

NEWS ANALYSIS

Economics of interception: India's private missile push faces its cost test

Rapid growth of inexpensive drones has created a different need: interceptors cheap enough to use repeatedly, yet reliable enough to protect military bases, troops and critical infrastructure; India's counter-UAS market, valued at \$315 million in 2025, is likely to touch \$1.09 billion by 2030



1 of 2 | Future tense: An artistic rendering of Jwala-MK1 short-range surface-to-air missile. - Photo: IG Defence

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In modern warfare, the price of a weapon is as important as its range, speed or precision. The ongoing West Asian conflict has brought this cost asymmetry into sharp focus: when a drone reportedly costing about \$10,000 can trigger the launch of an interceptor worth hundreds of thousands or even millions of dollars, the defender may win the engagement but lose the economics of the war.

The rapid growth of inexpensive drones has not only changed the economics of defence but also created a different requirement: interceptors that are cheap enough to use repeatedly, yet reliable enough to protect military bases, troops and critical infrastructure.

The test of Jwala — a cost-effective interceptor against hostile drones, developed by the private sector — therefore deserves attention, as it raises a consequential question: can Indian industry develop effective, affordable precision weapons to provide the lowest sustainable cost per successful interception for a clearly defined class of threats.

It would be premature to talk about Jwala's cost of interception since commercial viability is yet to be independently validated for interception rates, procurement costs and performance against representative threats. But the larger picture is the growing interest from startups.

Private-sector participation is a promising opportunity in a strategically important segment traditionally dominated by government-backed research and established defence manufacturers.

Developed by Indian defence technology firm IG Defence, Jwala-MK1 is a cost-effective short-range surface-to-air missile designed primarily to destroy hostile unmanned aerial vehicles (UAVs).

An Odisha-based start-up first publicly showcased its product, Jwala (meaning 'flame'), at the North Tech Symposium in Prayagraj in May 2026.

Unlike conventional air-defence missiles that engage aircraft or other high-value targets, Jwala is aimed at addressing the growing threat posed by drones through a relatively affordable kinetic interception system.

On October 3, 2026, the company successfully test-fired two solid rocket motors, an important step towards integrating the propulsion system with the complete missile.

Jwala uses a solid-fuel dual-pulse rocket motor, giving rapid acceleration at launch and extra speed in the final attack phase. It is designed mainly to engage UAVs, with an engagement range of 2-5 km and an altitude envelope from 50 metres to 5,000 metres.

Having cleared the preliminary phase, Jwala now has to undergo complete-system flight trials, validation of guidance and control, testing against representative targets, assessment of reliability and integration with the intended command-and-control architecture; only after which can its operational suitability be judged credibly. IG Defence intends to integrate Jwala with its GRID battle-management architecture, connecting sensors, threat assessment and defensive effectors. This could offer a broader solution than selling an interceptor alone.

Growth opportunities

India's defence-industrial base expansion gives thrust to the private sector. Defence production touched a record ₹1.78 lakh crore in FY2025-26, with private firms contributing about ₹42,000 crore or 24% of the total. Defence exports reached ₹38,424 crore during the year.

Indicating greater potential for the private sector, the Defence Ministry, in March 2026, had highlighted the important role of startups and Micro, Small and Medium Enterprises (MSMEs) in developing indigenous defence technologies.

MarketsandMarkets' August 2026 data found India's counter-UAS (unmanned aircraft systems) market, valued at \$315 million in 2025, is projected to reach about \$1.09 billion by 2030, implying annual growth of 28.2%. However, they do not establish how much revenue will accrue to small missile makers.

"The drone threat is evolving rapidly, and Counter-UAS systems must evolve with it. There is a growing need for affordable interceptors that can be produced and deployed in meaningful numbers," Wing Commander Anoop Sharma (Retd), AVP, IG Defence, had said.

Other private sector players involved in missile production include Solar Industries India, whose defence operations cover rockets, ammunition and loitering munitions; Adani Defence & Aerospace, which is developing manufacturing infrastructure for missiles and other defence systems; NIBE Group, whose new manufacturing complex is intended to cover missile and rocket systems, among other defence technologies; L&T, whose capabilities span precision engineering, launch systems, defence electronics and integration of complex weapon platforms; and Paras Defence and Space Technologies, which reportedly signed a pact with U.S.-based Powerus to manufacture and sell the Guardian-1 counter-drone interceptor in India.

Success on outcomes

Jwala's success will depend on three main outcomes — reliable interception, competitive lifecycle cost and scalable production. If all three are achieved, it could establish a valuable position in India's counter-drone industry as well as etch a place in the global markets.