





11th European Conference on Precision Agriculture

The Smart-AKIS Network

Closing the Research and Innovation Divide in the area of Smart Faming Technology

A.T. Balafoutis¹, S. Fountas¹, F. van Evert², A. Knierim³, G. Chatzikostas⁴, N. Bellostas⁵, I. Gorriti⁵, S. Aït-Amar⁶, A. Lafarga⁶, K. Erdle⁸, H. Brinks⁹, U. Adam¹⁰, F. Valorge¹¹, D. Tinker¹²

¹Agricultural University of Athens, Greece; ²Wageningen University & Research, The Netherland; ³Leibniz Centre for Agricultural Landscape Research, Germany; ⁴Biosense Institute, Serbia; ⁵Iniciativas Innovadoras, Spain; ⁶ACTA, France; ⁷Navarra Institute for Agri-food Technology and Infrastructure, Spain; 8German Agricultural Society, Germany; 9DELPHY, The Netherlands; 10CEMA, Belgium; 11FRcuma Ouest, France; 12DTA Ltd / EurAgEng, UK * Corresponding author. Email: abalafoutis@aua.gr

Background and Introduction

Smart Farming Technologies (SFT) refers to:

- farm management information systems
- precision farming and
- agricultural automation and robotics



- more efficient use of inputs
- increased work speeds and comfort
- improved decisions

The problem

ICT is causing such fast development in Smart Farming Technologies (SFT) and researchers, equipment suppliers, advisors and certainly farmers are struggling to keep up with the technologies available.

The Smart-AKIS Solution

The Smart-AKIS thematic network (www.smart-akis.com) aims at effective exchange between industry, applied research, agricultural advisors and the farming community to close the gap between research and practice in SFT applied in crop production.

Why follow Smart-AKIS?

www.smart-akis.com

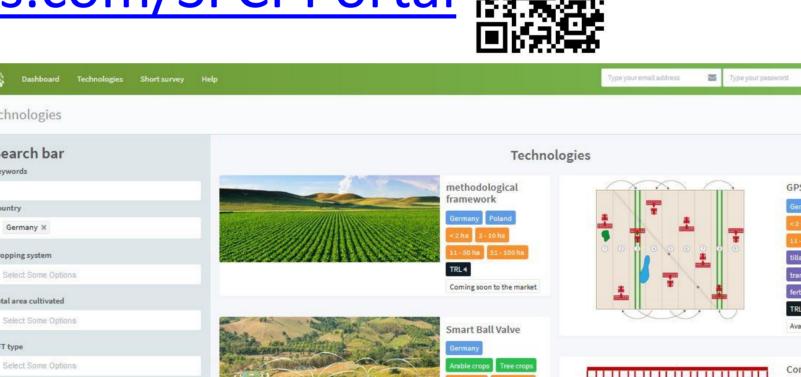


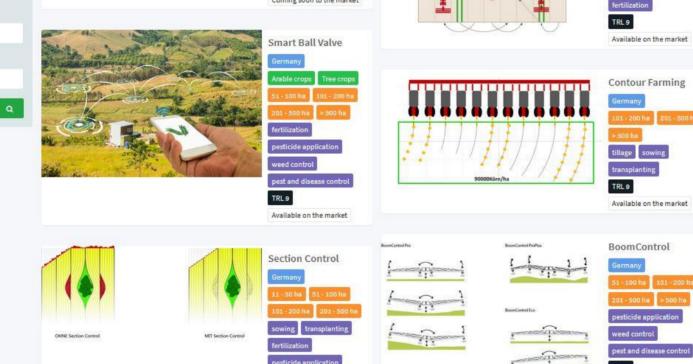
It is a Thematic Network that:

- Creates an easily-accessible online inventory of direct applicable Smart Farming Technology solutions from research results and commercial applications named **Smart Farming Platform**.
- Assess end-user needs and interests, and identify factors influencing adoption in regional level
- Organise Regional Innovation Workshops in 7 countries to adapt the inventoried technologies to regional context and capture grassroot-level ideas for the development of innovation projects.
- Hold Transnational Innovation Workshops to widen this process in the EU level for cross-border collaborations.

