ICT-AGRI

ICT and Robotics for Sustainable Agriculture

EFITA 2025 Conference, Poznan

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ict-agri.eu







My new sprayer















I want to do precision spraying!



Now I need an app







Agricultural app store Precision sprayer apps

Pesticide Saver

Save 70% of pesticides without sacrificing efficiency 1,394 downloads

Precise Spray

Spray only where needed by GPS controlled spraying 12,905 downloads

Smart Spray

Easy pesticide application maps for any smart sprayer 123.984 downloads





Agricultural app store Smart Spray

- Import field and crop data from your preferred Farm Management System
- Export application maps to your preferred field sprayer
- Generate documentation for government and crop purchaser
- WIFI data import / export



Download app





Agricultural app store Smart Spray - download

- Smart Spray requires access to
 - Field coordinates
 - Field crop data
 - Pesticide warehouse data
 - Zero spray zones
 - Field sprayer configuration
- Agree?







After 10 minutes configuration ...





My fields!





Why isn't it that easy?

Because we haven't made it!







European Research Area - NETwork

Information and Communication Technology and Robotics for Sustainable Agriculture

ICT-AGRI-1 2009 – 2014 ICT-AGRI-2 2014 – 2017



What do we do in ICT-AGRI?

Strategic Research Agenda (2012)

Interactive website

Calls for transnational projects







Strategic Research Agenda



Global food security

Sustainable resource management

Energy consumption

Food quality and safety

Climate change

Social aspects and demands

Increase productivity

Reduce waste in the food chain

Optimize fertilizer and pesticide use

Optimize water management

Maintain soil quality

Protect and promote biodiversity

Minimize air pollution

Increase energy efficiency

Ensure food quality and safety

Food traceability and information

Reduce greenhouse gas emissions

Increase animal welfare and health

Less tedious and hazardous work

Plant Production

Precision Crop Farming

- Variable Rate Application (VRA) - Controlled Traffic

Farming (CTF)

Precision Livestock Farming

Animal Production

Automated Indoor Climate Control

Automated Quality Control

Agricultural Robots

Farm Management and Information System (FMIS)

Farm Management





Website interactivity: <u>ict-agri.eu</u>

Discussion forum 😩



Map R&D projects by voluntary user inputs (2)



Comment Research Agenda draft



Survey among agricultural ICT providers



Online submission of proposals to calls









Calls for transnational projects

2010 Integrated ICT and automation for sustainable agriculture

2012 ICT and automation for a greener agriculture

2014 Applications for smart agriculture (with SmartAgriFood)

2015 Enabling Precision Farming

2016 Farm Management and Information Systems

2017?







National funding allocated to calls (1,000 €)

Country	2010	2012	2014	2015
Total	3,130	6,275	1,640	5,660
Denmark	500	1,500	500	2,000
Germany	200	1,000	500	250
Turkey	500	800	100	100
Belgium	100	120		1,000
Ireland	30	375		700
Switzerland	200	300	40	450
Latvia	150	150	300	210
Finland	200	200	200	200
Spain	150	180		450
Italy	500	50		100
Greece	200	400		
Israel	200	300		
France	100	400		
Netherlands	100	150		200
UK		350		





Preparation of transnational calls

Identify needs and solutions



Action plan for implementation of the Strategic Research Agenda



Implementation in EU and national initiatives



Implementation in transnational calls









Call preparation

Call documents
Pre-launch

Call and topics decisions Funding commitments

Approach funders Funding contributions



Action plan pre-view Call themes and models





Call implementation

Project negotiations

Call launch

Funding decisions

Pre-proposals

Expert review Ranking

Review Selection

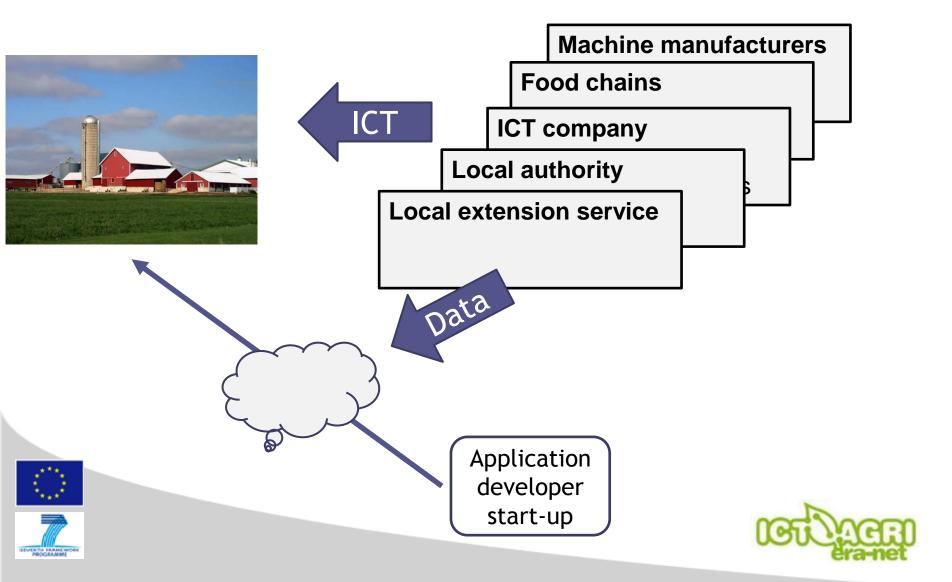


Full proposals





One set of problems for adoption





ICT-AGRI's mission

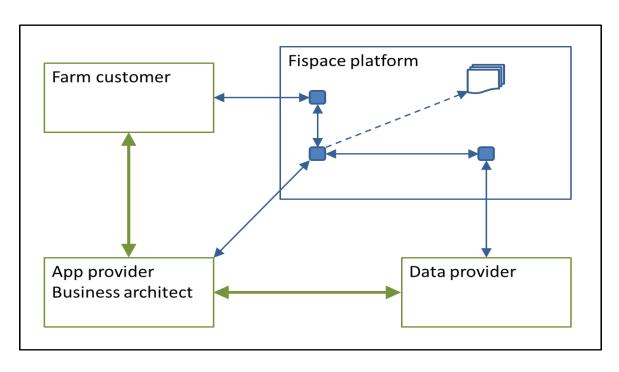
Contribute to **European collaboration** within ICT and robotics for a sustainable agriculture







Participation in SmartAgriFood



50 small and short projects funded 9 projects with additional ICT-AGRI funding





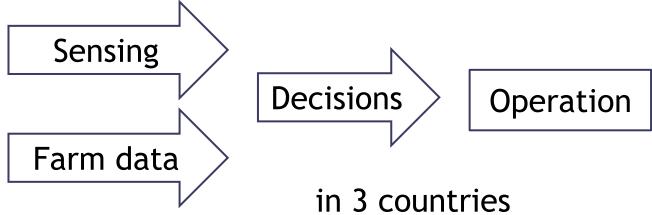


Enabling Precision Farming 2015

Theme 1: Precision Farming Methodologies



Theme 2: Precision Farming Solutions









Farm Management and Information Systems 2016







More information from our website: ict-agri.eu



Thank you for your attention



