



Subgroup on Innovation for agricultural productivity and sustainability 5th Meeting

2 June 2016

#RNSubInnovation - @EIPAGRI_SP

Subgroup on Innovation for agricultural productivity and sustainability

5th Meeting – 2 June 2016



Morning sessions

08:00 - 09:00 Registration & welcome coffee

09:00 - 09:10 Welcome & introduction – *Rob Peters, Head of Unit AGRI H.5*

09:10 - 09:30 Session I “EIP-AGRI Focus Groups

Presentations by EIP-AGRI Service Point and DG AGRI:

- Information on the state of play of FGs 6-20
- Launch of calls for experts for FGs 21-23

10:10 – 10:30 Session II “Operational Groups: first experiences”

Introduction by Anikó Serégely, DG AGRI

Feedback from workshop “Operational Groups: first experiences” (April 2016):

- *Jean-Marc Gautier, OG “Robustagno” (France)*
- *Herbert Mock, OG “Organic dock control” (Austria)*

10:30 – 10:45 Session III ‘Networking for innovation’

Introduction by Sirpa Karjalainen, DG AGRI

10:45 – 11:15 Coffee break

11:15 – 13:00 Session III “Networking for innovation” (continued)

Discussion in groups: how to support the NRNs’ role in fostering innovation & how to shape the NRN workshop planned in October 2016

13:00 – 13:45 Lunch break



Subgroup on Innovation for agricultural productivity and sustainability

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Afternoon sessions

13:00 – 13:45 Lunch break

13:45 – 15:10 Session IV “EIP-AGRI and Horizon 2020”

Introduction *by Inge Van Oost, DG AGRI*

Presentation project “Fertinnowa” *by Els Berckmoes, Research Centre for Vegetable Production (Belgium)*

Discussion in groups: how to promote synergies between EIP-AGRI activities & Horizon 2020



15:10 – 15:30 Coffee break

15:30 – 16:30 Session V “Priorities for 2017”

introduction *by Antonella Zona, DG AGRI*

Discussion in groups: broad priorities for EPI-AGRI network activities in 2017



16:30 – 17:00 Wrap up / next steps

Exchange of views on upcoming events

17:00 Closing





Horizon 2020

The EU Framework Programme for
Research and Innovation 2014-2020

**EIP Agricultural Productivity and
Sustainability**

**H2020 Multi-actor approach
linking with Operational Groups under
Rural Development**



RD Subgroup Innovation
Brussels – 2 June 2016

Inge Van Oost – DG AGRI

HORIZON 2020
Inge.van-oost@ec.europa.eu

1. The basics:

H2020 multi-actor projects are mirroring the RD EIP Operational Group approach

The EIP-AGRI in short

- 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 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*)

* *In line with the main recommendation of the 2015 Milan Scientific Committee on transdisciplinarity, implementation and impact: 'more research into*

2. The multi-actor approach under H2020 WP 2016 -2017:

Links with RD & OGs are indicated in red

First experiences with 2014-2015 calls led to the new
elements in WP 2016-17 indicated in green

Multi-actor projects aim to produce impact:

A multi-actor project needs to **demonstrate**:

- how the project proposal's **objectives** and planning are **targeted to needs / problems and opportunities of end-users**
- **complementarity** with existing research and best practices

*[What is the project's **added value**? - **Avoid recycling** projects: repetition and continuation of former projects – more of the same]*

- sufficient involvement of **key actors with complementary types of knowledge** (scientific and practical) should be **reflected in the composition of the project consortium** to reach the project objectives and make its results broadly implemented.

