



EIP-AGRI Workshop 'Enabling farmers for the Digital Age: The Role of AKIS'

26-27 April 2018
Jūrmala, Latvia

All information of the workshop
available on www.eip-agri.eu
at the event webpage

<https://ec.europa.eu/eip/agriculture/event/eip-agri-workshop-enabling-farmers-digital-age>

EIP-AGRI Workshop 'Enabling farmers for the digital age: the role of AKIS Agenda day 2: 27 April 2018

9:00 – 9:20 **Welcome to Day 2**
Outcomes Day 1 and introduction to Day 2 agenda

9:20 – 10:30 **Enabling farmers to the digital era: tools and practices Carousel of inspiring examples**

10.15 – 10.30 Mini Quiz about Farmers' Information Needs

10:30 – 11:00 Coffee break

11:00 – 12:15 **Understanding and accessing digitisation opportunities: what farmers need**

- EKONmod milk – Miroslav Záhradník and Josef Kanoš (Slovak Republic)
- Breakout session 3

12:15 – 12:45 Results of working groups and general reflection

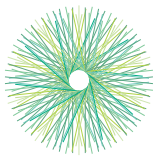
12:45 - 13:00 Closing of the workshop

13:00 - 14:00 Light lunch and goodbye



Enabling farmers to the digital era: tools and practices - Carousel of inspiring examples

1.	LimburgAgrofood: supporting agri-digital community	Frans Broeders	Netherlands
2.	Smart-AKIS. European AKIS towards innovation-driven research in Smart Farming Technology: the Smart Farming Platform – Education Project “Digitization in agriculture & forestry”	Spyros Fountas	EU
3.	IoT-Catalogue: Supporting IoF2020 Ecosystem	Martin Hirt	Austria
4.	Digital Start-up advisory service (4D4F)	Bruno Almeida	Portugal
5.	PLAID Virtual Farm	Andrew Lazenby	EU
6.	SEMS – Smart Economic Monitoring Systems of production and operation costs related to precision and high mechanization	Claire Hardy	EU
7.	MIKÄ DATA – Operational Group	Aldo Bertazzolli	Italy
8.		Petri Linna	Finland



Education Project "Digitisation in agriculture & forestry" Federal Institute for Rural Education and Training (LFI) www.lkdigital.at

AUSTRIA

Starting date - expected end date | 06.2017 - 12.2018



Since decades the 9 federal LFIs are the main training providers in Austria (2017: 334.573 participants in 12.920 courses). As for many institutions preparing for digital age is a crucial task, the federal LFI started this education project to design new offers for farmers related to digitisation.



MIT UNTERSTÜTZUNG VON BUND, LÄNDERN UND EUROPÄISCHER UNION

BUNDESMINISTERIUM
FÜR NACHHALTIGKEIT
UND TOURISMUS

LE 14-20
Entwicklung für den Ländlichen Raum

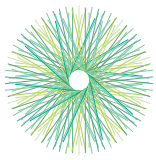
Europäischer
Landwirtschaftsfonds für
die Entwicklung des
Ländlichen Raums:
Hier investiert Europa in
die ländlichen Gebiete



The project consists of several work packages which aims to integrate new technologies and tools into the broad educational program of LFIs. At the beginning of the project the microsite lkdigital.at has been launched which gives people interested in these topics a first initial contact and shows them where they can find continuing materials. In the meanwhile an essential focus of the project is "to train the trainers" as advisors, teachers and course instructors. Besides that, a series of courses have been already organized and demand of farmers and rural population has been quite high. For Example courses focusing on farm management information systems, the usage of drones into agriculture or the application of telematics in arable farming have taken place during the last months. As some farmers are already quite deeper into new digital tools than agri-institutions or even industry, it has proved useful to put farmers experiences in a more central role during courses.



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IoT-Catalogue - Supporting IoF2020 Ecosystem

UNPARALLEL Innovation, Lda

www.IoT-Catalogue.com

PORTUGAL

The 'IoT Catalogue' is a web-based catalogue and decision-support tool for solutions of the Internet-of-Things (IoT). It brings IoT users and technology providers together, from domain needs to IoT products (and back) via validated solutions with components, assembly guides, and more.

