Defence start-ups and the role of private equity

The Risk Advisory Group

Defence start-ups and private capital

Following nations' defence requirements and investment appetite

An analysis of the most prominent current startups in the defence sector quickly shows that the typology of companies follows the current key themes among investors and the requirements of governments: a growing focus on automation and autonomy; a need for military and civilian dual use technology; the beginnings of a shift from hardware to software systems; and a recognition of space as a potential future warfare domain.

Increased defence spending from NATO member states in the light of geopolitical uncertainty coupled with significant advancements in technology have created fertile ground for defence-focused entrepreneurs.

Automation and autonomy

The benefits of automation in warfare, where systems are used to perform tasks traditionally carried out by humans, has recently become a key focus for governments due to the obvious advantages of increased efficiency and reduced risk to human life. Specifically, this has directly led to growing popularity in the use of drones, with the US Department of Defence redirecting approximately USD 50 billion from legacy development **programmes** into new technologies, primarily consisting of drones and counter drone tech, in its 2025 budget. Anduril Industries, a US-based start-up in 2017, has been a notable success story, having raised over USD 3 billion across five funding rounds and having a current valuation of USD 14 billion.

▲ French soldiers estimate coordinates on a laptop for mortar fire during a French-US "Royal Blackhawk", 2015

Dual use technology

Dual use technology, including drones, satellite tech, and communication systems is a growing focus for both government and investors due to its broader impact and value add beyond conflict scenarios. Investment in the dual use start-up space is currently dominated by venture capital funding, with 123 companies in the space each receiving an average of USD 5 million in venture capital (VC) funding in 2023, according to a 2024 report by the US-based VC firm AIN Ventures. Dual use tech investment has also been bolstered by **intergovernmental** initiatives, most notably through NATO, with its commitment of USD 1 billion to the dual use focused NATO Innovation Fund. A number of the key startups in this sector include the US-based autonomous drone producer, Skydio, and Blackshark.ai, an Austrian AI environment and object detection technology producer.

Software systems

Startups in the defence sector are focusing further on systems technology whilst allowing large traditional defence contractors to develop hardware capabilities. Software focused approaches allow startups to easily adapt to the modern speed of innovation, process large sets of complex and critical data, and develop modular platforms that act as 'brains' for a variety of different platforms, including satellites and drones. These systems include AI autonomy and decision support for target identification and route planning, as well as complex intelligence processing. Among the main startups in this area are the UK based companies Adarga, an AI enabled data analysis software provider, and Improbable, which provides virtual training environments through the **metaverse**. Ultimately, as described by Skydio's co-founder and CEO, Adam Bry, 'small, inexpensive, software-defined systems with rapid iteration are the future of defence.'

▲ U.S. Army 3rd Brigade, 10th Mountain Division, carries a Skydio X2 Delta short-range surveillance drone, 2025

Space as the next warfighting domain

Beyond the above prominent defence start-up offerings, space defence has been noticed by industry observers, such as ***SpaceNews***, due to its rapid growth following increased interest from governments and in particular the Trump administration. Prominent startups include US-based Firefly Aerospace, a developer of space launch vehicles and Dark, a France based developer of dangerous object interceptors. Funding in this space has primarily originated from aerospace focused VC firms, such as Seraphim Capital and Space.VC.

Primary sources of funding

Funding for the defence start-up space is dominated by venture capital, with US-based firms investing USD 35.8 billion across 800 startups in 2022 following the outbreak of war in Ukraine, according to a ***Financial Times***, **June 2023** report. There are several reasons for these firms dominating the space such as the high-risk nature of entering the defence space (with uncertainty around regulation and contracts), the use of already primarily backed VC technology (such as AI), and a changing moral sentiment towards defence (a March 2025 article from the start-up-focused publication, ***Sifted***, highlighted a shift towards "resilience" among investors).