[Include partners beyond scientists, such as farmers, farmers' groups, advisors etc - Don't forget to think about involving multipliers to strengthen impacts]

Multi-actor projects aim to produce impact:

A multi-actor project:

- **As a minimum**, should result in **substantial** easily **understandable practical knowledge** for broad dissemination in the **common EIP format**

[focus on concrete and concisely written results (not project activities description): possibly some 100 EIP practice abstracts in a practitioners/end-users'/farmers' language, best practices resulting from the projects' work, qualitative audio-visual material, etc

Do not reinvent the wheel: use existing long term available dissemination channels for practitioners, lasting beyond the project period

- Facilitation/**mediation** between actors and **involving** for instance **RD operational groups**, are strongly recommended

[but don't make impossible promises and mix up funding sources and policies: e.g. H2020 consortia cannot start up RD Operational Groups]

Demand-driven innovation in Multi-actor projects

- "multi-actor" is more than a strong dissemination requirement or a broad stakeholders' board
- "all along the project" *: **a clear role for the different actors** in the work plan, from the participation in the planning of work and experiments, their execution up until the dissemination of results and the possible demonstration phase.
- Project proposals should illustrate sufficient quantity and quality of **knowledge exchange activities**

Actor: a partner taking part in project **activities**, contributing to project outcomes

↔ Stakeholder: person expressing a **view/stake** at a certain moment(s) during the project

Horizon 2020 – Multi-Actor projects

Rationale and precise requirements for multi-actor approach:

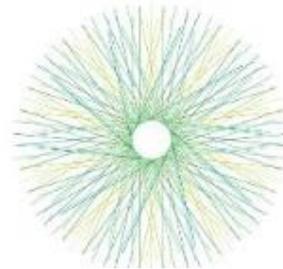
on page 11-12 of WP of Societal challenge 2 Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy 2016-17 :

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-food_en.pdf

European Innovation Partnership **EIP-AGRI**

Rural Development

- **Funding for setting up of an "Operational Group" (OG)** : farmers, advisors, agribusiness, researchers, NGOs, etc) **planning** an innovation project (Art 35)
- **Project funding** for the **Operational Group's project** (Art 35). This co-operation could be combined with other RD measures (e.g. investment, knowledge transfer, advice)
- Supporting **innovation support services**



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AGRICULTURE INNOVATION

**EIP
networks
in
MS/regions**

Horizon 2020

- **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"**

Involvement of OGs is strongly recommended

3. Thematic networks under WP 2016 -2017

(17 projects by end 2016)

Links with RD & OGs are indicated in red

Experiences with 2014-2015 calls led to the new elements in
WP 2016-17 indicated in green

Thematic networks in WP 2016-2017: Compiling knowledge ready for practice

Clearer focus on primary production's needs:

- Themes must **focus on the most urgent needs of agricultural or forestry production sectors**, or on important or promising cross-sectoral issues, including where primary production needs to improve its linkages to the supply chain: ***the themes of some OGs are already arising in the thematic network projects***
- Themes to be chosen **bottom-up**, contributing to a more competitive sustainable agriculture and forestry: ***e.g. common themes where OGs are working on (networking needed!)***

*[can be linked to **products or sectors**, e.g. arable crops, fruits, vegetables, pig,...etc) or a broad range of **cross-cutting subjects**, e.g. crop rotation, certain farming practices, energy, implementation approaches of a directive, eco-system services, social services, bio-based products, short supply chains,...etc]*

*Thematic networks in WP 2016-2017: **Compiling knowledge ready for practice***

- Projects **involving all actors relevant for the chose theme** (e.g. researchers, farmers, advisors, enterprises, education, NGOs, administration, regulatory bodies, **EIP Operational groups...**):
[no pure research networks, use funding efficient: not as many actors as possible but chose those actors that are complementary and can really contribute]
- Provide a comprehensive **description of the state of the art**: Partners should summarise, share and **present existing scientific knowledge & best practices that are not sufficiently known (and applied) by practitioners**
*[when defining objectives: illustrate the **added value, relevance of the theme, needs and potential for farming/forestry**. Get input from the existing projects from various funding sources and avoid recycling of projects and project partners]*

Thematic networks in WP 2016-2017: Compiling knowledge ready for practice

Expected impact:

- Support for the EIP through **interaction with operational groups, and delivery of a substantial number of "practice abstracts"** in the **common EIP format** *[provide a good description & quantification/qualification of the outputs]*
- Long term available
[KISS, no temporary fancy IT tools/platforms]
- Using the **main existing dissemination** channels most used by practitioners
[where the material stays available after the project finishes]
- Audio-visual material wherever possible
[farmers/end-users learn with their eyes]
- Greater **user acceptance** and dissemination of end-user material

Thematic networks in WP 2016-2017: Compiling knowledge ready for practice (= inspiration and supporting information to test out in OG projects)

Thematic networks **are not**:

- **networks for discussion**
- **research** projects
- networks **intended to prepare a research agenda**. *Thematic networks aim to put existing research into practice by focusing on end-user material feeding into the EIP network for broad dissemination*
- **awareness-raising or supply chain platforms/networks**. *Thematic networks intend to spread practical knowledge, and to make this happen they should be involving practitioners (farmers/foresters) in a multi-actor approach and working bottom-up starting with farmers and their needs.*

An example of a Thematic Network call 2014

Compiling knowledge ready for practice

- **Objectives targeting the needs of end-users (Imp)** : Key wine diseases (Grapevine Trunk Diseases and Flavescence Dorée) representing a threat for the economic viability of the entire sector, have been identified as a priority by winegrowers, many winegrowers are testing innovative sustainable approaches to fight these diseases.
- **Multi-actor approach (Exc)** : collecting data and discussion through a network of facilitator agents, several regional technical working groups and one European scientific working group (**= PRACTICE ABSTRACTS**). Capturing ideas and sharing between EU countries: 10 regions from 7 countries representing more than 90% of the EU wine production. Many **knowledge exchange activities** & experience bottom-up interactive processes (*with OGs for instance*)
- **Consortium (Impl)**: 11 partners from science, advisory and practice; regional technical working groups already defined in the proposal (no vague promises & complementary knowledge)

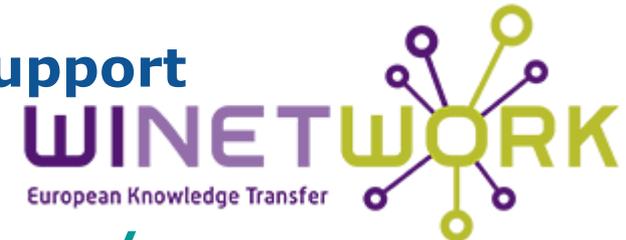
<http://www.winetwork.eu/>

4 Thematic networks – call 2014



<http://agrispin.eu/>

Innovation brokering and support



<http://www.winetwork.eu/>

Wine diseases



<http://www.ok-net-arable.eu/>

Organic agriculture arable crops

<http://www.hennovation.eu/>

Animal welfare hens



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

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
WATER-4b-2015	FERTINNOWA	Optimize water and nutrient use efficiency: dbase on innovative technologies and practices for fertigation of horticultural crops

Videostreamed presentation on Multi-actor approach and Thematic Networks in call 2016: (from 0:53:00 till 01:47:00)

<https://scic.ec.europa.eu/streaming/workshop-on-multi-actor-approach-and-thematic-networks-under-horizon-2020>

Basic info + questions & answers

Workshop "Interactive innovation in motion: multi-actor projects and thematic networks under Horizon 2020" 24/11/2015:

Event page:

<https://ec.europa.eu/programmes/horizon2020/en/news/interactive-innovation-motion-multi-actor-projects-and-thematic-networks-under-horizon-2020>