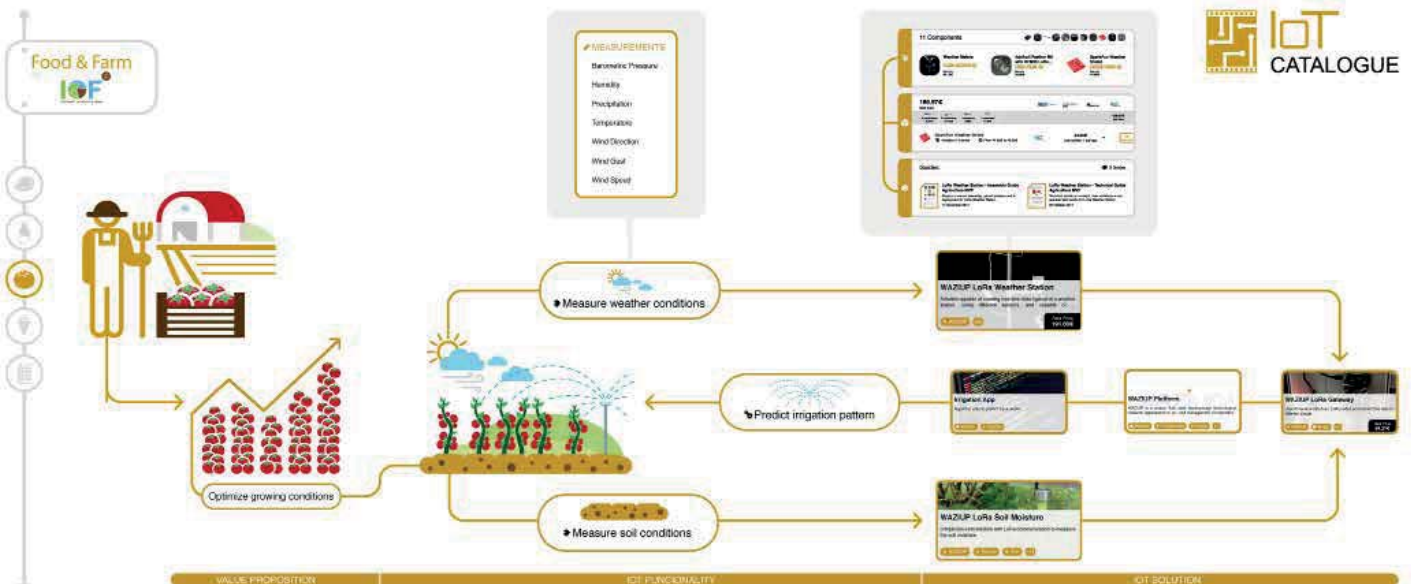


Involvement of farmers

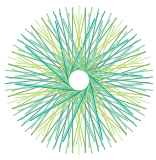
IoT Catalogue proposes to take the complexity on matching IoT technology with the farmer needs, by proposing IoT Solutions to domain related problems.

Farmers will take advantage of the IoT-Catalogue by (1) Understand how to IoT Technology is being used by others, and what value it provides to them and by (2) Sharing their own experience with IoT Technologies.

It is expected to build a community between the farmers and the technology providers, starting on IoF2020.



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SEMS - Smart Economic Monitoring Systems of production and operation costs related to precision and high mechanization

CRPV - Centro Ricerche Produzioni Vegetali
progetti.crpv.it/Home/ProjectDetail/5

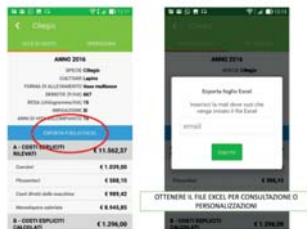
ITALY - EMILIA-ROMAGNA

Starting date - expected end date | 01.04.2016 – 31.03.2019

Establishing an online system for monitoring the economic sustainability of farms' production systems in Emilia-Romagna.

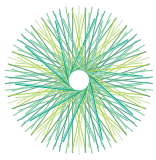
Involvement of farmers

- ▶ Data availability, ready for a quick utilization by farmers, is a preliminary step for more informed decisions about the introduction of tech innovation
- ▶ Farmers are involved through online mobile availability of data on the production costs of main crops and costs related to the use of innovative machinery
- ▶ Providing information on the costs concerning the introduction of digital-based innovations on precision agriculture, high mechanization, and environmental sustainability techniques.
- ▶ The network of relationships, already existing and strengthened by the project and the participative processes adopted, proved to be useful to assure the success of the initiative. Farmers will benefit from easier and better-informed choices on crops management and investments.



