



ARIMNet2

International Conference on Agricultural Knowledge and Innovation Systems (AKIS) in the Mediterranean

12-13 October 2016, Antalya, Turkey

The AKIS Concept and its Application in the EU Policies

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BACKGROUND OF THE SCAR AND SWG AKIS

- **1974:** Standing Committee on Agricultural Research (SCAR): Representatives of Member States and associated Countries who advise the European Commission and Member **States on coordination of agricultural research**
- 2005: SCAR started "Foresight" exercises
- 2006, Ministerial meeting, Krems (Austria): “ [SCAR to] include questions of advisory services, education, training and innovation in their discussions”
- 2007 - **1st SCAR Foresight:** “The mounting challenges facing the agri-food and rural sectors in Europe call for a review of the **links between knowledge production and its use to foster innovation**”

START OF THE SWG SCAR-AKIS

- 2009 – The **2nd SCAR Foresight** shed a rather crude light on the current state of Agricultural Knowledge Systems in Europe: “currently unable to absorb and internalize the fundamental structural and systemic shifts that have occurred. The remaining publicly funded **AKIS** appear to be locked into old paradigms based on linear approaches and conventional assumptions.”
- Currently: an even more changing policy context: the financial crises, global food security, the EU 2020 strategy: “Smart, sustainable, inclusive growth”, CAP post 2013

THE MAIN FINDINGS OF SCAR AKIS 1&2

- Knowledge model as a system, not a chain
- Triple Helix Model: academia, industry and government: interact from time to time, steered autonomously by their own development; dynamics of networks in the mutual creation of knowledge
- Innovation focus rather than dissemination of research results
- Actor driven innovation (students, consumers, ..)
- AKIS are built differently from country to country
- Different parts of one AKIS face different challenges
- Science driven research vs innovation driven research
- Lack of involvement by education
- Lack of reward for applied science

THE COMPONENTS OF AKIS

Knowledge organisations

- Research
- Education
 - Higher
 - vocational

Support organisations

- Innovation facilitators: incubators, nurseries....
- Credit
- Extension
 - Public
 - Private
 - Professional
- Brokers
- Suppliers

THE COMPONENTS OF AKIS (2)

Farmers and agrofood enterprises

Civil society

- Consumer organisations
- Environmentalists
- Unions

Administration

- Central
- Local

DIVERSITY OF AKIS

- Centralised/decentralised
- Public/private
- Top down/participatory
- Fragmented/pluri-sectoral
- Inclusive/exclusive

2. April 2012: the SWG SCAR - AKIS 2 was invited to help the implementation of the agricultural EIP

The European Innovation Partnership (EIP) „Agricultural Productivity and Sustainability“

Moving Innovation in Agriculture Ahead !



Practical outcomes of the AKIS 2 report

AGRI Strategic Research & Innovation Conference

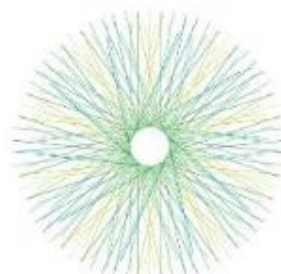
27 January 2016 – Brussels - Inge Van Oost - DG Agriculture and Rural Development

- 2010: **European Innovation Partnerships** want to speed up innovation through **cooperation and linking** existing policies and instruments
- The EIP-AGRI was launched by DG AGRI in 2012: COM (2012)79
- The EIP-AGRI applies an overarching "**Open innovation**" concept based on the **interactive innovation model** (applied in Operational Groups, Thematic Networks, and Multi-Actor projects): Collaboration between various actors to make **best use of complementary types of knowledge** (scientific, practical, organisational, etc.) **in view of co-creation** and diffusion of solutions/opportunities **ready to implement in practice**.
- **EU wide EIP network** linking actors: communication, partnering, dissemination, knowledge flows and collecting practice needs (**Open science**)

European Innovation Partnership AGRI

Rural Development

- **Funding for setting up of an “Operational Group”:** farmers, advisors, agribusiness, researchers, NGOs, etc planning an innovation project
- **Project funding** for the Operational Group’s project. This co-operation could be combined with other RD measures (e.g. investment, knowledge transfer, advice)
- Supporting **innovation support services**