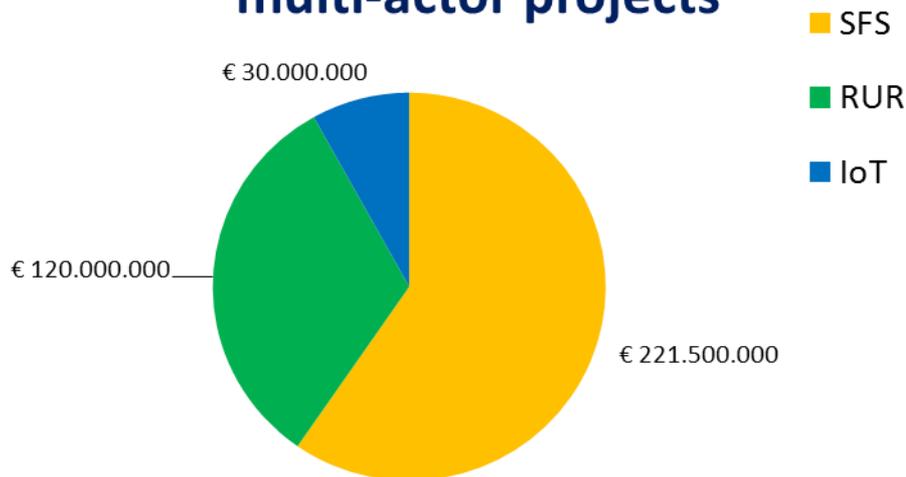


4. How is the Multi-actor approach under H2020 evolving?

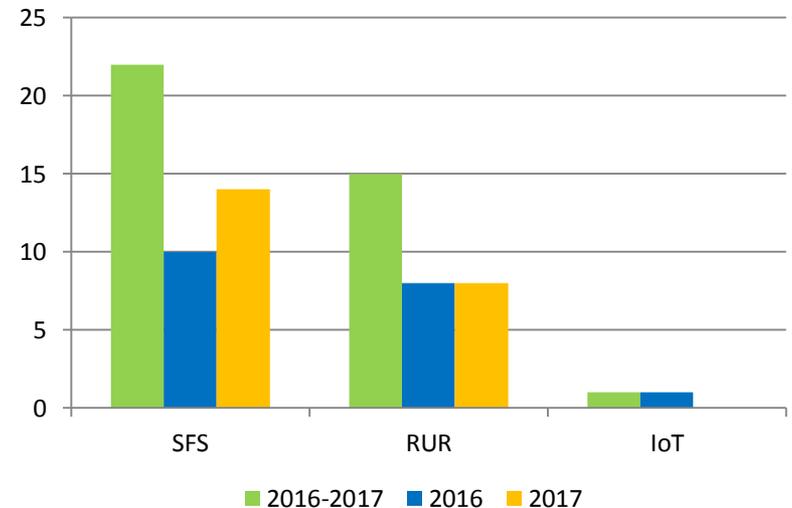
The H2020 Multi-actor approach is growing:

- *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



Designing the path – Agricultural Research and Innovation Strategy Conference 26-28 Jan 2016

Relates to next WP 2018 – 2020 and beyond (all pre-events, plenary and parallel sessions videostreamed)

<https://ec.europa.eu/programmes/horizon2020/en/news/designing-path-strategic-approach-eu-agricultural-research-and-innovation>

See: **Parallel session 6 on interactive innovation** for
- an **example of a 2014 multi-actor project Treasure**, and
- an example of EIP networking linking to H2020 by DVS (DE)

Also, the pre-event of the Standing Committee on Agricultural Research Strategic Working Group on AKIS

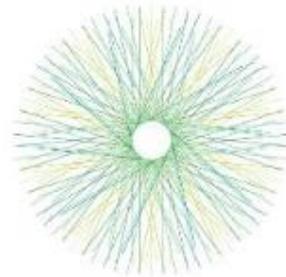
5. Linkages between OGs and H2020:

The role of networking and a common repository for contacting and practice oriented output

European Innovation Partnership **EIP-AGRI**

Rural Development

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- Project funding for the **Operational Group's project** (Art 35). This co-operation could be combined with other RD measures (e.g. investment, knowledge transfer, advice)
- Supporting **innovation support services**



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EIP networks in MS/regions

Unique EU repository of practice abstracts

Agriculture and Rural Development

Horizon 2020

- **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"

Involvement of OGs is strongly recommended

CONTENT: What info is to be shared through the EIP common format for practitioners?

