

# STRATIO, S.A.

## Partner Identification Form (PIF)

### 1. Organisation Identity

- **Legal Name:** Stratio, S.A. ("Stratio")
- **PIC:** 924784227
- **Address:** Instituto Pedro Nunes, Rua Pedro Nunes, Ed.D 3030-199 Coimbra, Portugal
- **Website:** <https://stratioautomotive.com/>
- **LinkedIn:** <https://www.linkedin.com/company/stratioautomotive>
- **Contact Details:** ricardo@stratioautomotive.com
- **Legal status:** For Profit, SME
- **Country of establishment:** Portugal

### 2. Scope & Expertise

- **Overview of core activities**

Stratio is a deep-tech SME at the forefront of AI innovation for mobility systems. Our work uniquely combines Physical AI (modeling real-world vehicle behavior through sensor analysis) with intelligent agent systems (autonomous reasoning and operational decision-making). With over a decade of development, we've created AI models that simultaneously understand vehicle physical states and fleet operational dynamics, converting raw sensor streams and operational data into predictive intelligence that ensures fleet continuity and urban mobility.

We're developing next-generation AI across the full mobility stack:

**Physical AI for Vehicle Condition:**

- Deep learning models trained on billions of real-world sensor data points from moving vehicles
- Multimodal sensor fusion to understand mechanical and electrical systems
- Real-time inference at the edge: AI running directly on vehicle hardware
- AI-driven digital twin capabilities: virtual representations of vehicle state for predictive monitoring and early warning
- Pre-trained AI models on 10+ years of fleet operational data, adaptable for transfer learning across vehicle types and use cases

### Intelligent Agent Systems for Fleet Operations:

- Agentic AI that reasons about vehicle state, maintenance priorities, and operational constraints
- Autonomous recommendation engines optimizing maintenance scheduling and resource allocation
- Decision-support systems learning from operator feedback and fleet performance patterns

### The impact of our work spans both technical domains:

- Physical AI capabilities: Earlier failure detection, optimized vehicle performance, extended component life
- AI capabilities: Smarter maintenance decisions, better resource allocation, autonomous fleet optimization
- Integrated value: Fewer breakdowns, lower emissions, more reliable transport, and intelligent infrastructure for tomorrow's autonomous fleets

Stratio technology is deployed across major transport operators worldwide (Keolis Group, ComfortDelGro, Arriva, RATP), processing real-time data from thousands of connected vehicles across the world. This represents production-scale AI deployment in operational mobility systems today.

## 3. EU Project Experience

Stratio has participated in a diverse portfolio of European and National co-funded research and innovation projects, under funding programmes such as Horizon 2020 (including the EIC Accelerator, formerly SME Instrument), Eureka Eurostars, ESA, and regional structural funds.

Funding Programme	Call Topic	Project Name and Number	Keywords
Horizon 2020	2R-OC-IP4-01-2017 (RIA)	My-TRAC: My TRAVel Companion Project no:777640	seamless transport; sustainable transport; affective computing; travel companion; rail; public transport; smartphone application; data analytics; behavioural analytics; artificial intelligence

Horizon 2020	SMEInst-10-2016-2017	JAM: vehicle predictive maintenance through Artificial Intelligence Project No:739305	fleet efficiency and productivity; predictive maintenance; vehicle health monitoring; retrofitting; VOR; vehicle health monitoring; artificial intelligence; CO2 emissions reduction
Horizon 2020	SME instrument phase 1: IT-1-2015-1	Jam: Enhancing fuel efficiency and reducing vehicle maintenance and downtime costs, using real-time data from vehicle sensors (IoT) and a machine learning algorithm for big data analysis.  Project no: 720115	fleet efficiency; fleet productivity; preventive maintenance; downtime costs reduction; real-time data analysis; machine learning; algorithm; big data analysis; eco-driving; GHG emissions reduction

These projects have supported significant R&D investment. Key outcomes include:

- Development of industry-ready predictive maintenance and condition monitoring solutions, using real-time vehicle data and artificial intelligence;
- Expansion of research and engineering teams, along with technical infrastructure across several European countries;
- Validation of Stratio's technology in real-world public transport operations, including large-scale fleet deployments;
- Commercial growth directly supported by the outcomes of these research initiatives, culminating in two successful venture capital funding rounds:
  - Seed Round (2019), led by Crane Ventures:  
<https://techcrunch.com/2019/05/28/out-of-stealth-stratio-emerges-with-predictive-ai-to-stop-your-bus-breaking-down/>
  - Series A Round (2021), led by Forestay Capital:  
<https://techcrunch.com/2021/11/29/portugals-predictive-maintenance-startup-stratio/>

[tio-pulls-in-a-12m-series-a-round-led-by-forestay/](#)

These achievements highlight the strategic value of public-private collaboration in advancing mobility innovation. European funding played a critical role in transforming Stratio's core technology from early research into a scalable commercial platform now used by transport operators worldwide.

## 4. Resources & Facilities

- **Staff**

Stratio has a team of approximately 50 people. Our staff bring knowledge from sectors such as transportation, automotive, software and manufacturing. Team members have worked in a range of settings, from startups to large international companies.

Our technical expertise covers several key areas:

- Artificial Intelligence & Machine Learning: deep learning, foundation models, transformer architectures, physics-informed neural networks, explainable AI
- Data Science & Engineering: large-scale data pipelines, multimodal sensor fusion, real-time analytics, MLOps
- Automotive & Mechanical Engineering: vehicle systems, diagnostics, connected vehicle architectures, CAN/OBD protocols
- Software Development & Embedded Systems: edge AI deployment, real-time operating systems, IoT device engineering
- Hardware Engineering: sensor integration, electronics prototyping, edge compute modules
- Product Development: TRL 3-8 innovation cycles, research-to-market acceleration
- Information and Security Engineering

Stratio is based in the central region of Portugal (Coimbra), and its team is made up of professionals across the Globe, supporting a diverse and international work environment. While headquartered in Portugal, Stratio has staff located across different countries. This allows us to serve clients in various regions and time zones effectively.

- **Physical Infrastructure and Resources**

Stratio has dedicated facilities in Portugal that support both software and hardware research and development. Our resources include:

- Spaces for hardware prototyping and electronics testing
- Equipment for collecting real-time vehicle data and validating condition monitoring models
- Development tools for embedded systems and in-vehicle communication protocols
- Secure environments for training and deploying artificial intelligence models
- Scalable cloud systems that support large-scale data processing and predictive analytics
- Access to operational fleets through customer partnerships, enabling live testing and validation in real-world transport settings

These resources support the entire innovation process, from early research through to commercial deployment and long-term support.

## **5. Partnership Role & Contribution**

Stratio is open to joining collaborative research and innovation projects as consortium partner, in the mobility and transport domain, particularly within the Digital Industry and Mobility/Environment Horizon Europe Clusters. The team is ready to lead specific work packages aligned with Stratio core competencies in artificial intelligence, vehicle data analytics, and connected fleet technologies.

We are specifically interested in Horizon Europe calls related to:

- AI agents and foundation models for mobility applications (HORIZON-CL4-2026-05-DIGITAL-EMERGING-02)
- AI-driven digital twins for early warning and operational intelligence (HORIZON-CL4-2026-04-DIGITAL-EMERGING-09)
- Connected and autonomous vehicle platforms (DIGITAL 2026-AI-09 - ECAVA)
- GenAI and Apply AI strategy implementation in mobility and transport sectors (HORIZON-CL4-2026-04-DIGITAL-EMERGING-19)

**Our core contributions to Horizon Europe consortia include:**

- Physical AI & Digital Twin Development: Leading work packages in AI model architecture design, training on real-world mobility data, and deployment of digital twin systems for vehicle and fleet intelligence
- Real-World Validation Environments: Managing live pilots with operational transport fleets across multiple countries, providing authentic testing infrastructure for consortium AI research
- Edge AI Deployment Expertise: Translating research models into production-ready systems capable of real-time inference on resource-constrained vehicle hardware
- Automotive Domain Expertise: Contributing deep knowledge of vehicle systems, and operational constraints to ensure AI research addresses real-world challenges