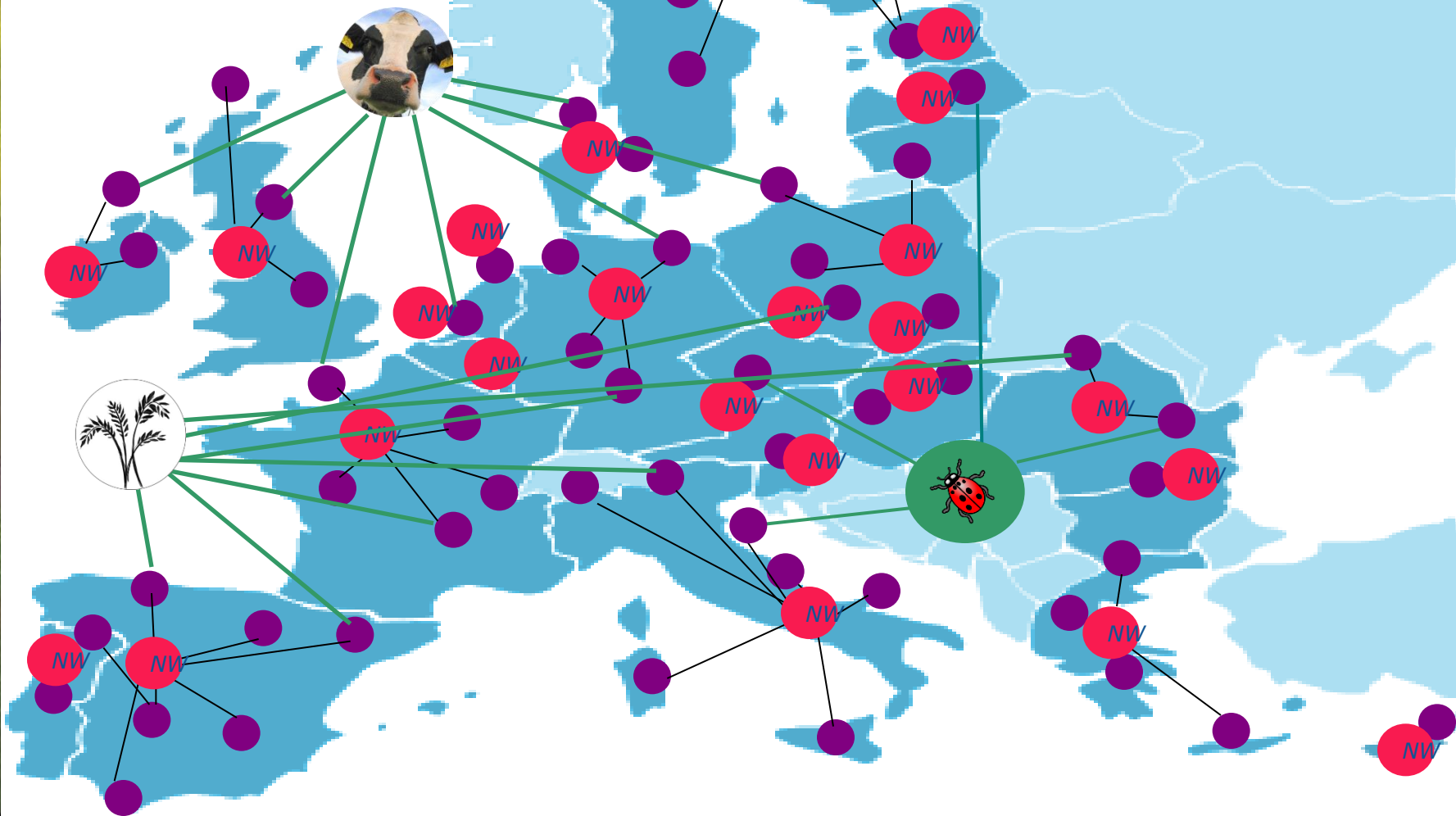


EIP-
AGRI
EIP networks
in MS/regions

Horizon 2020

- European **research projects**, to provide the knowledge base for innovative actions
- **Interactive** innovation formats such as **multi-actor projects and thematic networks** genuinely involving farmers, advisors, enterprises, etc. "all along the project"

An EU wide EIP network, supported under Rural development policy



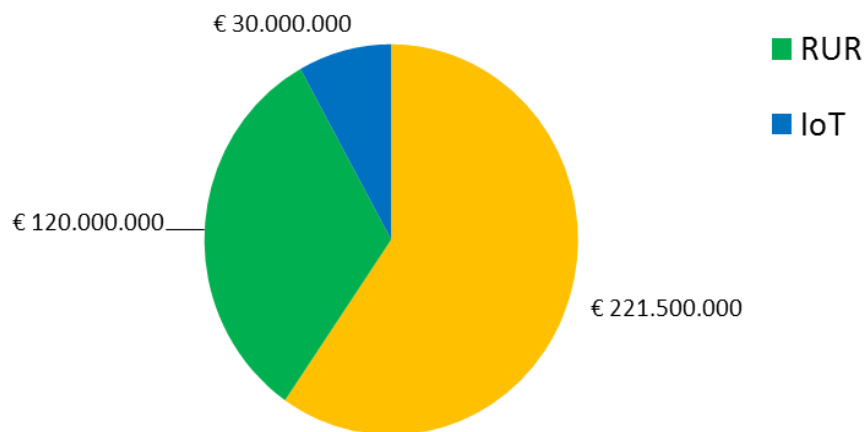
H2020 calls 2015: 16 new Multi-Actor projects, including 7 Thematic Networks