▲ Firefighter works following a Russian drone strike in Kharkiv, June 2025

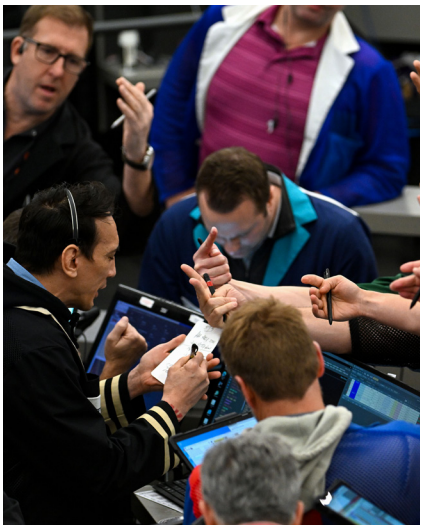
In conjunction with VC capital, government-backed investment **programmes** have also dominated funding in the sector. Many governments have recognised the strategic impact of ensuring that technological development remains ultimately under domestic or allied control. In the US, the ***Defence Innovation Unit*** (DIU) was founded in 2015 in order to bridge the gap between Silicon Valley startups and the Department of Defence (DoD) by accelerating the adoption of commercial technology. Similar **programmes** have been implemented by the likes of the UK with its National Security Strategic Investment Fund (NSSIF) and the EU with the EUR 8 billion budget European Defence Fund (EDF).

The role of PE

Traditionally, PE firms have been cautious of investing in defence citing a multitude of concerns. Recently, in April 2025, the Financial Times reported that executives in the private capital sector had expressed frustration with ESG policies 'holding back financing for European Defence' with pressure from governance rules set by investors as well as rating agencies. Another primary concern for PE is the high risk nature of defence startups. Where VC firms are well placed to back early phase startups with potential high R&D costs, the PE investment model often does not align with the unpredictable revenue streams and limited exit opportunities. A 2024 report by the financial advisory firm, Alix Partners, also warns of the 'efficiency paradox' in which PE firms investing in companies with intensive R&D processes can be over-standardised and over-streamlined resulting in a loss of sight of 'bigger strategic priorities' and a disruption to the flow of future innovation.

Whilst there are a number of barriers that have dissuaded PE executives from approaching defence start-ups, a March 2025 report from S&P Global notes that PE investment in defence increased significantly at the start of 2025, with joint PE and VC investment for January to mid-March of this year totalling USD 4.27 billion globally, nearly equalling USD 4.31 billion in total investment value in the entirety of 2024.

Several PE firms, including US-based Arlington Capital Partners (ACP) and AE Industrial Partners (AEI), have set their sights on technology focused defence start-ups. For example, in March 2025, ACP announced that it had funded the launch of GRVTY, a start-up-focused on deploying software to support the US intelligence and defence community.



▲ The S&P options pit at the Cboe Global Markets exchange, April 2025

Whilst PE firms are beginning to recognise the scalability of dual-use technology, as well as the capital efficiency in what are often smaller outfits, it is likely that increased interest in defence startups will be prompted by growing pressure from governments to ease the path to investment. Prompts from the likes of the UK's Financial Conduct Authority (FCA), who recently confirmed that its sustainability rules 'do not prohibit financial institutions from investing in or providing finance for defence companies', show that there may be a vital role for private capital to play in bolstering defence innovation at a time of heightened geopolitical uncertainty.

Considerations for investors

Despite the growth of the sector and the opportunities it offers, investing in the defence start-up space does not come without risks and considerations. Firstly, the compliance and regulatory environments can be complex to navigate, with ever evolving directives and strong export controls reled to the processing and use of sensitive information and technologies. Investors must also be aware of wider geopolitical implications and shifting policy priorities for the end users of products (governments and militaries). The revoking of **licences** or cuts in budgets can have seismic impacts on startups' cash flows and future income projections. Finally, investors should consider the wider reputational and operational risks associated with the sector. Supply chain opacity, potential hidden beneficiaries and backers, as well as use violations by end users can create serious challenges. It is then all the more necessary that those looking to back defence startups conduct detailed due diligence to ensure that they have a clear picture of the investment target, its modus operandi, and key associated risks.

Defence start-up ecosystem

The below table provides an overview of a selection of the key defence startups in the US and Europe with an insight into the total value of investment they have raised since their creation.

