

**Report SCAR SWG AKIS 4
6th Meeting
LISBON, 10th October 2017**

The SCAR SWG AKIS4 meeting in Lisbon was the sixth of the meetings proposed for the development of the mandate endorsed by the SCAR plenary in December 2015. This meeting looked at developing the following topics identified in the AKIS 4 mandate:

- **Learning and feedback from interactive projects approaches :**
 - ✓ Presentations and exchanges with 4 H2020 Thematic Networks and Multi-Actor Approach projects
 - ✓ Learn about 3 new H2020 projects on Demonstration + reflection about broader interaction among projects
- **Cross-fertilization with other EIPs and sectors:**
 - ✓ Presentations and exchanges with LEADER
 - ✓ Presentations and exchanges with EIP-WATER
- **Other topics of interest**

All presentations and slides from the parallel sessions can be found on the SCAR-AKIS dropbox:
<https://www.dropbox.com/sh/zxe01q1fbyyg9hb/AADODRkQ73UfMISNlzHUh1e8a?dl=0>

In Annex 1 the minutes of the meeting regarding all presentations and discussions are added.
Annex 2 contains the participants' list.

CO-CHAIRS: Anikó JUHASZ & Adrien GUICHAOUA
Facilitator: Floor Geerling-Eiff (report)

Venue: Salão Polivalente, Ministry of Agriculture, Praça do Comércio, Lisbon.



Session 1: Learning and feedback from on-going H2020 Multi-Actor Projects:

Presentation of H2020-2014 "Winetwork" (Eric Serrano – IFV/FR)

Closing the research and innovation divide, the crucial role of innovation support services and knowledge exchange

The challenge of the project is to co-create and exchange knowledge to control 2 important diseases that jeopardize the EU wine sector: grapevine trunk diseases and Flavescence Dorée. They are fast spreading across Europe, leading to economic losses and anxiety among winegrowers. The network focuses on improving exchanges between science and practice and bringing solutions (existing or new) to control these diseases. 11 partners are involved in their consortium: 10 for dissemination, 1 for methodology, 1 for tools development and 1 for scientific knowledge. The network involved Innovation Support Services, SMEs, wine producing clusters and a scientific research centre. It hosts 10 interconnected Operational Groups, which are spread all over European vineyards. The knowledge flow is organised in a two-way interconnection between 10 facilitator agents, 10 regional technical working groups and the end users. The network has reached 231 winegrowers. Scientific and practical results are combined in the network's knowledge reservoir leading to the following output:

- for advisors: video seminars, technical datasheets and power point presentations;
- winegrowers: video clips, end-user flyers, training modules and practice abstracts.

Furthermore the network screens EU, national and regional initiatives to create synergy for co-publications, exchanges on approaches, knowledge, results, linking to websites/newsletters and to organise common workshops.

The network will work on continuous links with national initiatives in the partner countries. They will extend the results at national level, beyond the current regions involved and think how to disseminate to new countries to enrich the knowledge reservoir.

Presentation of H2020-2015 "Smart Akis" (Spyros Fountas – AUA, Greece)

Mainstreaming digital farming for a climate smart agriculture in Europe

We are moving towards an era where we face a global shift in use of sensors in agriculture, from 0 in 2000 to 2 billion in 2035. Currently 525 million farms make use of 600 mln. sensors. Regarding the data needed per plant, one corn plant already requires 0,5 kB data per year for example and 4.6 kB per plant of image data are needed. Solutions for sustainability are sought in new crop varieties, smart crop protection, precision agriculture, internet of things, remote sensing and big data analytics. One problem is the ownership of these data. For example, a study shows that 88% of the US famers preferred not to store the data in a shared Internet-based database explaining the reluctance of software vendors to push in this direction, which emphasizes the importance of farm data ownership. The SMART-AKIS project EU AKIS towards innovation-driven research in smart farming technology, focuses on smart farming technologies and application of ICT into agriculture, leading to a third green revolution. Topics are: information management systems, precision agriculture, automation and robots. Diverse actors are involved: farmers, researchers, industry, extension services, consultants and advisors; 13 EU partners in total from 8 MSs. The project has delivered the following output: research reports, +1500 solutions, projects and papers, 7 innovation hubs have held innovation workshops, the smart farming platform (database) and policy recommendations. The smart farming online platform is free and open. It is the main entry point for smart AKIS services. Its target groups are: farmers, industry, researchers and advisors. The platform offers 4 services: an online survey for smart farming technology (SFT) mapping (tech feed), an SFTs database (tech browse), a quick assessment tool and an open message board for posts by registered users.

As expected, differences were observed among more advanced countries (the Netherlands, France, UK and Germany) and countries with SFT less widespread (Serbia and Greece). Incentives for the adoption of SFT are: the reduction of inputs, use for complying with regulation, easiness of data recording

and the reduction of labour and monotonous tasks. In all hubs, farmers were eager to adopt new technologies, although in general they are more hesitant about digital platforms usefulness. Their interest strongly depends on their farm type. Results from early adopters could help laggards to make right decisions (the guinea pig syndrome). Furthermore, there is a need for a network for benchmarking and international cooperation. Potential lies in the combination of data registration with governmental systems for regulation compliance, to correlate crop imaging data with soil data, early disease detection, use of information collected with crop sensors from crop protection and crops status documentation and the use of information from digital platforms which is useful as relevant info for markets (anonymous publication of input prices).

Presentation of H2020- 2016 “SheepNet” (Jean-Marc Gauthier – IDELE/FR)

Sharing Expertise and Experience towards sheep Productivity through NETworking

SheepNet is a network for the improvement of sheep productivity in the EU to enhance sustainable productivity in sheep meat and milk farming. The project focuses on declining factors that affect sheep productivity: reproduction of efficiency, the reduction of lamb mortality and gestation efficiency. SheepNet is:

- setting up a self-sustainable EU/international Thematic Network on “sheep productivity;
- stimulating knowledge exchange between research and stakeholders (end-users);
- valuing the input and knowledge of farmers and stakeholders;
- widely disseminating relevant best practices and innovations.

There are 10 partners from 6 EU countries involved in the network. They work towards the creation of a knowledge reservoir that combines both scientific and practical knowledge, key solutions with specific recommendations, communication and training material, scientific/practical pool of experts, a pool of innovative farms and a future research/network agenda.

The MAA leads towards better understanding of each other (e.g. farmers/advisors and scientists), greater consideration of field inputs and greater efficiency to respond to needs. However, it takes a long process to trust each other, to perform the different tasks and to provide relevant responses. Not everyone can take part and not everyone has the profile to take part. Small groups live their own life. Therefore, dedicated training and tools to facilitate meetings are needed. The network sees behavioural changes for those who received the facilitation training. Farmers see things differently, realise that their input adds value and thereby feel more confident. On the other hand, advisors and scientist adopt a better listening behaviour. However, there are difficulties for those who newly enter an already constituted group.

Solutions to connect the TN to other H2020 projects lie in common communications, invitations to participate to international events and common reflections to identify innovative practices. Challenges are to connect with more networks and H2020 projects and how to ensure long term communication. The efficiency in the network can be improved by sharing solutions with other TNs about tools to facilitate meetings and how to:

- implement a platform, to identify and transfer innovations, to be rapidly “visible”, realise long term communication, involve a wider audience, mitigate language barriers and interact with other H2020 projects.

Parallel sessions: Exchanges on coordinating common issues for Thematic Networks

Group 1: moderated by Jean Marc Gauthier

Coordinating common issues for Thematic Networks

The following questions were addressed in the first group of the parallel sessions:

1. Communication and outputs: how to better spread - accelerate the uptake of - end-user material produced by H2020 projects?

