Gradiant at agrifoodTEF

agrifoodTEF is a European network of testing infrastructures that enables **agritech companies** to validate their robotics and artificial intelligence (AI) solutions under real-life conditions.



Al & robotics services for agrifood innovation

by gradiant

At Gradiant, we bring

our expertise in AI and robotics to help evaluate and validate technologies that drive automation, efficiency, and data-driven agriculture

Al & data services for agriculture

Transform your agricultural data into smart, actionable insights. We train and evaluate AI models using images, sensor data and weather information to detect plant diseases, estimate yields, and monitor soil conditions—all through an intuitive dashboard. We also ensure your data is clean, complete, and ready to be used or shared securely in collaborative dataspaces

Key services:

- \checkmark Training of AI models for agrifood applications
- ✓ Computer vision model training using TEF infrastructure
- Monitoring and evaluation of deployed AI model
- ✓ Tracking of AI development lifecycle
- ✓ Design and execution of algorithm test scenarios
- \checkmark Data quality analysis for AI and robotics use
- ✓ Design of dataspace use case scenarios

Al software setup & deployment

We assess your current software and data pipelines to ensure your systems are Al-ready. Need to test first? We offer temporary environments and portable "Al toolboxes" using standard containers—making testing and deployment simple and seamless

Key services:

- ✓ Assessment of data architecture for agrifood applications
- ✓ Deployment of AI models for testing
- Container image generation for streamlined testing and deployment



Drones, robotics & farm automation

Use drones (UAVs) and ground robots (UGVs) to collect detailed data about your land. We support sensor and camera integration, automate flight or navigation paths, and generate precise maps and reports—covering everything from soil moisture to crop health

Key services:

- ✓ Feasibility assessment for UAV/UGV sensor integration
- ✓ Data collection using drones and ground robots
- ✓ Generation of terrain datasets and analysis outputs

Connectivity & Cybersecurity for smart farming

Ensure reliable communication between devices in remote areas using private 5G or LoRa networks. We also protect your AI and robotic systems with cybersecurity scans that detect software vulnerabilities—keeping your farm operations secure and resilient

Key services:

- ✓ Connectivity assessment via private 5G/NB-IoT/Lo-RaWAN networks
- ✓ Data collection from network-connected sensors
- ✓ Vulnerability scans of AI or robotics software systems
- All services are 100% funded for SMEs
- After that, clients cover the full-service cost
- Multiple services can be combined, and we can also tailor new ones to meet your specific needs





This project has received co-funding from the European Union's Digital Europe Programme under grant agreement N° 101100622.