Service ID S00385



Location Belgium

Policy lab for innovative drone technologies in regulatory sandboxes

Provider service

Instituut voor Landbouw-, Visserij- en Voedingsonderzoek (ILVO)

Link to content

https://agrifoodtef.eu/catalogue-of-services/policy-lab-innovative-drone-technologies-regulatory-sandboxes

Type of Sector

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

Accepted type of products

Design / Documentation

Type of service

Desk assessment, Test design, Test setup

Description

This service is designed to support agri-food companies that want to test and evaluate the use of innovative drone technologies in a controlled environment—a so-called regulatory sandbox. Setting up such a drone sandbox requires navigating complex airspace regulations, flight safety rules, environmental constraints (e.g., drift, pesticide use), and data protection standards. Our experts help you design and prepare a sandbox operation from A to Z: from selecting a test location and identifying legal permissions needed to preparing risk assessments, notifying authorities, and ensuring safe operational procedures. We also offer advice on sensor integration, traceability, and aligning with EU drone and agricultural regulations such as Regulation EU 2019/947 on the operation of unmanned aircraft. This is an ideal service for companies wishing to run trials with crop spraying or precision seeding drones before launching commercially. - Set up a regulatory sandbox to safely and legally test spraying or seeding drones. - Understand the full list of permissions, safety protocols, and risk assessments required. - Learn how to engage with authorities (e.g., airspace regulators, pesticide control bodies). - Get support in preparing the documentation to operate drones legally during the test phase.

How can the service help you

We start with an intake to assess your objectives and technical setup. Our team then assists you step-by-step with designing the sandbox, identifying applicable legal frameworks (e.g., EASA drone rules, pesticide usage restrictions), preparing required documentation (e.g., flight plans, risk assessments), and coordinating with relevant authorities.

The service can be delivered remotely or on-site. Customers must provide a technical description of their drone system, proposed test activities, and desired outcomes.

How the service will be delivered

The service can be adapted to focus on:

- Country-specific regulations for drone operation in European countries
- Thematic areas like spraying, imaging, or automated flight planning
- Regulatory sandbox exploration for pre-market applications.

Limitations: This is an advisory service; it does not provide legal certification itself but helps prepare you for that process.

Service customisation

This service is tailored to your specific drone application (spraying or seeding, drone in box, etc.), operational scale, and test location. We can support sandbox setups in Belgium and guide cross-border alignment within EU drone regulation frameworks.

Limitations: This service focuses on the sandbox setup phase and does not substitute for official certification or licensing processes but prepares you thoroughly to interact with relevant agencies.