SFS-1C-2015	iSAGE	Sustainability of terrestrial livestock
SFS-2B -2015	SOILCARE	Soil cropping improving systems
SFS-5-2015	NEURICE	Crop productivity strategies (Genetics x Environment x Management)
	GoodBerry	
	TomGEM	
SFS-13-2015	MyToolBox	Biological contamination of crops and food chain
	MycoKey	
SFS-20-2015	Strength2Food	Sustainable food chains: EU quality policy and public sector procurement
ISIB-2-2015	Smart-AKIS	Smart Farming Technology: Farm Management Information Systems, Precision Agriculture and Agriculture automation and robotics
	HNV-Link	Support HNV farmlands through knowledge and innovation
	AGRIFORVALOR	Valorization of biomass side-streams from agriculture and forest
	4D4F	Data and sensor driven decision making on dairy farms
	EuroDairy	Practice-based innovations in dairy farming: resource efficiency, Biodiversity, Animal care, and Socio-economic resilience
	EUFRUIT	fruit: cultivar development, minimise residues, storage and fruit quality, sustainability of production systems
ISIB-4b-2015	ALTERFOR	Improved forest management models
WATER-4b-2015	FERTINNOWA	Optimize water and nutrient use efficiency: dbase on innovative technologies and practices for fertigation of horticultural crops

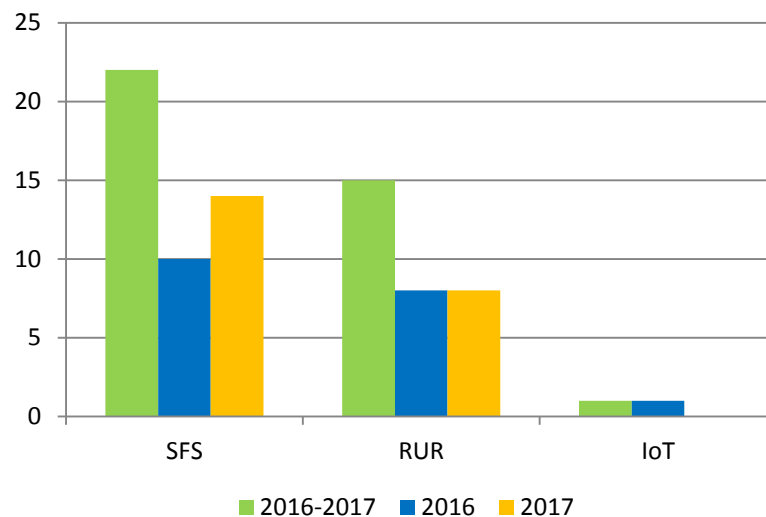
The H2020 Multi-actor approach is growing:

- WP 2014-2015: 150 mio Euro
- WP 2016 -2017: investment X 2,5 → **371,5 mio €**
- **38 topics in 3 calls: SFS (221), RUR (120), IoT (30)**

Distribution of budget for multi-actor projects



Number of multi-actor topics in WP2016-2017





AKIS 3 Main recommendations:

1. AKIS organisation (1/2):

- **Public authorities have a range of responsibilities and many options for action when it comes to organisation and governance of AKIS: e.g. use the **AKIS concept** as an **analytical tool for diagnosis**, **target public support to public interests****
- **Farmers in pluralistic AKIS need support for “finding their way around” among the diverse public and private providers of advice: create **transparency**, support **synergy** and improve **linkages**, provide **training to advisors**.**

1. AKIS organisation (2/2):

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AKIS 3 Main recommendations:

2. Policy framework for AKIS governance:

- **Research funding** should not be limited to traditional approaches but should also **facilitate cross-overs** to other research fields, **interactive, transdisciplinary innovation** and transdisciplinary research and development processes.
- **Public – Private Partnerships** in research and innovation programmes for agriculture should be **further explored**.
- **Excellent Research Infrastructures** are relevant in the future.
- **International collaboration** with international partners (other continents) is attractive for very different reasons.
- **A real European Research Area** is a prerequisite for many of the actions suggested above.

AKIS 4 MANDATE

PROPOSED ACTIVITIES

1. Improve the integrated approach within the European AKIS and the implementation of the EIP

Emphasis on the connection between the EU, the national and the regional dimensions.

- Complementarities and synergies among EU funds (H2020-EAFRD-EFRD-ESF- Education)
- Thematic interconnection and collection of expertise of interactive innovation projects at different levels
- AKIS supporting Infrastructures
- Further development of the EIP approach

2. **Learning and feedback from interactive project approaches (multi-actors projects, thematic networks, operational groups) >** Insights for potential developments of these projects approaches (Seek for interactions with the H2020 mid-term evaluation)
3. **Better address the knowledge flows along the whole production/value/supply chain >** Reflection on more “integrated” approach along the value chain.
4. **Cross-fertilization with other EIPs and sectors >** Improved methodology (tools) fostering and boosting the Innovation processes.

5. **Analyzing the perspective of AKIS in Food and Nutrition Security and Sustainable Agriculture across non european countries (together with SCAR ARCH Group)** > Based on the interactive innovation approach, explore (successful) experiences from other countries that could be scaled up and investigate how to influence the (common?) research agendas.
6. **Monitoring interactive innovation policies and benchmarking for sustainability (OECD countries)** > analyze and discuss trends and evaluation systems and formulate indicators for interactive innovation in collaboration with OECD.

On behalf of the members of the SCAR AKIS group

**THANK YOU FOR YOUR
ATTENTION!**