

SMARTY PROJECT: Advancing Secure AI in the Cloud-Edge Continuum

European joint project SMARTY enters its second year with strong momentum

Golfe Engineering Denmark (G.E.D) leads key deliverables shaping SMARTY's future innovations

The European research initiative **SMARTY**, launched in 2024, is making significant progress towards building a secure, trusted, and high-performance **cloud-edge continuum** for AI-enabled applications across automotive, fintech, telco, and industrial sectors.

The SMARTY project develops an integrated environment where heterogeneous systems protect **data-in-transit** and **data-in-process**, enabling secure execution of AI workloads. This is achieved through **quantum-resilient communications, confidential computing, software-defined perimeters, and swarm formation**—all combined into a multi-layered security fabric. In addition, **semantic programmability** and **graph-based service management** are enabling intuitive, drag-and-drop deployment of AI services for faster, more reliable innovation.

Golfe Engineering Denmark (G.E.D) has played a pivotal role during the project's first year as **lead contributor to the strategic deliverable defining SMARTY's use cases and requirements**. Acting as a key task contributor within **Work Package 2**, G.E.D coordinated the development of a comprehensive roadmap detailing the **functional and non-functional requirements, performance indicators, infrastructure, and enabling technologies** for SMARTY's demonstrators.

This foundational work ensures the alignment of developments in the project's technical work packages (WP3, WP4, WP5, WP6) and provides the consortium with a clear execution plan for integrating **11 hardware assets** and **33 software/AI assets** into operational testbeds.

SMARTY's first-year achievements include:

- Detailed mapping of **six advanced use cases**, including:
 1. Secure on-board electronics for the automotive sector
 2. Secure edge computing for telco operators
 3. Secure and resilient financial infrastructures
 4. Cooperative perception for driving assistance and collaborative traffic control
 5. Edge-based collective perception for cooperative ADAS
 6. Semantically-powered smart factories (*newly introduced through consortium collaboration*)

- Definition of technical and performance KPIs for each use case.
- Asset mapping to testbeds, ensuring seamless integration into demonstrators.
- Strong coordination among 33 partners, resulting in cross-sector innovation.

Impact and Outlook

These results mark a strong first year for SMARTY, laying the groundwork for the next 24 months of development and integration. The secure, AI-powered infrastructure envisioned by SMARTY will be tested in real-world environments, with transformative applications across Europe's key industries.

About Golfe Engineering Denmark (G.E.D)

G.E.D is a Danish SME specializing in technical project management and media engineering expertise for innovation-driven projects. Services range from technical specification and market analysis to full PMO roles in publicly funded European research initiatives. In SMARTY, G.E.D ensures that complex technologies and diverse industrial needs converge into a unified, executable strategy.

SMARTY [Consortium](#)

SMARTY is driven by a broad European partnership of leading industry players, SMEs, and academic institutions, including CNIT, ITALTEL, University of Stuttgart, Orange Polska, Technische Universität Berlin, NVIDIA, Bosch GmbH, Infineon Technologies, Continental Automotive, and Barcelona Supercomputing Center, among others.

Project website: <https://www.smarty-project.eu/>

Golfe Engineering Denmark: www.golfe.dk