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PLAID Virtual Farm

The James Hutton Institute/H2020

www.plaid-h2020.eu - @PLAIDManager

UK, SCOTLAND - ABERDEEN

Starting date - expected end date | 01.11.2017 – 01.09.2018

- ▶ **PLAID will increase access to on-farm demonstration across Europe by developing a "Virtual Farm"**
- ▶ **Visitors to the farm watch 2D and 3D videos produced by farmers, enabling peer-to-peer learning.**

Involvement of farmers

- ▶ The Virtual Farm will increase the farmers' ability to interact with their peers through virtual experiences, complementing and enhancing traditional face-to-face demonstration events.
- ▶ PLAID will train farmers to produce their own 360 degree videos and display these in the Virtual Farm.
- ▶ The Virtual Farm concept has been discussed at the FarmDemo Supra-regional and the PLAID National Stakeholders Consultative Group meetings. This has allowed the development process to focus on areas that are important to the farming community.
- ▶ The Virtual Farm is an easily accessible tool that will be available on-line (web-based) and also as an app and a Virtual Reality experience. It uses technology already readily available and increases the ability of farmers to interact virtually with their peers, farming management systems and technology.
- ▶ The Virtual Farm will increase access to demonstration and therefore innovative ideas and technology. It will also increase farmers' technical skills and marketing skills.



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Smart-AKIS. European AKIS towards innovation-driven research in Smart Farming Technology: Smart Farming Platform

Coordinator: Agricultural University of Athens (AUA - GR); Wageningen University & Research (WUR - NL); Centre for Research and Technology Hellas (CERTH - GR); Leibniz-Zentrum fuer Agrarlandschaftsforschung (ZALF- DE); BioSense Institute (BIOS - RS); Association de Coordination Technique Agricole (ACTA - FR); Instituto Navarro de Tecnologías e Infraestructuras Agroalimentarias SA (INTIA - ES); Deutsche Landwirtschafts-Gesellschaft e.V.(DLG - DE); Delphy (DELPHY - NL); Iniciativas Innovadoras SAL (INI - ES); Comité Européen des Groupements de Constructeurs du Machinisme Agricole (CEMA - BE); Fédération régionale des coopératives d'utilisation de matériel agricole de l'ouest de la France (FRcuma Ouest - FR); David Tinker & Associates Limited (DTA LTD - UK).



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 696294.

www.smart-akis.com - smart-akis.com/SFCPPortal

Facebook: @SmartFarmingNetwork Twitter: @smart_akis

BELGIUM, FRANCE, GERMANY, GREECE, NETHERLANDS, SERBIA, SPAIN, UK, EUROPE

Starting date - expected end date | 01.03.2016 – 31.08.2018

Smart-AKIS disseminates through an online platform the pool of Smart Farming solutions existing nowadays coming from research results and commercial solutions. Smart-AKIS also fosters collaboration between the farming community, extension and advisory services, research and industry for the development of new R&I, demonstration and transfer projects on smart farming.

Involvement of farmers

Many smart farming solutions are available in the market nowadays, but their adoption by farmers is hindered by a number of social and economic obstacles, tackled by smart-AKIS through this holistic approach:

- **RESEARCH:** More than 270 farmers all over Europe have been surveyed to understand and respond to their needs and interests on Smart Farming.
- **KNOWLEDGE:** A free, open, updatable and easy to use platform allows farmers and advisors to search, browse and assess more than 1.200 smart farming commercial solutions, scientific papers and projects.
- **MULTI-ACTOR INNOVATION:** 22 workshops in 7 countries have brought together more than 1.000 farmers, researchers, advisors and industry players to jointly develop and transfer smart farming initiatives.
- **RECOMMENDATIONS:** Recommendations for the adoption of smart farming are being drawn following consultation with farmers and users for overcoming the economic and technical barriers, the concerns posed by agricultural data and the future role of advisors in digitalisation.