Company	Country	Products/Service	Date founded (approx invest since founding)	Notable sources of investment
Anduril Industries	US	AI powered defence systems including autonomous drones and surveillance systems	**2017** *(USD 4.34 billion)*	VC firms including **Lux Capital, Founders Fund** and **Andreessen Horowitz**. Institutional Investors including **Baillie Gifford** and **Fidelity Management**
Shield AI	US	Autonomous aircraft AI systems	**2015** *(USD 1.31 billion)*	VC firms including **Andreessen Horowitz** and **Hercules Capital** Government backed investment **programme** the **US Innovative Technology Fund**
Improbable	UK	Virtual environments and metaverse for training	**2018** *(USD 866 million)*	VC firms including **Andreessen Horowitz.** Institutional investors including **Softbank**
Saronic	US	Autonomous Surface Vessels (ASVs) for maritime operations	**2022** *(USD 845 million)*	VC firms including **General Catalyst, Andreessen Horowitz, Caffeinated Capital**, and **8VC**
Skydio	US	Autonomous drones	**2014** *(USD 841 million)*	VC firms including **2468 Ventures** and **Andreessen Horowitz** US multinational **NVIDIA**
Helsing	Germany	AI powered military systems, autonomous drones	**2021** *(USD 827 million)*	VC firms including **General Catalyst, Accel**, and **Plural** Angel investors including **Elad Gil** Automotive company **Saab**

Company	Country	Products/Service	Date founded (approx invest since founding)	Notable sources of investment
ICEYE	Finland	Synthetic Aperture Radar (SAR) microsatellites	**2012** *(USD 560 million)*	VC firms including **Molten Ventures** and **OTB Ventures** Defence company **BAE Systems** Government backed investment **programme** the **UK National Security Strategic Investment Fund**
Firefly Aerospace	US	Development of Space launch vehicles	**2014** *(USD 539 million)*	VC firms including **RPM Ventures** PE firms including **AE Industrial Partners.** Japanese multinational **Mitsui & Co**
Epirus	US	Directed energy systems - including high power microwave tech for counter-electronics	**2018** *(USD 543 million)*	VC firms including **AJI Capital** Family offices including **Centaurus Capital**
Chaos Industries	US	Detection and communication technology	**2022** *(USD 490 million)*	VC firms including **Accel** and **8VC**
Quantum Systems	Germany	Small unmanned aerial vehicles (UAV)	**2015** *(USD 349 million)*	VC firms including **Balderton Capital.** Aeronautics company **Airbus Defence and Space**
Mach Industries	US	Hydrogen powered UAVs and munitions	**2023** *(USD 100 million)*	VC firms including **1517** and **Bedrock Financial Services**
Destinus	Switzerland	Hypersonic aircraft and hydrogen powered propulsion systems	**2021** *(USD 94.2 million)*	VC firms including **22 Capital The Spanish Government** Family offices including **ACE Ventures**

Company	Country	Products/Service	Date founded (approx invest since founding)	Notable sources of investment
Vannevar labs	US	AI powered data analysis	**2019** *(USD 91.1 million)*	VC firms including **DFJ Growth** and **General Catalyst**
Adarga	UK	AI data analysis for defence and intelligence	**2016** *(USD 52.5 million)*	VC firms including **Boka** and **Allectus Capital**
Blackshark.AI	Austria	AI generated training environments and object detection	**2020** *(USD 35 million)*	VC firms including **Point72 Ventures.** US multinational **Microsoft (through its M12 venture fund)**
Living Optics	UK	Hyperspectral cameras for surveillance and reconnaissance	**2019** *(USD 32.1 million)*	VC firms including **Oxford Science Enterprises** and **Octopus Ventures**
Stark	Germany	Fully autonomous strike drones	**2024** *(USD 15.5 million)*	VC firms including **Sequoia Capital** Angel investor **Peter Thiel**
Deepnight	US	AI enhanced night vision technology	**2023** *(USD 11 million)*	VC firms including **Y Combinator** Angel investor **Kulveer Taggar**
Dark	France	Interceptor rocket system for space debris and air launched rockets	**2021** *(USD 10.9 million)*	PE firms including **Earazeo** Investment bank **Bpifrance**