- Short and easily understandable **title** (one key sentence, max 150 char.)
- Short **summaries** in easily understandable language (max 1500 char.) = ***'practice abstracts'***:
 - What problem will the knowledge generated solve for the end-user? What will be the main benefits to the practitioner?
 - Main outcome/recommendation (2-3 main results)
- **Contact data:** Project coordinator (+ address, e-mail, telephone), text editor, project partners (+ address, e-mail, telephone), geographical location, project period, funding source & budget, link to project website and to a website where info stays long-term available

Common format template in Excel:

easy to share and best to draft together (scientist + practitioner)

	A	B	C	D	E	G	H
1	Project Information						
2							
3	Project Unique ID (see INSTRUCTIONS)		Mandatory				
4							
5	Title of the project in native language: short and easily understandable (one key sentence on the project; max 150 characters, word count – no spaces)		Mandatory	0 character(s) / 150			
6							
7	Title of the project in English: short and easily understandable (one key sentence on the project; max 150 characters, word count – no spaces)		Mandatory	0 character(s) / 150			
8							
9	Geographical location						
10	Country		Mandatory				
11	Rural Development Programme		Mandatory				
12	Main geographical location (NUTS3)		Mandatory				
13	Other geographical location		Optional				
14	Other geographical location		Optional				
15							
16	Editor of the text: person/organisation responsible for delivering the text		Mandatory	0 character(s) / 150			
17							
18	Project coordinator (lead-partner) according to the cooperation/consortium agreement:						
19	Name		Mandatory	0 character(s) / 150			
20	Address		Mandatory	0 character(s) / 150			
21	E-mail		Mandatory	0 character(s) / 150			
22	Telephone		Mandatory	0 character(s) / 150			
23							
24	Project period:						
25	starting date (YYYY)		Mandatory				
26	end date (YYYY)		Mandatory				
27							
28	Project status: ongoing (after selection of the project) or completed (after final payment)		Mandatory				
29							
30	Main funding source (Rural development programme, H2020, or other EU, national/regional or private funds)		Mandatory				
31							
32	Total budget of the project (in euros)		Mandatory				
33							
	Objective of the project in English:		Mandatory	0 character(s) / 600			

An example of a practice abstract from Fertinnowa

Application of zeolite to reduce nitrates concentration in growing media and soil

Areas like the Albenga plain in Liguria Region (Italy) are classified as “areas vulnerable to nitrates” and are under specific legislation to limit nitrate contamination of superficial and deep water bodies.

The addition of zeolite to the source of nitrogen can improve the nitrogen use efficiency and reduce the environmental impact caused by nitrates leaching. Thanks to the specific atomic structure of clinoptilolite (a kind of zeolite) nitrifying bacteria are stopped from entering the tiny pores of the clinoptilolite. The ammonium is held internally on the cation-exchange sites and is not likely to be leached out easily as water passes through. As a consequence, nitrification and thus nitrate leaching is reduced. Secondly, zeolites improve nitrogen use efficiency because they act as a medium that slowly releases fertilisers.

Trials in the Albenga area have demonstrated that the addition of zeolite to the soil substrate both in open field (vegetables) and in greenhouse (ornamentals) lead to a reduction of nitrates concentration in the substrate.

For the best result, add clinoptilolite at a rate of 3% weight/weight when preparing the substrate for crop cultivation:

- for potted plants: mixed in the peat based substrate (normally added with slow release fertiliser);
- for open field cultivation: mixed in the first 20-30 cm of soil through tillage.