The main problems are: how to reach farmers (outside projects) and end users and language barriers. Possible solutions are:

- to organise a workshop at national level and only with farmers, in order to disseminate the results;
- organise bilateral cross-border workshops between EU regions and countries to disseminate results;
- H2020 results should be better adapted to the farmer's understanding by involving local advisors and translate it in local languages (e.g. practice abstracts);
- link with operational groups and farmers' organisations, national platforms and networks to optimise the dissemination impact;
- output should be continuously updated after projects, for example in follow-up projects, but with the possibility and need to involve different actors;
- build (a) knowledge reservoir(s) for the long-term availability and maintenance of the knowledge rich infrastructure and feed into existing channels.

The availability of farmers' time is essential: how to get access and involve them, what are adequate formats and communication channels? Important is the translation of output in different languages. Also, focus on the tone and media of communication related to the target group, such as publishing in farm journals or items on farm radio programmes or other media such as specific television channels, farm twitter or YouTube channels. Furthermore, make use of multiplier functionalities such as national and regional existing (peer-to-peer) networks and organisations.

2. Websites: which specificities for TNs Website? Is a common format suitable? How to sustain them?

There should be better facilitation in the search of results. Create a generic EU-H2020 website with short descriptions and links to the individual project websites. They should use a common framework which concentrates on the content. Make links and connections between EU, national and regional websites that are frequently used by farmers and advisors. We should distinguish between short term project websites and long term knowledge reservoirs. Regarding long term communication channels, it is necessary to build up trustworthy databases and trust among its users. Link to existing farm channels like weather forecasts, local newspapers and national known websites for optimal communication reach.

3. Knowledge reservoirs: how to link and match TNs outputs and end-user material? How to create a user-friendly reservoir for the wide EU?

Focus on a network of knowledge hubs. Target groups should be farmers and advisors, in the first place. It would be recommendable to develop one, common frame for a knowledge reservoir but would this be feasible? A knowledge reservoir requests the follow-up of projects. H2020 projects should therefore better build forth on already existing knowledge reservoirs. This could be achieved by overlap in the people involved in the previous/current and follow-up projects. Knowledge reservoirs should be user friendly, create options for search actions at frequently visited places for farmers and collect feedback to improve their own system. It could be tested e.g. on farmers schools and universities of applied sciences.

Group 2: moderated by Andres Montero Aparicio

Constructing multi-actor consortia, including synergies with other interactive innovation projects

The following questions were addressed in the second group of the parallel sessions:

1. How to build efficient multi-actor consortia ?

It is key to identify the problem first. Once it is identified, it will be easier to look for the right partners. However, building a multi actor consortium might not be the main challenge, making it successful is. Therefore, end users should be active from the very beginning and already be involved in the project proposal stage. Make use of existing networks but focus on involving newcomers as it is difficult for them to enter, because they are not connected in the system. This is also a matter of trust.

Furthermore, it is quite difficult to get sufficient commitment from companies and SMEs. It takes time for newcomers to get used to the multi actor approach in H2020 projects. How can the EIP Agri SP tools serve the search for multiple actors efficiently? And where to look for key player profiles? A preparation phase to set up MA projects with the right people involved, should allow to find the right people and newcomers to get engaged and to build up trust.

2. Which specific measures are there to make different kinds of actors to work together efficiently? Organise both physical and digital (skype) preparatory meetings with end users. Create an overall view of the implementation of the project results, to better understand the needs and project aims. There should be a central coordinator to manage the composition of the different groups of actors involved (farmers, facilitators and academia). Co-ownership is important!

3. How to connect with other TNs, OGs, H2020, National project (while setting the project? Once the project is launched?)

It is not always easy to find the connections between H2020 and national projects. The core task of NRNs is to foster innovation and to keep this inventory available for certain types of projects. It should feed the back office for advisory services. Therefore, training of NRNs on H2020 is needed to be able to provide better guidance. Furthermore, NRN workshops could be organised to disseminate results of H2020 projects to interested actors and support e.g. researchers in their communication to farmers. In the next period, we should enhance the capacity to develop trans-national operational groups, workshops and cross-visits.

Group 3: moderated by Floor Geerling-Eiff

1. What are the main practical/financial/administrative issues faced in implementing the TNs?
 - In comparison to EU projects in the FP7 programme, it is considered to be much easier in H2020 to work with different partners and to link with the EC, for instance regarding deliverables and financial organisation. Contracts are less complicated and e.g. traveling is less of an administrative burden. This makes H2020 more attractive to participate for different actors. The administration takes less time and actors are not scared anymore to fill in forms the wrong way. So in general, procedures under H2020 are more flexible. However, there should be continuous focus how to reduce administrative burdens.
 - There is also more flexibility to rearrange budgets among the partners involved. Budgets are not that fixed anymore. Innovation is not a linear process, so fixed budgets aren't suitable. However, some group participants indicated that it still takes quite some administration and they face difficulties to change partners or involve more partners during the project process (if they had not been involved from the beginning). There should be more focus on organising budget in different innovation phases, when it's needed. Synergies between different instruments for knowledge and innovation could facilitate this need.
 - Another problem is the difference in financial (co)support that EU members states invest in the preparatory and proposal stage of projects and/or during the project. One solution could be to better bridge gaps between EU and national or regional strategies for research and innovation. This is also a matter of efficiency and effectivity. There are many EU, national and regional networks working on same topics and innovation challenges. How can these networks and

knowledge flows be better connected? How to avoid overlap in R&I activities and how can we better learn from each other's solutions?

2. Are there specific actors mainly affected by these issues?
 - In some countries knowledge workers receive public (national) support to invest in H2020, in other countries they do not. In particular for smaller institutes and organisations, it is quite risky to invest in EU proposals without public support in relation to the unknown return on investment. In particular if they would like to coordinate a proposal. How to create a level playing field?
 - The project coordinator is often a multitasker. It is wise to have one coordinator on content and an additional financial/administrative coordinator. It is a separate profession. It might be an idea to appoint particular budget for administrative coordination, say 5-10%. The financial coordinator can facilitate the different actors involved in the project, including the farmers.
 - Regarding cross-visits, there has to be sufficient budget calculated to organise these.

3. How to anticipate and cope with these problems?
 - Make the threshold as low as possible for different actors to get involved. Also, the percentage of budgets for SMEs involved could be raised;
 - Less focus on fixed but more focus on lump sum budgets to involve partners in the network stages when they are relevant, which allows vice versa the opportunity for partners to get involved when they 'hear about' the network. Also, reserve budget for unidentified purposes in the project;
 - Enhance the MAA. An actor and network analysis who and when to involve in the innovation process, is essential. Think in advance why you are doing what you are doing, who you are doing it for and who should be involved. This analysis will also give insight who is not that relevant to involve. Not everyone can be involved, so this has to be a careful consideration.
 - We will also have to be more creative in connecting funds and linking projects and networks (synergies).

Session 2 Exchanges on H2020 projects on demonstration

Presentation of FarmDemo: an integrated project by PLAID and AgriDemo F2F

(RUR 11- 2016: Inventory of demo farms and best practices for demonstration projects) and Joint activities

- By Claire Hardy, James Hutton Institute and Fleur Marchand, ILVO

The Plaid project is focused on peer-to-peer learning and accessing innovation through demonstration. Plaid has 13 partners in 12 countries. Primary outputs are: 1) a conceptual framework and typology of demonstration farming in Europe, 2) geo-referenced inventory of demonstration farms and supporting organisations across the EU, 3) pilot testing of farmer-led approaches of virtual (on-line) demonstration, set of informative videos (youtube channel), 4) case studies in all Plaid partner countries, 5) integration of project outputs to determine targeted decision-support tools, 6) policy recommendations for governance and financing of demonstration, 7) building a Community of Practice and 8) a final conference.

