



There's a way for European startups to grab a piece of the largely gated multi-billion-euro defense market without becoming military experts: team-up with one of the big guys.

Thales, one of the world's biggest defence suppliers, is calling for pitches from entrepreneurs in the region, backing the military sector's emergence as a market for collaboration. Startups from the business and consumer worlds and well-established defence companies are finding strong incentives to overcome their differences and team up.

"Here's my technology. Do you have a market for it?"

"The typical approach we get from startups is: 'Here's my technology. Do you have a market for it?'," says Frédéric Montagard, who is in charge of technology intelligence, assessment and insertion at Thales, effectively heading up its startup coordination.

"We become partners because they have a technology ready, and we can tweak it with our own expertise and take it to our customers faster and cheaper than if we did everything in-house."

The aerospace and defence market is expected to grow in 2020, including by countries in the NATO military alliance, according to a Deloitte report last year. Military spending amounted to some \$245bn in Western Europe alone in 2018, according to data compiled by the Stockholm International Peace Research Institute (SIPRI).



Thales' Frédéric Montagard

But the complexities of military tenders and the kinds of clearances required to supply the army tend to make defence contracts inaccessible for startups going at it alone in Europe. They face unfamiliar rules and codes, different from their day-to-day of doing business in the commercial world.

Thales' history as a European defence behemoth, as well as cybersecurity expertise reinforced by its recent acquisition of Gemalto, means the company has the ability to cater to the military's specific needs. It has the budget and size to guarantee what practically no startup can: a policy for near-zero margin of error, even for brand new technology.

Becoming government compatible

If startups think selling to big companies is hard, it is nothing compared to selling to government.

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"We take B2B startups and make them B2G compatible," says Thierry Devèze, innovation leader at Thales. That's business-to-business turning into business-to-government, which means ticking the boxes for required legal, technical and military clearances. In return, the corporate giant gets speedier innovation.

Thales has been pushing for the past five years or so to collaborate more with up-and-coming startups, despite what is sometimes a massive culture shock for the company, better known for its secrecy and engineers in grey suits than for meetings around foosball tables. It has made some adjustments along the way.

"We put ourselves in the entrepreneurs' shoes, so we cut back on meetings, do more videoconferencing and take on the heavy, costly tasks like all the legal stuff," Montagard says. "We link the interesting startups quickly with the right people in and around Thales."

Some 1,200 startups each year reach out in more or less formal chats about working together. The company has about 1,000 startup partners in portfolio and 20 collaborative proof-of-concept products in the works.

Faster military innovation

One example the company demoed recently at its InnovDays event is an augmented-reality helmet for soldiers, **with an integrated voice-assistant and navigation system** that also shows the positions of fellow soldiers. It will be ready to sell within the next two years, and was built by combining Thales know-how with technology from startups that wasn't necessarily geared towards the military to begin with.

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The company teamed up with Simsoft Industry, a French upstart based near Toulouse which makes voice assistants, usually for industrial applications. It also used gesture recognition software by Clay AIR, a Paris-based startup with research labs near Bordeaux and offices in California, which is also marketing its hand-tracking technology for use in cars and gaming virtual-reality headsets.

“In a world where Al Qaeda can buy Chinese drones in a snap, the usual 10-year innovation cycle in the military just doesn’t work anymore,” says Thales’ Devèze. “We’re aiming for three years instead, and getting there includes building on existing products and turning them into military applications.”

Consumer tech turns critical

Another demo at a recent event showed potential applications for pilots and air-traffic controllers for a mind-scanning device called Melomind, built by Paris-based neuroscientists turned entrepreneurs.



Thales’ 2019 InnovDays

Thales is analysing data gathered by the Melomind device using its own sophisticated signal-analysis software, and testing use-cases for critical applications. For instance, the device could be used to sense when an air traffic controller gets too tired to focus, by capturing brain activity.

“They have a good consumer product, so we contacted them about using the device with our own technology,” says Daria La Rocca, a data scientist at Thales. “We’re thinking about entirely different applications.”

The company is looking to partner with startups in segments including deeptech, artificial intelligence, cybersecurity and smart sensors. It has a cybersecurity accelerator at Paris mega-campus Station F.

In some cases partnerships end in takeovers. Last year, Thales bought upstarts Ercom, which specialises in communications and device security, and Suneris, which makes software to supervise telecoms networks traffic.

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