6. The role of networking is absolutely key:

(National) (Rural) Networks' support in linking and fitting into the existing AKIS

EIP networking at national/regional level supported by Rural Development Programmes (NRNs)

Connecting actors and animating innovative actions is RD funded:

- The **action plan of the National Rural Network** (NRN) should foster innovation and cover at least (Art 54)
 - the **search of partners** for Operational Groups (**look into Multi-actor and Thematic Network projects!**)
 - provide **networking** for advisors and **innovation support services** (**use the connections of ISS with MAs and TNs!**)
- **Regional RD networks**, other existing networks, bodies and platforms can contribute to connecting stakeholders, preparing and discussing potential innovative ideas = **an opportunity to use**
- Many RDP rural network activities describe they will connect to H2020, but not very concrete yet! **Still much work to be done....**
- *An example: Germany provides the possibility to connect with H2020 with their OG database, trains and connects innovation brokers, supports OGs to look for research partners, ...*

- Key for systematic exchange of knowledge and contact data within the framework of the EU **wide EIP network**: encouraging support by the **regional/thematic networks** and **NRN activities**
- **Partner search**: the common format enables MAs, TNs and OGs to be quickly **visible** for other partners and innovation actors, including various internat./national/regional projects
- As of H2020 call 2016, all **multi-actor projects and thematic networks** are obliged to produce practice abstracts and use the EIP "Common format"
- All other projects from whatever funding source are also welcomed to use the same format (ERANETs, EFRD, etc).
- All this will form a **unique practice-oriented interoperable repository** at EU level, rewarding researchers for impact.