The Agridemo project aims at building an interactive agridemo hub community that enhances farmer to farmer learning. The scope of the project is to organise demonstration activities on commercial farms which are diverse in origin, represent both science driven and innovation driven models and farmer-to-farmer learning is the central goal. The project has 14 partners in 12 countries. Primary outputs are: 1) a geo-referenced inventory of demonstration farms in the EU and typology of demonstration farms and organisers, 2) best practical approaches for on-farm demonstration activities, projects and programmes. 3) recommendations for AKIS governance and policies on support for f-t-f learning approaches and 4) disseminate and accelerate the uptake of best practices.

FarmDemo integrates the 2 projects Plaid and AgriDemo, funded under RUR-11. Joint actions are:

- 1) to co-produce and co-design a geo-referenced inventory of demonstration farms and organisations;
- 2) a joint farmdemo hub, an interactive, user oriented web-map application, including the inventory but also farm demo showcases, videos and other project results;
- 3) joint policy recommendations, policy workshops and a joint final conference.

The output of FarmDemo forms the input for the EU Nefertiti project that has recently started. 50% of Nefertiti partners participate in Plaid and AgriDemo. Both coordinators have a key role in the new Nefertiti project. The work plan has been scheduled according to the expected Plaid/AgriDemo readiness deliverables. The Plaid and AgriDemo final conference will be jointly organised with the Nefertiti mid-term conference.

Presentation of NEFERTITI project

(RUR 12 – 2017: Networking EU wide demonstration activities)

- By Adrien Guichaoua, ACTA

NEFERTITI stands for Networking European Farms to Enhance cCross ferTilisation and Innovation uptake Through demonstration. The proposal had been submitted in response to the call RUR-12-2017 which was a logic continuity of RUR-11-206. The budget is 7 mln. Euro and the project has 32 partners. The starting date is January 2018. It is a unique project which establishes 10 interactive thematic networks and brings together 45 regional clusters (hubs) of demo-farmers and the actors involved (advisors, NGOs, industry, education, researchers and policy makers) in 17 countries. It aims to create added value from the exchange of knowledge, actors, farmers and technical content over the networks in order to boost innovation uptake, to improve peer to peer learning and network connectivity between farm actors across Europe, thus contributing to a more competitive, sustainable and climate-smart agriculture. Themes are closely linked to the H2020 Thematic Networks and will connect with other organisational structures at grass root level, such as EIP operational groups and study clubs that will confer to the project a key role of accelerator and empowerment of the dissemination and of the uptake of the practical-oriented knowledge delivered by all EIP related projects. Deliverables will be: a monitoring and learning programme which supports the systematic extraction of lessons learned, a web based platform in each language of the partners and the engagement of a policy dialogue with EU regions.

Reflections about broader interaction among these projects (and with others) and suggestions to the consortia

- The involvement of commercial oriented partners was discussed. One of the advantages is the speed and willingness of developments, one disadvantage is the restraint to publish and share developed knowledge;
- One of the reasons that it was easy to combine both projects was that they were quite similar because the call was very structured. Therefore the tasks were quite aligned but there are other countries involved in both projects. The work is complementary;
- About impact, Euphras will take over the results of FarmDemo and the follow-up takes place in Nefertiti. It is good to know the outcome of the project beforehand;
- The aim of Nefertiti is not to duplicate what has been done already, but to build on past experience, use it for other results and to optimise dissemination. Farm Demo and Nefertiti do not overlap totally but both projects want to work as rational as possible;
- Farm demo focuses on peer-to-peer networks, Nefertiti implements the broader multi-actor approach. It is complementary;
- In the future more synergies between projects and follow-up of results, will be stimulated;
- Nefertiti makes a clear difference between the actors involved and stakeholder engagement. If there are AKIS actors who can benefit from the project, please contact Adrien.



Session 3: Cross-fertilisation with other EIP & Sectors

Presentation and exchanges with EIP-WATER (Hans Stielstra, EC-DG ENV-Deputy HoU-C1)

Why we need EIP Water:

- 1) the EU Water Framework Directive – WFD (2000) set 2015 as the deadline to achieve good water status. We are not there yet;
- 2) the Nitrates Directive had a measurable effect on the reduction of pollution from agricultural nitrogen. However, the Nitrates Directive alone will not lead to nutrient management at the scale necessary to secure the WFD environmental outcomes;
- 3) sustainable Use of Pesticides Directive (2009): is an important instrument to help achieve good water status. The commission came to the conclusion while it helped to reduce pesticides, there are still a lot of gaps. Precisely in the protection of the aquatic system against pesticides.
- 4) the Drinking Water Directive (DWD): we want to achieve minimum health standards in water intended for human consumption.

Key challenges are:

- 1) the assessment of the Member States; the 1st River Basin Management Plans shows progress has been made in improving water chemical and ecological status;
- 2) more than 90% of the RBMPs indicate that agriculture is a significant pressure, including diffuse or point source pollution by organic matter, nutrients, pesticides and hydro-morphological impacts;
- 3) assessment of 2nd River Basin Management Plans – 2018.

On water and agriculture (Commission staff working document ‘Agriculture and sustainable water management in the EU’), there are 4 priority areas: implementation, governance, investment and knowledge. EIP is highlighted under knowledge. We would like to identify synergies between the European Innovation Partnerships on Agriculture and Water.

Presentation of H2020 – 2016 “WaterProtect” (Piet Seutjnes – VITO/BE)

The EU WaterProtect aims at developing innovative tools enabling drinking water protection in urban and rural environments. Pesticide and nutrient pollution of drinking water sources is a continuing concern. Mitigation measures are not in place or not effective and we need farmer engagement. Objectives are:

- to contribute to effective uptake and realisation of management practices and mitigation measures to protect drinking water resources;
- upscale findings from action labs to other regions;
- advise policy makers from WFD, CAP, nitrate and pesticide directives;
- strategic communication to stakeholders and dissemination to the public.

The MA approach in the project leads to a transparent and fair process, visualization of the process for better understanding, an equal involvement of all actors, a neutral start for the process by sharing common objectives and a common language, social and emotional dynamics to encourage overall group functioning.

The project brings together research and innovation actors. The project partners are keen to learn and exchange experiences with operational groups from EIP Agri dealing with water and agriculture. They match in the following aspects:

- focus on sustainable agriculture and water which fits in “sustainable management of the essential natural resources”;
- scientists, practitioners and intermediaries, including farmers, advisors, NGOs, businesses etc. are all actors and partners in the bottom-up process;
- delivering practice materials.

Furthermore it creates synergy between existing policies. The WaterProtect has a policy oriented work package and will advise on cross-cutting issues from WFD, CAP, SUD, Nitrates directive and the DW directive.

Presentation of H2020- 2015 “Fertinnowa” (Els Berckmoes – Proefstation/BE)

Fertinnowa is a thematic network (CSA) under the H2020 Water 4b call. The project focuses on the transfer of innovative water technologies in fertigated crops (vegetables, fruits & ornamentals). The project runs from 2016 – 2018. There are 23 partners + 2 linked third parties involved from 9 EU Member States and South Africa.

