could repair, because the problem is one of duration and dispersion, not of quality.

The reserve system that is Israel's military strength is simultaneously its economic and social vulnerability, because the same citizens are both the soldiers and the workforce, and a small state cannot keep them mobilised across several fronts indefinitely without grave cost. A war that the adversary succeeds in prolonging and widening therefore attacks Israel at its structural weakest point, and it does so while deepening the reliance on the US for the munitions, interceptors, and intelligence that a multi-front war consumes at a rate national resource cannot match. The proxies need not win; they need only make the war long, and length is the one thing Israel's way of war cannot accommodate.

[94]The Washington Institute for Near East Policy, "The Wartime Role of Iran's 'Axis': Countering Proxy and Terrorist Threats," 5 March 2026.

**The Arab Strategic Response: Precision, Mass, and Escalation Dominance**

The Arab strategic analysis has given this predicament a name and a framework. In a body of work developed at the Al-Ahram Center for Political and Strategic Studies (ACPSS) and published in its *Arab Strategic Report*, the central finding is that Israel's nuclear monopoly creates a structural paradox: the same arsenal that reliably deters an existential attack by another nuclear state leaves Israel strategically vulnerable to a sub-existential attack by a non-nuclear one, because the weapon that deters annihilation is inherently unusable against anything less. This is the breakdown of escalation dominance, the ability to hold the advantage at every rung of the ladder, at exactly the rungs where the war is actually fought.[95]

From this diagnosis, the ACPSS analyses draw a strategic prescription that the region's actors have followed. Rather than pursue a direct nuclear parity that Israel's monopoly and its preventive strikes have made unattainable, regional adversaries have adopted a counter-balancing policy of "precision and mass": the deployment of thousands of low-cost, high-precision ballistic missiles and long-range unmanned aircraft that together form a conventional counter-deterrent. This counter-deterrent is designed to bypass Israel's nuclear umbrella altogether and to exploit the limited economics and the finite magazines of its missile defences, and the 2026 war is its vindication. The forces arrayed against Israel are not merely tactical nuisances but the instruments of a considered regional response to the nuclear exceptionalism this report has documented, and a ground or multi-front phase would likely bring that response to bear across every front at once.

**The Deepening Dependence**

In such a phase, the dependence on the US would only tighten. More fronts mean more munitions, more interceptors, more intelligence, and more of the regional force presence that Iran has already shown it can strike. Israel excels at the raid and the surgical strike; it is not built for the prolonged, multi-front, attritional war that a ground phase would likely become, and it cannot fight such a war on national resources alone. The proxies need not defeat Israel; they need only prolong and widen the war until Israeli endurance, and American patience and stockpiles, are exhausted. That is the danger the next phase holds, and it is the logical endpoint of every dependence this report has

[95] Al-Ahram Center for Political and Strategic Studies (ACPSS), analyses published in *The Arab Strategic Report*. The mechanism is the regional form of the stability-instability paradox in deterrence theory.

traced: without the US, Israel cannot sustain the war it is in, still less the larger one that a ground campaign could bring.

The economic dimension deserves a final emphasis, because it converts military strain into fiscal and social fact. A multi-front war of the kind a ground phase would bring keeps large numbers of productive citizens under arms for extended periods, deters investment, disrupts trade, and must be funded alongside a defence budget already rising toward record levels. The reserve mobilisation that mans the fronts simultaneously empties the workplaces and the factories, so the longer and wider the war, the greater the economic damage and the shorter the society's patience. Over a protracted conflict the military, economic, and political costs reinforce one another, and the adversary's strategy of exhaustion is aimed precisely at the point where they meet. Endurance, on every axis, is finite, and a ground war is the scenario most likely to find its limit.

## 13. Conclusion: Capability, Dependence, and the 2026 War

This report set out to examine three things, Israel's nuclear weapons, its missile forces, and its missile defences, and to test a single proposition: that formidable capability does not by itself amount to complete strategic autonomy. The examination yields a qualified answer. In origin, the sword is foreign: a plutonium arsenal begun in a French-built reactor with Norwegian heavy water and, by a disputed account, diverted uranium and delivered by missiles of French design and submarines of German build. In its present operation, however, that sword is substantially Israel's own, designed and produced at home and sustained from national resources, and the honest verdict is therefore not that the arsenal is borrowed but that it is foreign in origin and largely nationalised in fact, undeclared throughout.

Between the two stands the asymmetry the report has been careful to define precisely. Israel holds an arsenal it will not declare, stands outside the treaty and the inspections it presses on others, and declines the process to rid the region of the weapons it alone possesses, even as it acts to deny those weapons to Iran. The point is not that Israel has broken a rule it never accepted, for it never joined the treaty, but that the international system has tolerated and shielded an extra-treaty arsenal while holding the region's treaty members to strict account. That asymmetry of treatment is a real and consequential feature of the regional order, and it is unlikely to prove indefinitely stable.