An EU wide EIP network, supported under Rural development policy

Linking with H2020

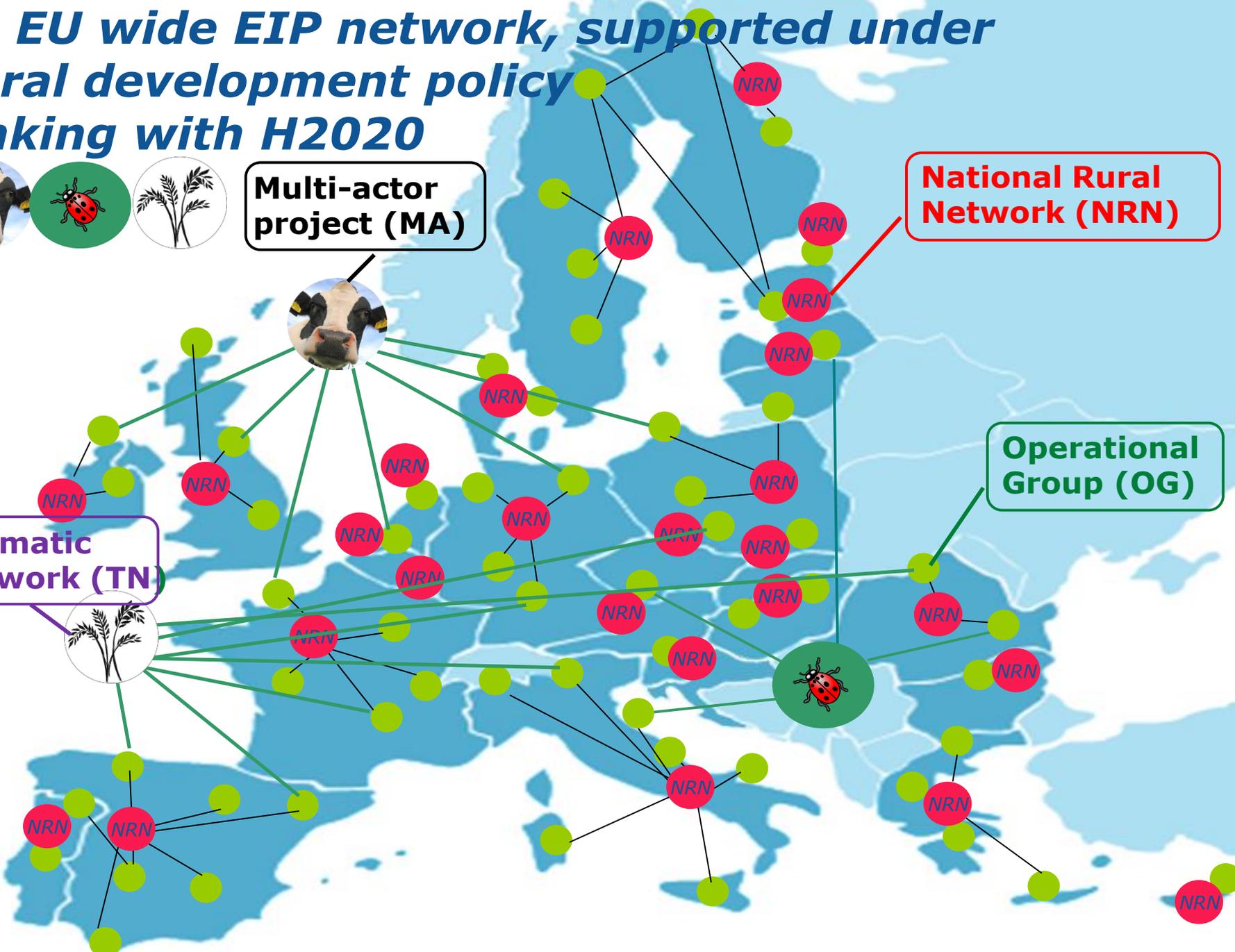


Multi-actor project (MA)

National Rural Network (NRN)

Operational Group (OG)

Thematic Network (TN)



Start building an EU AKIS



***Innovation is: an idea put into
practice with success !***



***Let's create a European
AKIS:
To an
„Agriculture of Knowledge“***

www.eip-agri.eu

Thank you for your attention!

Inge.Van-Oost@ec.europa.eu

Where can I find more info?

- **EIP brochure on thematic networks & practice abstracts**
 - http://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_brochure_thematic_networks_2016_en_web.pdf
- **EIP common format for practice abstracts**
 - <https://ec.europa.eu/eip/agriculture/en/content/eip-agri-common-format>
- **Videostreamed seminar on drafting practice abstracts:**
 - <http://www.ncp-biohorizon.net/events?cmd=showDetail&id=33>
- **Links to NRNs:** National Rural Networks can help in partner search between H2020 consortia and EIP Operational Groups
 - <https://enrd.ec.europa.eu/en/country>

Horizon 2020 calls 2016-2017

List of Multi-Actor projects and Thematic networks

Multi-actor topics 2016: Sustainable Food Security (SFS)

SFS-1	Solutions to multiple and combined stresses in crop production	10 Mio €
SFS-2	Teaming up for good: Exploiting the benefits of species diversity in cropping systems	5 Mio €
SFS-6	Weeding - strategies, tools and technologies for sustainable weed management	7 Mio €
SFS-7	Organic breeding – Increasing the competitiveness of the organic breeding and farming sectors	8 Mio €
SFS-9	Spotlight on critical outbreak of pests: the case of Xylella fastid.	7 Mio €
SFS-11	Challenges for disease management: Perennial crops in the tropics and sub-tropics	12 Mio €
SFS-15	Breeding livestock for resilience and efficiency	7 Mio €
SFS-26	Legumes - transition paths to sustainable legume-based farming systems and agri-feed and food chains	10 Mio €
SFS-37	The impact of consumer practices in food safety: risks and mitigation strategies	9,5 Mio €
SFS-42	Promoting food and nutrition security and sustainable agriculture in Africa: the role of innovation	5 Mio €

Multi-actor topics 2016: Internet of Things (IoT)

IoT-01	Large-Scale pilots	100 Mio €
	Pilot 2: Smart farming and food security	30 Mio €

Multi-actor topics 2016 - Rural Renaissance (RUR)

RUR-1	Consolidated policy framework and governance models for synergies in rural-urban linkages	6 Mio €
RUR-4	Water farms – improving farming and its impact on the supply of drinking water	5 Mio €
RUR-6	Crop diversification systems for the delivery of food, feed, industrial products and ecosystems services - from farm benefits to value-chain organisation	20 Mio €
RUR-7	Resource-efficient and profitable industrial crops on marginal land	6 Mio €
RUR-8	Demonstration of integrated logistics centres for food and non-food applications	12 Mio €
RUR-10	Thematic Networks compiling knowledge ready for practice	10 Mio €
RUR-11	On-farm demonstrations: deepening farmer-to-farmer learning mechanisms	2 Mio €
RUR-14	Advisors' roles in the functioning of AKIS and advisory policies boosting innovation in sustainable agriculture	5 Mio €

Multi-actor 2017: Sustainable Food Security (SFS)

SFS-4	New partnerships and tools to enhance European capacities for in-situ conservation	2 Mio €
SFS-8	Organic inputs – contentious inputs in organic farming	8 Mio €
SFS-10	Emerging diseases in plants and terrestrial livestock	15 Mio €
SFS-16	Bee health and sustainable pollination	9 Mio €
SFS-17	Innovations in plant protection	10 Mio €
SFS-20	Science-based regionalisation of the Common Fisheries Policy	6 Mio €
SFS-27	Permanent grassland – farming systems and policies	10 Mio €
SFS-28	Functional biodiversity – productivity gains through functional biodiversity: interplay of crop pollinators and pest predators	10 Mio €
SFS-30	Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination - focus on C, N and P cycling	12 Mio €
SFS-34	Innovative agri-food chains: unlocking the potential for competitiveness and sustainability	6 Mio €
SFS-39	How to tackle the childhood obesity epidemic?	20 Mio €
SFS-48	Resource-efficient urban agriculture for multiple benefits – contribution to the EU-China Urbanisation Partnership	7 Mio €

Multi-actor 2017 - Rural Renaissance (RUR)

RUR-2	Coastal-rural interactions: Enhancing synergies between land and sea-based activities	5 Mio €
RUR-5	Novel public policies, business models and mechanisms for the sustainable supply of and payment for forest ecosystem services	8 Mio €
RUR-9	Business models for modern rural economies	9 Mio €
RUR-12	Networking European farms to boost thematic knowledge exchanges and close the innovation gap	7 Mio €
RUR-10	Thematic Networks compiling knowledge ready for practice	10 Mio €
RUR-13	Building a future science and education system fit to deliver to practice	7 Mio €
RUR-15	The benefits of working with others – fostering social capital in the farming sector	3 Mio €
RUR-16	Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas	5 Mio €

Guidance for drafting practice abstracts (1)

Choose the right topics. The items chosen need to be assessed against their potential to bring concrete recommendations and useful results for practice (i.e. information / tools that practitioners can **immediately use**).

Consider the right level. It is much more useful to go at a deeper level to **find practice-relevant information** (e.g. specific elements from work packages). Do not try to summarise the project itself.

Focus on useable results. The main scope is to focus on results, outcomes and recommendations that can 'be used' and move the practitioner to action. **Avoid describing project activities** since these are of no further use for the reader at the time he/she is reading it.

Guidance for drafting practice abstracts (2)

'Recycle' already available information from your project.

Take advantage and use appropriately relevant information that exists already. Sometimes short, concise and ready-to use information is already available for the target audience on your website or in reported deliverables.

Use of language. It is key to **put yourself in the place of the reader** (end-user) when writing. What do they want to read about? **What would practitioners find useful?** Would a farmer, forester etc. disengage when reading this sentence? Etc.

For instance: Sentences like these should be avoided: "Tests have shown that an IPM approach can result in lower yields with high environmental benefits". Even if factually true, this information is not appealing for practitioners and could even put them off. A suggestion is to try to work around negative messages to draw the reader's interest to positive elements. For instance, if lower yields are involved, try to explain why taking up a certain practice is still important (e.g. 'the dexipm tool can help farmers to find the solutions that have the lowest impact on yields while having a similar reduction of the use of pesticides')