A European benchmark study revealed that growers struggle to achieve sufficient and qualitative irrigation water, use irrigation water in a more efficient way, avoid run-off leaching and how to manage waste fertigated water. Knowledge & innovative technologies are available but are not implemented by the growers. The main objective of the FERTINNOWA thematic network is to create a meta-knowledge database of innovative technologies and practices for the fertigation of horticultural crops. FERTINNOWA will also build a knowledge exchange platform to evaluate existing and novel technologies (innovation potential, synergies, gaps, barriers) for fertigated crops and ensure wide dissemination to all stakeholders involved of the most promising technologies and best practices (fertinnowa.com).

The consortium members are active in numerous water related projects. More than 31 projects are linked. Water related projects can participate through consultation for technology reviews (initiative consortium), by taking part in the technology exchange, by taking part in the workshops, in showcase events and in the final event. All members are active in the core tasks. Benefits are the high degree of interaction and the group’s spirit: let’s go for it together. Risks are the high degree of interaction, the risk of delays and the frustration if one partner does not live up to the expectations. A reason for growers not to get too involved, is that they want to share their vision but do not want to spend too much time. If you want close contact with the growers it is a bottleneck to involve NGO & policymakers. One challenge is to avoid making the thematic network commercial. The concern is to avoid advising technologies.

Results of the project are published on the website. It is the focal point for informing about the project's objectives, methods and results. The technology database is filled with technology review reports and practice abstracts (100). It is ready for EIP-AGRI. However, the growers are reached by organising local events, international events equally spread in the EU, the provision of interesting technologies: technology market, eye-catchers, the provision of translation, field visits and a final conference (a selection of 30 growers can participate for free).

The presentation on LEADER: the concept, history and future by Paul Soto, ENRD
Unfortunately, this presentation had to be cancelled due to logistical problems.

2018 AKIS work plan

Main SWG AKIS Deliverables in 2017, are:

- Policy Brief on "New agricultural education systems";
- Policy Brief on "The future of Advisory services";
- Flash report on the "Implementation of the Digitization in the EU MS";
- Report on the "The Role of Thematic Network in EU Agriculture Innovation";
- Report of the FOOD 2030 Workshop on Workshop on "Agri-food SMEs collaborating for innovation along the supply chain - What, who, how?" (October 2017).

The following topics of the mandate need to be addressed in 2018 (follow-up or not yet addressed):

- Improve the integrated approach within the European AKIS and the implementation of the EIP;
 - o 1A. Complementarity and synergies among funds (External Study to follow-up);
 - o 1C. AKIS supporting Infrastructures (External Study to follow-up);
 - o 1D. Further development of the EIP approach (Stakeholder feedback);
- Learning and feedback from interactive projects approaches (follow-up);
- Better address the knowledge flows along the whole production/value/supply chain (follow-up report of the Food SME Workshop + session with SWG FOOD SYSTEMS on knowledge exchange/cross-fertilisation/transfer);
- Cross-fertilization with other EIPs and sectors (Follow-up of exchanges with EIP Water, LEADER and GIZ in view of the Final AKIS Report Article);
- Analysing the perspective of AKIS in Food and Nutrition Security and Sustainable Agriculture across developing countries;
- Monitoring interactive innovation policies and benchmarking for sustainability: a common session together with ARCH SWG on Evaluation of Innovation and Impact, also with FAO- OECD, ENRD Help-Desk.

FINAL AKIS 4 REPORT : expected by the beginning of 2019. The preparation will be put on the agenda in the February meeting (2018, Athens, February 28 – March 1).

Suggestions from the group:

- regarding monitoring interactive innovation, maybe link to other relevant projects such as Impresa;
- link to ICT Agri era-net;

Further remarks:

- the policy brief on education will be translated in other languages;
- it would be good to wider spread the SCAR-AKIS presentation on advisory services.

Next SCAR-AKIS meeting: Tallinn, December 7th 2017.

Annex 1: Minutes SCAR-AKIS meeting Lisbon: presentations and discussions

Presentation of H2020-2014 “Winetwork” (Eric Serrano – IFV/FR): Closing the research and innovation divide, the crucial role of innovation support services and knowledge exchange

The project was finished in September but we're still working on it. We tackle different topics, not the generic ones. We focused on two diseases: 1) grapevine trunk disease and 2) flavescence doree. Diseases were occurring in other countries. We built the consortium to collect the knowledge and to spread this knowledge coming from scientific results but also from the field. In each country there are 10 specialists for distributing knowledge. We wanted the SMEs to disseminate the knowledge we collected, supported by one expert in scientific knowledge. We didn't want a lot of scientists. Just one. We built a consortium with 10 wine producing areas. We built the network thanks to a facilitator agent in each wine area. That connected the scientific paper to practice. There are 10 interconnected Operational Groups, spread all over the European vineyards.

We collected the know-how in each area. The role of the facilitator was the link between science and practice. Each facilitator worked with the same methodology. They trained each other and they all worked on innovation in the field to create the material in the field. We created working groups on the two diseases. Each scientific group chose 10 scientists who wanted to work with us, to share their knowledge.

In fact, with the scientific working group and the technical working group in the field, we were addressing 200 people, of whom about 50 were wine producers. There were more than 300 scientific articles about the two diseases. With the know-how from the field, the facilitator made communication material like pictures and films from practice regarding the diseases. We made a knowledge reservoir from both scientific knowledge and from the field. We have to translate this in material, for technical purposes but also for the brewers. We also made video clips, flyers and practice abstracts for the brewers.

All material was translated in each language in each country. It can't work if the knowledge stays in English. In the knowledge reservoir, you can find more than 65 materials. In each country the partners are doing the translations. Across the EU we target 50.000 brewers, thanks to the specialists in communication. In each country the problem is how to link all countries: interregional exchange. We are making a link to an international cluster and we are closely linked to transfer all the results on a website. In France there was a big project called National plan for vineyards, in 2016. We linked the results to the target groups and students connected to this project. It is important to have these kind of links.

The project finished in September; what did we learn? We made a survey and sent it to all brewers involved, how to progress with the knowledge and how they implemented it. When we started the project, the facilitator agent had to understand both science and field know-how. If he only comes from a scientific world, it doesn't work well because he lacked knowledge from the field. If it was someone from the field, they could make a great link with science. So, the other way around it did work. The coordinator has an important task. There is an essential role for the leader. In the beginning we didn't have a leader for the facilitators. But I didn't understand their work that well. So then they decided their selves, because it was very important how to progress, to appoint a leader. So it's very important to think of appointing this type of leader when you are building a network like this.

The facilitator agent was very important to talk to both scientists and the field experts. We had 2 meetings with all facilitators. The 1st meeting was difficult because they didn't understand each other. The 2nd meeting went better. We didn't have enough physical meetings with the wine brewers. It was b-2-b, facilitators – wine brewers. When we organised meetings in the network in each country, several

meetings were organised in parallel. These kinds of meetings were very great. We could talk to scientists and they could understand the main topics. It was very interesting to meet them all. It was more important to go for the scientists to go into the field to try to disseminate their knowledge.

We didn't have enough money for cross-visits in the field. For the dissemination, peer-to-peer, wine brewer to wine brewer contact is very important. Now we know that there is some innovative action coming from the field. 'I want my wine brewers to visit others.' We have to organise that in an efficient way.

To finish, when we created the knowledge, we wanted to share it with everybody via the knowledge reservoir, a database where everybody can share their knowledge. It is difficult to create a dynamic on this reservoir for other networks. It is difficult to establish knowledge sharing, coming from the technicians and from the wine brewers. We are trying to build the knowledge reservoir about these two diseases. We have now 65 materials for dissemination; we have to share it.