The war's deeper lesson is about dependence of a specific kind. Israel's deterrent originated in foreign help, and its shield, though Israeli in design and operation, is sustained at the high end by one indispensable patron; and the moment the system was tested by a prolonged war against a large adversary, the limits appeared where the report's framework predicts them, in material and political dependence rather than in origin or design. The magazines drained, the most advanced interceptors could not be replenished at home, the electronic-warfare advantage was eroded, the American-led regional network was itself struck, and the resupply on which a long war depends ran through Washington. None of this made Israel unable to fight; it made Israel unable to sustain the same tempo and coverage indefinitely on national resources alone, which is a precise and important limit rather than a wholesale weakness.

This is what Arab strategic writing has called the breakdown of escalation dominance, and it is the theoretical core of the whole account. An adversary that calibrates its campaign to remain below the existential threshold operates in the space the nuclear weapon cannot reach, and no arsenal, however large or however modern, deters a war it cannot be used to fight. Israel's monopoly thus purchases immunity from annihilation at the price of exposure to exhaustion, and the 2026 war has shown which of those two threats the region has chosen to pose. The undeclared arsenal deters the war nobody intends to fight while contributing little to the war that is actually underway, which is the sharpest available statement of the predicament this report has traced.

The conclusion is not that Israel is weak, for its capabilities are formidable and its technology genuinely advanced, nor that its deterrent is merely borrowed, for much of it has been nationalised. It is that capability and autonomy are not the same thing: an arsenal foreign in origin, though now largely Israel's own, a posture opaque in operation, and a shield Israeli in design but dependent at the high end on American replenishment and an American-led regional network. The 2026 war did not break this system, but it did reveal, more clearly than any exercise could, where its autonomy ends, and its dependence begins. For the region, and for a non-proliferation order that has long accommodated one extra-treaty exception, that revelation may prove among the most consequential results of the war.

It should be said clearly, in closing, that none of this forecasts Israel's defeat, and the report makes no such prediction. Israel may well prevail in the current war, restore a measure of deterrence, and rebuild its magazines with American help over the years that replenishment

requires. The claim advanced here is narrower and more durable than any prediction of outcome: that whatever the result of this particular war, the conditions it has exposed, the foreign provenance of the arsenal, the opacity that places it beyond all accountability, the co-owned and finite shield, the dependence on a single patron, and the double standard that corrodes the order Israel invokes are structural features of Israel's situation that will persist after the guns fall silent. A war can be won, and its underlying strategic condition left unchanged, and it is that condition, not the war's outcome, with which this report is concerned.

Three implications follow for the region and for the wider international order. The first is that missile defence, however advanced, does not confer security against an adversary willing to fight a prolonged war of cheap precision masses, because the cost-exchange runs against the defender and the magazines are finite. The second is that dependence on a single great-power patron, however generous, is a structural vulnerability that reveals itself precisely when it is most needed, in the extreme case when the patron's own needs compete. The third, and the most consequential, is that a regional order in which one state holds an undeclared, uninspected arsenal outside the treaty, while the system presses strict obligations on its treaty-bound neighbours, is not a settled order but a contested one, and the 2026 war has made the contest more open. What the war revealed is not a borrowed deterrent but a dependent one, autonomous in much and reliant in specific, identifiable respects, and that more exact picture is the one this report has tried to establish.

The choice this leaves is stark, and it belongs to Israel and to the powers that sustain it. The present course, an undeclared and modernising arsenal, a shield that only a patron can keep filled, and a double standard enforced by periodic war, is not a stable equilibrium but a source of recurring crisis because it gives every excluded state a motive to challenge the monopoly and gives the monopoly no means of defending itself indefinitely except the patron's finite help. The alternative course, transparency, treaty membership, and a genuine regional settlement that constrains all arsenals rather than exempting one, is the one Israel has refused for half a century and refuses still. Which course is taken is beyond the scope of this report to predict. What the report has sought to establish is only this: that the deterrent on which Israel stakes its security is foreign in its origins, opaque in its operation, dependent in its sustainment, and indefensible as a standard, and that the war of 2026 has made each of these truths, long visible to the region, impossible for anyone to ignore.

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## ABOUT THE REPORT

The 2026 Iran war exposed vulnerabilities in Israel's much-vaunted deterrence posture and revealed the strategic depth behind its undeclared arsenal. This report examines Israel's nuclear weapons and missile forces, the foreign provenance that underpins them, and the operational lessons emerging from the conflict.

Grounded in open-source intelligence and strategic analysis, it offers a rigorous assessment of capabilities, dependencies, and the evolving deterrent balance in the Middle East.

## KEY FEATURES

- Comprehensive analysis of Israel's undeclared nuclear arsenal and delivery systems.
- Detailed assessment of Israel's missile forces and layered defence architecture.
- Examination of foreign supply chains and international partnerships sustaining Israel's strategic capabilities.
- Lessons from the 2026 Iran war and their implications for deterrence stability.
- Policy recommendations for regional and global strategic stakeholders.

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