

Smart Farming Thematic Network

HORIZON 2020 THEMATIC NETWORK - Smart AKIS 'European Agricultural Knowledge and Innovation Systems (AKIS) towards innovation-driven research in Smart Farming Technology.'

Smart-AKIS is a Horizon 2020 thematic network which aims to increase the adoption of Smart Farming Technologies by the European farming community. It strives to bridge the gap between the field and research on the identification and delivery of new Smart Farming solutions to fit farmers' needs.



Smart Farming for agricultural productivity and sustainability

Smart Farming technologies can be a major support for farmers in the response to the global food challenge of feeding more than 9 billion people in 2050, as well to sustainability and competitiveness challenges which they face. Spyros Fountas, Smart AKIS Coordinator, from the Agricultural University of Athens says "Following the plant breeding and genetics revolutions, a third Green Revolution is taking over the agricultural world based upon the combined application of modern information technologies and solutions such as precision equipment, the Internet of Things, positioning systems, Big Data, drones, robotics, etc."

Smart Farming technology (SFT) has a real potential to deliver a more productive and sustainable agricultural production, based on a more precise and resource-efficient approach. However, a number of technological, social, regulatory and economic factors have hindered the widespread adoption of these technologies, as Maria Kernecker from Leibniz Centre for Agricultural Landscape Research-ZALF explains "Amongst these factors, the gap between the needs, interests and expectations of the research and the farmer communities led to a low adoption of these technologies: in the USA possibly up to 80% of farmers use some kind of SFT, in Europe it is no more than 24%. And so their potential to contribute to a more productive, resource efficient and sustainable EU agriculture has not yet been fully exploited."

From the farmer's point of view, Smart Farming provides the farmer with opportunities for better decision-making and more efficient management. [More information on Smart Farming.](#)

Providing applicable Smart Farming solutions to farmers in Europe

Smart AKIS will collect and disseminate existing but insufficiently used scientific knowledge and best practices on Smart Farming. It will:

- Create and disseminate an inventory of direct applicable solutions from the large stock of research results and commercial applications in Smart Farming in Europe, tailored to the needs of farmers. [Read more...](#)

- Foster the collaboration between the farming community, extension and advisory services, research and Smart Farming technology providers. This will promote new innovation projects and processes for the development of new Smart Farming solutions taking into consideration end-users' needs and interests. [Read more...](#)

This approach will take place both at regional level, in seven Innovation Hubs located in France, Germany, Greece, Netherlands, Serbia, Spain and UK, as well as at a European-wide level. An online Smart Farming Community Platform will facilitate the dissemination of results and interaction between stakeholders, and being compatible with the EIP-AGRI Service Point, will ensure the long term accessibility of results.

It aims to showcase and assess over 400 research project results and available smart farming technologies and solutions on its platform, leading to the adoption of over 50 Smart Farming solutions, involving over 700 stakeholders at specific events which will be held by the hubs, spark national and international collaborative projects on the topic whilst creating links with Operational Groups.

Launching the inventory of Smart Farming solutions

The inventory will allow searches by available categories of solutions, and provide information on the technical solutions, as well as on the economic and environmental benefits through videos and other interactive demonstration tools.

Have you developed innovative products, projects or research results which apply ICT technology for agricultural management information systems, precision agriculture and agricultural automation and robotics? Smart AKIS thematic network has recently launched a call for contributions from researchers and companies. [Fill in the form here.](#)



The consortium

Smart AKIS is composed of 13 partners from 8 countries, representing academia and research, farmers associations and cooperatives, advisory and extension services and the agricultural equipment industry:

- Agricultural University of Athens (Greece)
- Wageningen University & Research and Delphy (Netherlands)
- German Agricultural Society-DLG and Leibniz Centre for Agricultural Landscape Research-ZALF (Germany)
- BioSense Institute and Government of Vojvodina (Serbia)
- Technical Institutes of Agriculture-ACTA and National Federation of Cooperatives for Agriculture Material Users-CUMA (France)
- Institute for Agri-food Technologies and Infrastructures of Navarra-INTIA and Iniciativas Innovadoras (Spain)
- European Agricultural Machinery Association-CEMA (Belgium)
- European Network for Engineering and Systems in the Rural Sector-EurAgEng (UK)

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More information

WEBPORTAL: www.smart-akis.com

FACEBOOK: @SmartFarmingNetwork

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