Furthermore, we built technical working groups. In these groups there were technicians and wine brewers. It works better on the technical working group when there are more brewers than technicians. The brewers are intimidated by the technicians. If we are going to continue to work with this technical group, we want to only have wine brewers in the group.

What should we improve?

- Continue the links with the national initiatives, they must appreciate the results of the Wine network.
- We worked in the wine areas. We have to extend our work to all other countries, other operational groups.
- We worked in 7 countries in the EU but how to disseminate the knowledge in new countries that are not in the network?
- How to transfer the knowledge in other languages and countries like Greece e.g.?

The project came up with the following lessons learned:

- the facilitator agent plays an essential role in linking science and practice;
- leaders are of equal importance to coordinate the network in the right direction, to lead the scientific groups and to lead the facilitator agents group (these were 3 different people). They came together regularly, not so much to talk about the planning of the project but about the needs and messages to the different groups;
- next to the development of practical tools, it is important that technicians, winegrowers and scientists meet physically (sometimes more for the scientists);
- the approach in the project has to be organised bottom-up;
- the knowledge reservoir that was created provides accessible and long-term available material that everybody can use and upload his/her knowledge and know-how. This improves the flow of information and knowledge between academia and practitioners, and stimulates exchanges between EU wine regions;
- however, it is difficult to establish a dynamic technical-social network 2.0 that is actively and frequently used.

Q&A:

- Q: in a knowledge reservoir, anyone can upload their knowledge? Is there a quality check? A: we had a lot of discussions with the scientists and the brewers. We wanted to collect both scientific knowledge and the know-how. What was very important was to give the information to other

brewers. In the knowledge area there was no barrier but after it was the role of each technical group to transfer the knowledge in each wine area. We want all information. It was very difficult for the scientist to understand this but that was not really important;

- Q: how will you sustain this project once it is ended? How do you foresee the long term maintenance? It is important to maintain the reservoir. We are linked to national initiatives. We have to use all the materials. The facilitator agent, they are connected to their companies. They keep using the knowledge reservoir. We have to go higher up in the communication level. Maybe we didn't use all social media as possible. This is a challenge. The question is how to disseminate all the materials, knowledge and know-how to other countries.
- In technical terms: how can we improve the knowledge? If you miss the economic part, we want that. It is not very easy. It is really a new project, the economic analysis. We should find new experts in the consortium.
- Organising cross-visits from wine brewers to wine brewers is very important.
- Q: the Valerie project, is developing a tool to get access to scientific knowledge and translate it in a practical way. We developed a lot of fact sheets. If you're interested. Was there a social media platform that was used more than others? A: no, we didn't use social media. Maybe it's useful to share the knowledge better and faster but it was is very difficult to get the brewers involved. We have to think about it. We are convinced it is the future but still it is difficult to get them on board.
- Q: in Slovakia, most are/will not be involved in H2020, how to interact with these stakeholders? It is a pity that systems do not work well. We also have a lot of winemakers and they do not have a clue of what is happening outside of Slovakia. I would like to adapt your platform and get more information to the farmers.
 - o A: that's a challenge, to disseminate broader than outside the project. We welcome you to step forward.

Presentation of H2020-2015 "Smart Akis" (Spyros Fountas – AUA, Greece): Mainstreaming digital farming for a climate smart agriculture in Europe

Spyros, background on precision agriculture. SFT: smart farming technologies. Multi-actor approach to use precision farming. It is still difficult to get the data from the farmers, 81% of the Danish and 78% preferred to store the data themselves. Approach smart AKIS: involvement of a wide range of actors in AKIS. We collected lots of information, categories per crop and per fruit, e.g. crop protection. We have a sustainability assessment. We looked at the last 7 years, a systemic review. The TRL level is around 5.

Smart farming needs to be a service. We did a survey on the needs of farmers on smart farming. On the 24th of November, we organised an event in Pamplona Spain with open access to what we have learned. Expected outcomes are several multi-actor projects.

Barriers for the adoption of smart AKIS:

- Competition is the biggest problem;
- Researchers have to be stimulated to be more practical;
- Communication from H2020 projects to national/regional level is difficult. Needs more attention;
- Practice abstracts should be better accessible, have to better pop-up in search engines;
- Platforms and projects are not interconnected;
- Projects should be funded to gather the generated knowledge at least from the TN.

Lessons learned:

- MAA has transformed research projects within H2020 in comparison to FP7 projects;
- The projects and the results are directly communicated with the end-users;
- Competition among commercial companies with similar products to come to the same table;
- Farmers were more open to discuss their problems and concerns regarding SFTs with the commercial vendors, while more actors were involved (agronomists, researchers, peer farmers);
- Commercial vendors tried to adapt their attitudes and be more pragmatic, when all actors were in the table;
- Researchers tried to talk in practical terms and not superficial research outcomes, when commercial vendors and farmers were involved;
- EIP-AGRI Service point helped us identifying all OGs related to SFTs and we have contacted them regarding our project. Great!
- The problem is how the National/Regional projects get to know the results of TN or H2020 projects! This is a bottleneck!.. No connection and communication, especially when project partners are not from the country or interest;
- Practice Abstracts is a very good idea, as it will be easily accessed! However, they should be easily accessed by search engines (google, firefox, etc.);
- Too many platforms and projects websites with so valuable information, but not interconnected!
- Projects should be funded to gather the generated knowledge, at least for the TN.

Q&A:

- Q: you also try to bring middle sized and bigger farms into a common interface? A: In the platform we made a selection of crops and also take into account different farm sizes.
- When somebody uploads information, it is important to filter the quality;
- Q: when you talk about involving social media, is that organised in every language? A: Yes, we keep it in the national language. The technologies we use in the project are in English but that's for internal use in the project;
- Q: regarding property rights, we see that the food industry is starting to become very interested in these data. Are you sharing the data freely to the end consumers or will you protect it? A: EIP agri organised a meeting about data sharing. That what is accessible we distribute that. We have to find better ways to exchange (all open) data. We will have a discussion on this topic (in a project meeting in Bratislava?). It is a broad initiative.

Presentation of H2020- 2016 "SheepNet" (Jean-Marc Gauthier – IDELE/FR)

Why did we organise a thematic network? In the EU sheep herding is not a self-sufficient profession. It is in less favourable areas but it is key production for these areas. They play an important economic role. It was declined by 50% since 2000.

