

Service ID S00252

Location Remote, Spain



Assessment of the feasibility of integrating payloads or equipment into U

Provider service

GRADIANT

Link to content

<https://agrifoodtef.eu/catalogue-of-services/assessment-feasibility-integrating-payloads-or-equipment-ugvs>

Type of Sector

Arable farming, Greenhouse, Horticulture, Livestock farming, Tree Crops, Viticulture, Forestry

Accepted type of products

Design / Documentation

Type of service

Desk assessment

Description

This service will evaluate the feasibility of securely integrating third-party equipment or payloads related to the agrifood sector into unmanned ground vehicles (UGVs). The goal is to assess whether such integrations can be done safely and efficiently, ensuring that the added equipment does not interfere with the performance and operation of the UGV. This service will place special focus on key integration concepts such as minimum functional requirements, communication interfaces, power supply for equipment, physical integration of devices, and software compatibility. The outcome will include an evaluation of the feasibility of the integration, along with possible recommendations for the suitable configuration to ensure the proper functioning of the system.

How can the service help you

This service fulfils customer needs for a secure and efficient way to integrate third-party equipment or payloads into UGVs. Before the service, customers may struggle with uncertainty about the technical requirements and compatibility of adding new devices to the UGV systems, risking potential failures or incidents. After the service, they will have a clear understanding of how to integrate these devices, including a better configuration if it is possible. This helps customers to reduce integration risks and to enhance UGV system performance.

How the service will be delivered

Although the service initially only offers the option to evaluate the feasibility of integrating a specific set of equipment into a UGV, if the approach established by the customer is found to be inadequate, they can request a review of an alternative method to achieve the final objective.

Service customisation

This service has no restrictions regarding delivery, with its duration depending on the needs established by the customer. The service is completely independent of the user's location, with the only requirement being that the customer provide the integration objective, as well as the documentation for the equipment to be integrated (such as datasheets, 3D models, etc.). At the end of the service, the customer will receive a report detailing the feasibility of integrating the equipment into the UGV, including recommendations for the most efficient configuration of the equipment.