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Frans Broeders
Limburg Agrofood
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NETHERLANDS

Starting date - expected end date | 01.02.2018 – 01.02.2021



► **LimburgAgrofood is an integral program of LIOF and the Brightlands Greenport Venlo Campus, aimed at structurally strengthening the competitiveness of the Limburg agro-food sector.**

Involvement of farmers

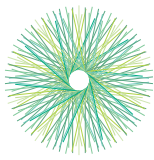
- Farmers like to innovate and co-create
- Digitisation policy Province Limburg
- LIOF can create the Agri-Digital Community
- Connecting farmers to both campuses and knowledge centres within region

Activities and results

<p>AGROFOOD NETHERLANDS</p> <ul style="list-style-type: none"> ► Second exporter in the world ► Export value Agrofood NL 2017: 92 Billion! 	<p>AGROFOOD LIMBURG</p> <ul style="list-style-type: none"> ► Next to Germany, most important export market ► >5000 companies in Agrofood Limburg ► 2,6 Billion added value Agrofood Limburg 	<p>3 SUBSIDY INSTRUMENTS</p> <ol style="list-style-type: none"> 1. Advice project (max. €10k, 50%) 2. Innovation project (max. €50k, 35%) 3. Knowledge project (max. €10k, 75%)
<p>3 TOOLS</p> <ol style="list-style-type: none"> 1. Knowledge 2. Network 3. Capital 	<p>4 CAMPUSSES</p> <ul style="list-style-type: none"> ► Brightlands Campus Greenport Venlo ► Brightlands Chemelot Campus Sittard-Geleen ► Brightlands Maastricht Health Campus Maastricht ► Brightlands Smart Services Campus Heerlen 	<p>AGRI DIGITISATION</p> <ul style="list-style-type: none"> ► Smart Fresh Logistics ambition; digitised supply chain and Custom services ► Brightlands Greenport Venlo Campus ambition Future Farming ► Brightlands Smart Services Campus ambition ICT & Big Data ► LIOF can create the Agri-Digital Community

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4D4F

Innovation For Agriculture

www.4d4f.eu - www.i4agri.org

UK

Starting date - expected end date | **01.03.2016 – ongoing**



Data Driven Decision making for Dairy Farmers

► Encouraging the uptake of digital technologies in management systems on dairy farms

Involvement of farmers

- Driving efficiency through best practice management – specifically to utilize existing and emerging technologies
- Building an online network and data base for farmers to access independent info on systems and what works well
- Help farmers to understand and select the most appropriate systems and technologies to their individual situations.
- Wider use of technologies and better use experience – thus increasing cross fertilization with peer group farmers

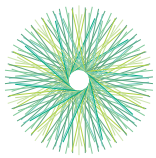
Activities and results

The 4D4F thematic network is focused on developing a network for dairy farmers, dairy sensor technology suppliers, data companies, agricultural advisors and researchers, to explore ways to use data generated by dairy sensors to support improved decision making by dairy farmers.

Create a community of practice to share, debate, disseminate and support the implementation of innovative approaches to dairy management. Develop Standard Operating Procedures which can be integrated into the decision making process on farm. Link to relevant EIP-AGRI operational groups . Collate all available systems in a Warehouse of Technology.

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MIKÄ DATA: Agricultural business development with intelligent data analytics

Tampere university of technology

www.avoinsatakunta.fi/mikadataeng

FINLAND - pilots areas are in west side of finland, town of Pori

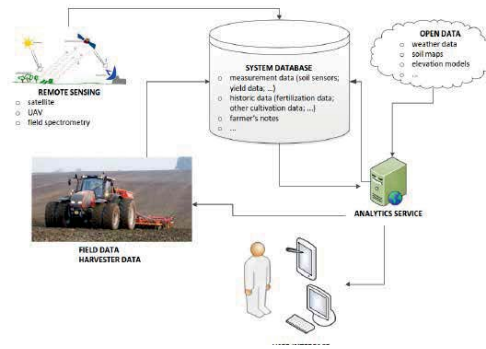
Starting date - expected end date | begin of 2017 to end of 2019



The project builds an intelligent data analysis service, where the farmer can observe and analyze time series data of remote-sensing-based vegetation indexes, crop yields, and other features related to the growth of the crops. In this service, the farmer will see, e.g., variations in soil types and nutrient levels

Involvement of farmers

The service is developed in close collaboration with farmers. The goals of the project have come from farmers, and they hoped a service where they can see the variation of soil types and nutrient variation. Farmers are actively involved in project management meetings and workshops, and donate their field data to the project. The project raises farmers' understanding of the potential of the data.



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