That is why we decided to set up a sheep net in farming:

- To set up a self-sustainable EU thematic network on sheep productivity;
- To stimulate knowledge exchange between research and stakeholders, etc.;
- 6 EU countries are involved, involving 80% of all EU sheep flocks;
- We have 7 network facilitators. This is crucial for our network. They need to have the same skills and make sure that they progress at the same speed;
- We work with a multi-actor approach: we get support from technical groups, composed mainly by scientists. Then the work (the knowledge is put into practice) in an operational group. The idea is to spread all knowledge and to foster also with New Zealand and Australia because we can learn a lot from each other;

- On the one hand we have the scientists, on the other the Sheep AKIS. We foster a top-down and a bottom-up approach.
- We want to achieve a higher user acceptance and articulate new research needs. You can see that we stick our work programme in this frame. We also define our project in 5 steps. It is always finalised with national and transnational work. See presentation;
- Added values: it helps us to have a better understanding of each other. Researchers but also stakeholders. Through national and transnational workshops, we make sure they participate in all of the 5 steps. How does it work, what are the needs? It is an opportunity to speak directly to farmers, share ideas and experiences, and make them comfortable to do so.
- To implement MAA is a long process. You can't do it (quickly) in the first meeting. You have to think it through. That people will understand it. They need to trust each other. It is really a long term process to overcome the hesitance to participation, create willingness and understanding for the approach. You must be open minded, ready to open up your farm and willing to speak to others. So the MAA can also be done in small groups, from 12 to 15 persons is a good number. Each group has its own life;
- In the beginning we had a training with all the facilitators in order so that everybody would be able to be involved. We used different techniques. They were somewhat intimidated in the beginning but in the end they really enjoyed it. The added value of this training was to work on team building. We did it together. We know each other now, we work hard on it and we are confident what we can do together.
- We use the same technique to be able to get the same process and results. Farmers and advisers do not speak English. They need techniques to be able to exchange amongst each other.
- Did we change behaviour? Yes, really for the ones who did these trainings. We see how we can manage these type of workshops. The farmers were really involved. For advisors and scientists the point is to create a solution together, not to give the answers point blank. When there is someone new in the group, you have to make sure he/she understands how it works.
- How to connect thematic networks to operational groups? At national level there can be a hub, but the challenge is how to connect these at EU level. We hope that Sheepnet inspires to build an EU sheep-hub network between the different OGs and national networks that we identified in our Sheepnet. In France several equivalent operational groups exist. The meaning of the workshop is to share ideas and topics on sheep productivity. In France we have 3 different networks. They are not OGs but comparable. By using these, doing work with these groups we reach a wider group for dissemination. We try to link to other H2020 projects. We already organised a common session on EIP. We decided to reinforce our link with some people from the iSAGE project/organisation.
- Communication:
 - o We developed a knowledge reservoir in which we translated the results in 6 languages;
 - o We tweet a lot, also in combination with smart AKIS;
 - o We use different tools such as pictures, films, etc.;
 - o We have a responsive website in 6 languages. We have a Facebook, a new YouTube channel.
- The project will continue 3-5 years after the project ends. We have to make use of the EIP network to do so. But the challenge is to sustain the network for a longer term.
- How to improve our efficiency? We have some common issues, how to better share solutions, how to share tools to implement the MAA. What is a good frame to identify and transfer innovations?

Q&A:

- C: the training aspect really struck me. To exchange between people, to set up trust, to use the same methodology to do the same work in the different countries. It is impressive;
- Q: how to exchange information and use it in other networks? It would be great to use your experience.

- You can't cover all of EU in the project. Even if you cover 80% there is still 20% that might be interested. How to reach them? Create a set of common questions that should be addressed in depth.
- A: it was very important we would have the same skills but it took us long to identify and create our platform, how to do it. All these experiences, we should share it so we do not have to reinvent the wheel;
- Q: regarding the website, we have to learn and try to understand what is happening. What is your experience? A: I only have one year experience on this. Now we only have a few visitors. We have to make sure the website is attractive and by inviting a lot of stakeholders and stimulate mouth-to-mouth communication. We should learn from different experiences. It is good that we have this opportunity to share.
- Q: it is very important to organise a longer term view of what these networks are producing. We had informal talks of how they built their websites and how they collected their information. We drew the policy briefs, a lot of information is still coming our way. This is probably our main field of work. The part to develop are training and facilitation. As pioneers, you have it in your profiles.
- Sylvia was in the Platform meeting last week but scientists really didn't understand much of the MAA. They struggle with what it really means. The presentations are very interesting.
- Of course there's further work to be done. We will take up on that in the SCAR-AKIS group.

Presentation of FarmDemo: an integrated project by PLAID and AgriDemo F2F (RUR 11- 2016: Inventory of demo farms and best practices for demonstration projects) and Joint activities

- Presentation of PLAID

Plaid has 13 partners in 12 countries. It is a MAA consortium. The main aim is to focus on demonstration farms -> impact, open access, mediation techniques, and types of materials that are being produced. Insight in what was adopted and what was refused. We developed a conceptual framework and a tool for demonstration at multiple farm sites. We're helping to create outputs, for farmers, policy recommendations -> final conference.

- Presentation of Agridemo

Ilvo is the leading partner. In the project 14 partners from 12 countries are involved, a range of 4 research institutes, 3 social scientists and 1 IT-group. We have within our practical network also private education and land organisations, etc. Other parties that are involved: we have links outside of the EU (Via Campesina), stichting Veldleeuwerik, Bayer: forward farming, Euro Dairy covers the whole of EU, next to the regional groups. So diversity of involvement on different levels. We want to find evidence and at the same time strengthen our activities by improving the networking and involving the MAA approach. At the start of the project we aligned concepts. We work with diverse partners. All these concepts will be addressed. We will focus on a structure analysis and in depth case studies. In the outer circle, we will interact with EIP Agri. Our scope is to organise demonstration activities on commercial farms. Farmer-to-farmer learning is essential. We make a geo-referenced inventory of demonstration farms in the EU and a typology of demonstration farms and organisers. You have listened to the two projects. Now we want to merge.

- Merger between the two projects into FarmDemo

In the first place we discussed how we can create synergy for organising activities efficiently. Then we found out that the two projects are complementary. We are now working together to join strengths. There are many pro's. We do common in depth analysis, this gives us richer inputs. It leads to good discussions

and we are able to have good collaboration. Regarding the data collection, for example in the UK there are now 3 organisations working on this topic which give us better coverage in England and this counts for the whole of the EU. We can also compare results and methodologies. There are a few disadvantages. It means that we have more discussions and more to organise but the difficulties are minor to the advantages. The barriers are: more meetings, we need a lot of skypes, we need to ask for flexibility for deadlines. We had to become collaborators and build up trust. We have to make sure we communicate well. We have separate websites for instance. We produce other mutual output like postcards and we collaborate well on social media. There are a lot of joint deliverables. We come up with policy recommendations together and we'll organise a final conference together. So we organise a lot of joint actions. We do a lot together, it are only the case studies we do separately. Collaboration was quite easy, both our frames have the same shape. When conducting our case studies, we need to use the same words. We really discussed on that. Now we have two consortia which cover all of the EU more easily. Regarding the development of the questionnaire, we decided to split the list in A. for input data and B. for analysis. On the data gathering, we organiser regional skype meetings to ask how the process is going. The demo-hub is supposed to be a very active innovation hub.

Q&A:

- C: we have another typology: farmer led, versus commercially led. We will definitely look at your approach. We try to include it in the stakeholder approach but it is an issue that took a lot of discussion;
- C: we are very curious what commercial companies can offer and that it is not purely for commercial purposes.
- Inge: it might be that commercial parties will push harder;
- Q: is it centred on a theme? A: no it's not, we ask them what they are dealing with and we compare. E.g. are there different questions around crops in France than in other countries.
- Q: did you have to reformulate the proposal with the merger of the two projects. Initially you have an idea, and now you need to integrate? A: Inge, one of the elements we looked at was that both projects were very similar. A: the call was quite structured. Our tasks were quite aligned. We discussed it from the beginning. We had other deadlines for deliverables, they're not the same. We organise the coordinating part in our own time, that is no project time. Now we have access to many more countries. We only have 4 or 5 countries in common. So we work complementary, there's little overlap.
- Q: is there is enough commitment for continuation? A: it has already been said that Euphras will take over and in Nefertiti is a follow-up project now. It is unusual that the project already knows the output.