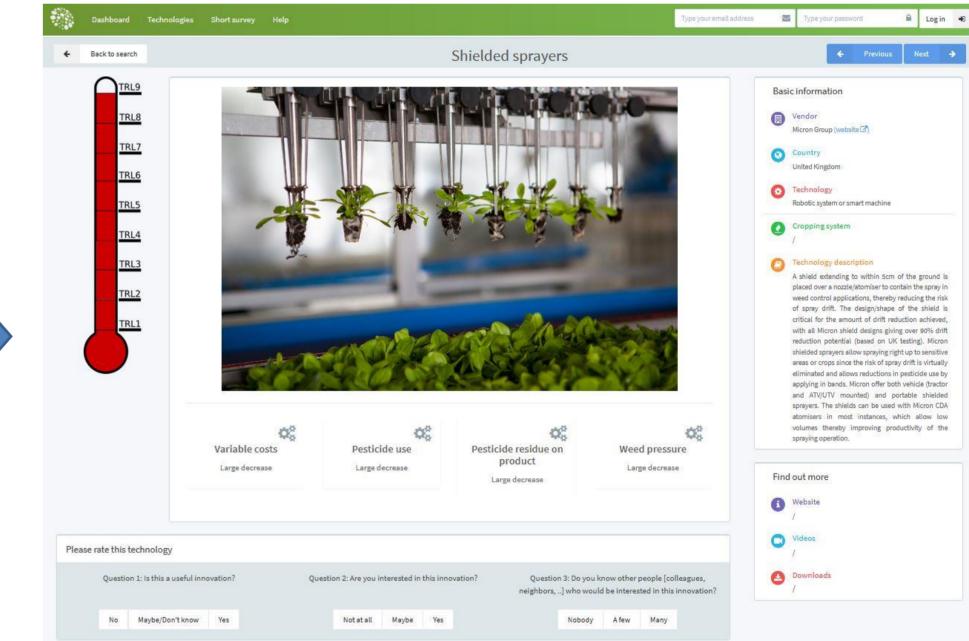
Smart Farming Platform https://smart-akis.com/SFCPPortal







Submit your SFT now!



The Platform

The search engine

Example of Technology Card

- •1094 SFTs have been included already in the Platform
- ●172 entries are for commercial products (FREE of charge promotion of SFTs)
- 719 articles (and growing quickly) and 203 projects included
- •TRLs is more than "5" (Technology validated in relevant environment)

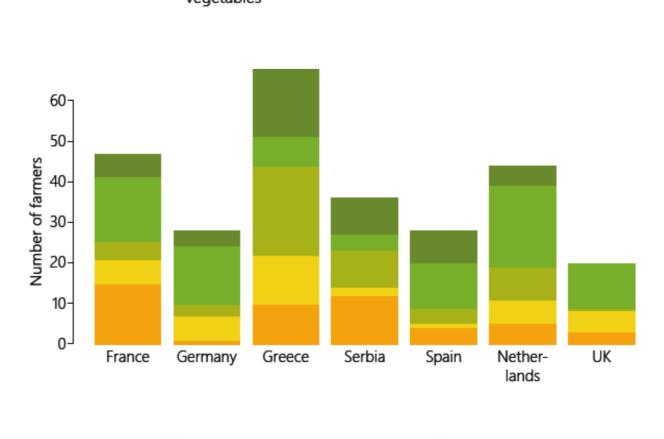
Farmers Survey

•271 farmers from 7 countries surveyed for their needs and interests on Smart Farming

Results

- Crop disease and soil conservation main challenges.
- SFT perceived to reduce inputs and improve productivity
- SFT perceived to have no environmental benefits
- Most useful SFT are considered as:
- ☐ Robots for monotonous tasks
- ☐ Real time diagnostics with drones
- ☐ Integrating SFT systems
- ☐ Data for information and decision support
- High cost and poor compatibility are barriers.
- Advisors, farmers and agri-tech providers are main sources of information

Prioritisation of *Smart Farming* technologies broken down into production systems and countries



Innovation Workshops

A series of Workshops in the seven partner countries have started from late February 2017 with very positive results.

If, as a researcher, product supplier, potential funder or distributor, you are interested in taking part in Smart-AKIS Innovation workshops, please contact your Smart-AKIS Contact Point.

Greece: Matina Voulgaraki, AUA. stavou@aua.gr France: Pauline Bodin, ACTA. pauline.bodin@acta.asso.fr **Serbia:** Milica Trajkovic, BioSense. <u>trajkovic.milica.ns@gmail.com</u> **Germany**: Klaus Erdle, DLO. k.erdle@dlg.org

Spain: Alberto Lafarga, INTIASA. <u>alafarga@intiasa.es</u> **UK**: David Tinker, DTA / EurAgEng. d.tinker@ntlworld.com The Netherlands: Harm Brinks, Delphy. h.brinks@delphy.nl

SMART AKIS PARTNERS:























