

**Service ID** S00348



**Location** Denmark

## Testing AI Solutions for Precision Agriculture

### Provider service

Danish Technological Institute

### Link to content

<https://agrifoodtef.eu/services/testing-ai-solutions-precision-agriculture>

### Type of Sector

Arable farming, Food processing, Greenhouse, Horticulture

### Accepted type of products

Data, Physical system, Software or AI model

### Type of service

AI model training, Collection of test data, Data analysis, Performance evaluation, Test design, Test execution, Test setup

### Description

This service focuses on testing and experimenting with AI solutions specifically designed for agricultural applications. It aids companies in robotics and drones by facilitating the implementation and deployment of advanced technologies in farming and food processing environments. The service includes the evaluation of new sensors and algorithms that enhance localisation and positioning, crucial for precise agricultural operations. We offer testing and validation of AI-driven solutions for precision agriculture, support for implementing robotics and AI in agricultural practices, optimisation of sensor and algorithm performance for enhanced crop monitoring and yield prediction, and deployment of drones for aerial surveillance and data collection on large farms.

## **How can the service help you**

Agri-tech companies benefit from this service as it enables them to test, validate, and refine their AI-driven solutions tailored for agriculture. By testing and validating the AI-driven solution in real farming conditions, the company gets a clear overview of how well the solution has been tailored to farming and where the solution can be improved. Potentially, this can accelerate the company's time to market. In addition, the service can validate the company's unique selling points, improving the trustworthiness of their solution.

## **How the service will be delivered**

The service can be customized to fit specific agricultural needs, such as soil analysis and crop health assessment. Options include tailoring AI algorithms for unique data processing requirements, modifying sensor configurations for specific crop monitoring, and adapting drone technology for varied farm sizes. Limitations may include the availability of drones and sensors for particular environments and the need for specialized software for data analysis.

## **Service customisation**

The service is delivered through on-site testing and remote support, depending on customer requirements. It involves the deployment of high-precision sensors and drone technology for data collection and analysis. The service can be executed year-round but may have specific timing based on the agricultural cycle. Customers will receive detailed reports on sensor and algorithm performance, recommendations for technology integration, and ongoing support for customisation needs. Customers need to provide their agricultural environment details and specific goals for the service.