Presentation of NEFERTITI project (RUR 12 – 2017: Networking EU wide demonstration activities), Adrien Guichaoua

Is a 4 year project of 7 mln. Euros, covering 17 countries. The aim is to establish 45 regional clusters on knowledge and innovation, to boost innovation uptake between farmers, advisors, etc. There are 10 themes on animal production, arable farming and horticultural production. WP2 is focused on creating a hub and to stimulate cross-visits, etc. WP6: is meant to reflect on what is going on in the groups, to policy makers. 45 hubs in total, will be established. Each network will be managed by different people. It starts beginning 2018.

Q&A:

- Q: are you going to update the platform of the FarmDemo project; what is the relationship? A: The aim is not to duplicate what has been done already but to build on past experiences. To rationalise and to make it as easy accessible as possible. The aim might be to restructure. We still have time to think about it before the start of the project. Farm Demo and Nefertiti will not overlap entirely but we want to be as rational (efficient) as possible.
- FarmDemo focuses on P2P networks, Nefertiti is broader; it implements the multi-actor approach. It has another focus. We have to make sure it is complementary. The aim is also to uptake what has been done and how to organise the results from FarmDemo in the cleverest way and how to manage it such as back-to-back meetings.
- Inge: it is important to get feedback from the member states. It is also important that they can join. Say it forward in your countries.
- A: it is a project where we make a clear distinction between all the actors involved and stakeholder engagement. If you are an actor in AKIS and you think that this activity can be useful to your purposes, please don't hesitate to contact Adrien so you can benefit.
- Inge: in the overview I saw relatively few flags from Eastern European countries. A: that is not completely true because there are several Eastern Union countries involved already. We need someone to collect the data from Estonia. Inge: we have a member in the AKIS group who is actually involved in the administration, so we could lay that contact.

Presentation and exchanges with EIP-WATER (Hans Stielstra, EC-DG ENV-Deputy HoU-C1)

So far I didn't have the pleasure to meet that many agricultural experts yet. I have only been involved for 8 months in his function.

If we talk about water policy, a.o. the water EU framework for good quality water is very important. We have not reached our aim yet there. And regarding the nitrates directive, the commission came to the conclusion that while it helped to reduce pesticides, there are still a lot of gaps, precisely the protection of the aquatic system against pesticides. We are going to revive the directive, also by reducing the reporting and make it smarter. We still have a number of challenges. Some explanation: it has a cycle of 6 years, from 2003-2009. The river basin management had to be readdressed. The conclusion in 2012 when we had to collect and assess the plans from all countries, was that: yes we reduced the chemical problems on water quality but still half of ecological water basins are in a bad status and now we are 2 years behind on schedule. This describes how persistent the problems are. That is not a secret.

In the 2nd cycle, we will finally produce the assessment next year to show the state of EU water. There is pressure on agriculture but there is also the case of industrial pollution and heavy water boards. There is an agricultural concentrate in the most effected countries, but that is not the only problem. 7% of groundwater stations contain pesticides. They tell us that it is used for extensive agriculture. There's another pressure on the water which has to do with legal abstractions but it could also be mismanagement like permits that are broader than the environment can actually carry.

Commissioners Vella and Hogan have decided to team up, to make ways to progress on the interrelation between agriculture and water management. The Commission uses this space, not to produce new knowledge but to exchange more and efficiently use existing insights. There's room for improvement such as implementation (in the water sector we have strong cooperation between all actors involved; we want to use this more). We are also evaluating how we can improve the implementation. Governance is a

second aspect. One of the things we did was to bring together the water and agricultural site. This was the first time they met.

The third priority is about investments. They can be better used. The so called Juncker (FC) declaration is going into its second live. It opened up investments in the water area. Our experience is also that despite funding, there's also a problem of capacity to use the budget as available. Finally we should exploit knowledge more, like we are discussing today.

There are plans to organise a knowledge hub between water and agriculture. There was no funding instrumentation through EIP. It is a network which is trying to put together a lot of the innovative activities through other programmes in action groups. There are many action groups. Some of them are very active, others are not so effective. Some haven't done much. Some things succeed and some others do not stand the test.

Some action groups on agriculture can be relevant for the water EIP. The EIP website can support you in finding the topic where you're interested in. EIP has different angles and a number of directors. There are 2000 people, products and services that are available in this area of water.

Why do we need it? Because environmental legislation will only get us so far. It will give us a framework but it won't get us to all results what we want to achieve. We want to implement the policies as well as possible. We also try to work with local governments and make sure that there's exchange of information at that level.

Q&A:

- Q: (Copacogeca). You mentioned the knowledge hub but you also announced a new platform. You mentioned the action groups. Copacogeca is involved in some of the water groups. Some of the action groups are not able to stand the test. One of the reason is the budget. This is the main obstacle. A: we are going to do an evaluation on the EIP water in the next months. We want to get a good perception why groups succeed and why some don't. Another one will be on how we will steer this process. We need to focus on the greatest challenges. Cause pesticides or other (historical) factors the main problem? Then we can focus more directly on those factors. There is not as big of a pot of money like before, but we are going to look at this instrument as such.
- Q: on cross-fertilisation between EIP AGRI and water related topics. A: I cannot give you that information; that is with DG Agri. Maybe that is the answer for now? To start an activity with DG Agri that they can start with this initiative but I don't know of it further.
- Q: couldn't the topic be on the agenda of DG Agri – EIP? A: Yes it is now.
- Q: two related questions. You have 8 action groups. How are their results translated in concrete actions? Is there a specific action? There is no proper funding but how far could this work be translated in SC5 in H2020 for example? A: there's a larger amount of action groups. They are linked to existing H2020 projects or other projects. They also collect knowledge. Often they aim at developing certain tools. It is difficult to give one answer. The action groups are free for all. What they try to achieve is really up to the action groups. In some cases there will be concrete suggestions, sometimes it is on something completely different. So for some there is a clear link but it is a different concept than EIP Agri. It is different at the level of structure. How can we make a better link there?
- Inge: you are planning a knowledge hub. Will it take over tasks? It is about knowledge that leads to innovation. For us innovation is not something that is being published in a journal. Are there any reviews on how this works? A: what we try to do is to put into practice what is relevant to

both policy makers and farmers. We want to live up to the concept of what we announced to do. It is a repository of tools and materials. The work to elaborate that hub has only just started.

Presentation of H2020 – 2016 “WaterProtect” (Piet Seuntjens – VITO/BE)

Is a recently approved project in the RUR-4 call? It started in June 2017. There is a clear link between water and agriculture. We know that we cannot tackle all problems but the issue is it to get the results implemented in the field. For some reason mitigation matters are not in place. There seems to be a lack of involvement from the actors. The objective is to achieve effective uptake. We want to show there are several action labs and we want to realise this with new government strategies. A big part of the work will be to organise proper financing. We have to move from depolluting the water to actions for good water, so that organisations can produce clean water at a lower cost.

To go from best management practices to implementation, we use ICT tools. We are going to upscale. There is e.g. a twin project which is called Fairway, to enlarge the scope and the coverage of challenges. (Denmark is involved). There is a common project. From there we will give advice in cross-cutting issues in the CAP, to provide benefits to water. We need to see how we can create mutual benefits. Strategic communication is a very important WP in our project.

Regarding the scheme to come from knowledge to implementation, if you're going to perform actions on water quality, you need to communicate the system transparently. That actions really help better water quality; you need to show this. We need new government incentives to get part of that money back into action. The loop between mitigation actions is important and government engagement to do so, is important.

