

# Most Innovative Security & Defence Tech Company 2025 – Western Europe & Situational Awareness Tool Pioneer Award 2026

## Particle Summary

Portugal's SME landscape is one of the most impressive in Europe, with its streak of innovation having massive implications for a host of industries across EU member states. A great example of its prowess can be seen through PARTICLE SUMMARY, a business established in 2018 to design and develop cyber-physical solutions through the IoT paradigm, supporting big data architectures and high volumes of data exchange in cloud environments. Founder and CEO Marco Manso spoke with us for more on how these solutions translate to the defence, security, and health industries.

PARTICLE SUMMARY is a Portuguese technology start-up specialising in situational awareness systems, real-time surveillance, and defence technology for governments, military, and first responders. Its offerings are primarily based around secure systems and mobile applications for improved situational awareness, resulting in the integration of comprehensive monitoring capabilities, robust communication protocols, and AI-enabled analytics alike, all whilst upholding the strictest security and privacy features for these sectors.

This is just the beginning, as PARTICLE's wealth of experience working with a number of NATO research groups on both network-enabled environments and open APIs has also contributed to interoperability solutions being achieved amongst heterogeneous systems and across borders alike. Similarly, the company is also experienced when it comes to EU-funded research programmes, with these seeing it explore cutting-edge concepts and expertise in implementing and deploying innovation-led solutions in the security sphere.

All of this makes PARTICLE a key player in some of the most highly competitive markets in Europe, spaces where companies both large and small are vying for success. One of the things that sets this company apart from the rest is the unique proficiency its team have when it comes to developing secure and effective interoperability environments, with these experts being capable of addressing the needs of their clients and combining the latest technologies in a way that is both affordable and unobtrusive, as Marco himself demonstrated.

"In April 2024, PARTICLE authored with the European Committee for Standardisation the CWA 18096, which implements standardised protocols, data formats, and interfaces for a network-enabled sensor ecosystem to connect and exchange information in a harmonised and interoperable way", he explained.

Innovation is a common theme across this and other such projects spearheaded by the company, which leverages agility across both its decision making and action taking, reinforcing its expertise and its market-leading position.

With defence and security currently booming across Europe, this as a result of current geopolitical conflicts and the need to modernise both military and

security capabilities, EU initiatives such as Readiness 2030 have been created, with the aim of simplifying the market and bolstering protection. The investments that have stemmed as a result have encouraged SMEs like PARTICLE to partake in advancing and innovating across these systems, helping to defend the continent across land, air, sea, space, and even cyber.

**"Currently, as part of the SEAGUARD Innovation Action (funded by the EU Horizon Programme), PARTICLE is designing and implementing an interoperable system for cross-border maritime surveillance involving multi-domain manned and unmanned vehicles."**

Unmanned systems, interoperability, and AI integration are all being favoured across these channels, and given its experience in all of the above, PARTICLE remains in a unique position to make the most of these opportunities, delivering tailored, real-time solutions across the likes of remote monitoring and surveillance missions. Beyond this, since the company is wholly owned by European shareholders and based in Portugal – a NATO country fully committed to its defence and security obligations – PARTICLE receives all of the support it needs to continue to support national defence.

It is on the back of this that the company is able to plan for an exciting and prosperous future, with initiatives all based around continuing to reinforce its numerous developments and European partnerships, especially when it comes to situational awareness tools. The refinement of both its business strategy and its development have allowed it to maintain this excellence, and it is hoped that 2026 will bring along new investors and business partners interested in supporting PARTICLE's ambitious growth strategy.

As these plans come to fruition, all that is left is to champion PARTICLE SUMMARY as the Most Innovative Security & Defence Tech Company 2025 – Western Europe and recognise it with our Situational Awareness Tool Pioneer Award 2026. These accolades have been achieved due to its exceptional ability to combine reliability, innovation, and mission-critical performance to elevate security, defence, and healthcare sectors across Europe. More on how it does this can be found by following the website link below.

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