If you can show how it works, you can get the right actors involved. If you give them an impression where they stand in the process and steer them where we are going to realise mitigations, related to how the landscape looks. In this multi-actor setting we want to come closer to reaching our goals. Action labs, parties involved in drinking, environmental, farmer organisations, they are all collecting data but they are not used to communicating with each other. Now the organisations come to measure something what the farmers do not know. We want to engage farmers more, so they get more involved and gain trust in what is being checked/tested.

Once we know the system better, we know the role of farming and we have a solution for them, then the process becomes more transparent. We need incentives how to finance this. If we both use projects and legal obligatory rules, we have to play with what best fits for reaching our goals. We want to collaboratively reach this with our stakeholders. Which kinds of tools, some of the actors do not want to spread their data e.g.

We work with targets on installing mitigation systems. The timeframe of the project is too short (to achieve everything) but there are a number of criteria which we will evaluate. We worked with core partners and leaders for each action lab. That was decided because one head coordinator would not be feasible. Each action lab leader is responsible for distributing the costs. We have multi-actor managers. We want to have consistency in our MAA. It is not a straightforward exercise. There are many organisations related to communication related issues, like the farmer's association. We want to streamline so we don't have conflicting advices.

We do not want to exclude actors. First we thought it would not be possible to involve everyone. But during the process we noticed that who wants to hook on, it is good to have them aboard. We need the

involvement of local actors. We will create synergies. We have a policy oriented approach to see how we can get some interaction there. With regard to EIP Water we're looking at new government strategies.

Q&A:

- Q: do you have any coordination on the methodology regarding the lab results? A: this is actually managed by the working groups. There is a common governance group. They also work by the protocol so that they know where they're working on. The same goes for the mitigation measures to bring to the local actors.
- Q: did you face any difficulties, how do you manage? A: I don't know yet. I think we can gain trust this way. We will see how it will work out. I'm not sure if every group will reach the same results. We experience in the Belgian lab, there is good will there. We don't know yet. It is still to be seen how this will work out. We will have to do the discussions first and then we will see how it works out.
- Q: if you make a recommendation for the farmer regarding less pesticides, is there a way to organise this so we will not find the residues in the water? Even if you realise the mitigation, pesticide is abundantly used. A: The exercise will have to prove that. What are the options that are most cost efficient to do? That's the exercise, to confront it in practice.
- Q: are women more sensitive to this subject at farm level? A: I don't know.

Presentation of H2020- 2015 "Fertinnowa" (Els Berckmoes – Proefstation/BE)

A thematic network is really about **not** doing research. We are dealing with water and nutrition issues in the EU. Growers struggle to achieve goals. They do not manage to gain waste fertigated water. Fertinowwa is oriented on connecting knowledge to practical problems. We will look for all possible solutions. If it can work and that we can see with our own eyes that it works. We started asking the growers about their problems. Are they not aware or are there other problems? Important in the survey is that we stress on the water and environmental impact but also the technical and social approach. One of the most problems to water storage is algae control. There are so many solutions available but they are not being implemented. This important thing we see.

Another question: what keeps growers from closing the water and nutrient cycle further? If you ask the grower what keeps them from implementing solutions, economics is by far the nr. 1 reason. This is smt. true, smt. not. A lot of growers do not foresee why they should implement these solutions. If there is no pressure, then they will not invest in it. There is serious doubt if solutions are really working. They have fear, there's a real need to make them aware. Not all solutions work. And there is not always an answer to all questions. So farmers are hesitant.

Since October, we stressed the most important problems. For the algae we came up with solutions. When we covered it in the NL they said it was too expensive. In the NL it costs 40 euro per ha², in Spain it costs 6 euro. So I'm not the friend of the company that sells the solution for 40 euro but I am the friend of the company who sells it for 6 euro.

Bridging the gap between knowledge and implementation, bringing the messages to the grower. It has to be in their own languages. How to link with other water projects? Water related projects are very important for Fertinowwa. A lot of partners are researchers that implement a multi actor approach already. They were already aware of a lot of projects but it did not cover all of it. If you want to connect with other projects, then every meeting you have to say that if there is a project which we can link to

Fertinowwa, I invite you to come to our workshop. We invite researchers to present the results of their projects. I met up yesterday with 2/3 researchers who will be involved.

The EIP Water newsletter is very interesting. It has a description of a project and the person that is what I like.

Our consortium involves researchers and advisors. We don't have policy makers and NGO's involved. If we would have asked the growers, they wouldn't have wanted to have NGO's or policy makers aboard.

Characteristics in the projects are:

- The added value is high. We want to organise (more) multi actor discussions;
- We have missing actors in the consortium but they are involved in advisory boards;
- We will maintain the website for 5 years (what will happen after this period?);
- We use other tools and media for communication;
- Linked to the practice abstracts: we listed 200 technologies in a social economic and legal point of view;
- If the grower is involved he can go to the technology review;
- We know now what keeps growers from implementing innovative solutions;
- We made a table (see presentation) that is very interesting for growers;
- We have technology exchanges. By providing videos we attract quite some growers;
- Technology database: we are trying to avoid to advice specific technologies;
- To make sure that growers attend our meetings we use different languages. We will pay the entrance for growers;
- We will organise a contest for those who have the best practices. They can come to the final conference.

Q&A:

- Q: did you not get angry reactions from the commercial providers?
- Q: how far did you overcome the challenges for the economic problems? A: It depends regarding the problem. Policy is also important. Quite some technologies are available, how to make the growers better aware of it?
- Q: Eric: in the vineyard irrigation is a big problem. We would like to develop solutions but growers say that it would work in a lab but not in practice. Do I need a facilitator agent or can I come to you? A: We will create factsheets 'for dummies', as to speak. If you go to a grower they ask for basic questions. It differs. In Spain e.g. the growers are much more advanced. If someone goes to a grower, how can we better link to advisors, that they have our tables available?
- Q: is there not some sort of tool where you can ask a question (so link to Valerie)? Inge: isn't that already out there? It has a huge amount of data and it costs a lot.
- Regarding the subscription for SC2 in average, 1 in 5 projects can be funded. This is 20%. Thematic networks are bottom up. What happens to the other 80%, can we gain more knowledge/ insights/inspiration from these ideas?
- Q: how do you prevent, draw the line, that you do not give advice on a more commercial basis?

Annex 2

Participants list SWG SCAR-AKIS-4, 6th meeting, October 10th Lisbon.

Austria	1. Christian Rosenwirth	Policy
Belgium	2. Fleur Marchand	Research
Belgium	3. Piet Seuntjens	Research
Belgium	4. Els Berckmoes	Research/advise
Belgium	5. Sylvia BursSENS	Research
Belgium/Germany	6. Karen Ellerman Kuegler	Advise
Belgium/Germany	7. Michael Kuegler	Advise
Cyprus	8. Eftychia Esnow	Policy
DG AGRI	9. Inge Van Oost	EC policy/EIP
EU	10. Valentin Opfermann	Sector organisation
France	11. Adrien Guichaoua	Research/ISS
France	12. Valerie Dehaut	Policy
France	13. Eric Serrano	Research
France	14. Jean Marc Gauthier	Research
Germany	15. Carola Ketelholdt	EIP
Germany	16. Emilie Gaetje	EIP Agri
Germany	17. Jill Ebert	Research
Greece	18. Spyros Fountas	Research
Greece	19. Alex Koutsouris	Research
Hungary	20. Anikó Juhasz	Research
Ireland	21. Mark Gibson	Research/advise
Italy	22. Mara Lai	Research/policy
Italy	23. Simona Cristiano	Research
Netherlands	24. Annemiek Canjels	Policy/EIP
Netherlands	25. Floor Geerling-Eiff	Research
Netherlands	26. Martijn Plantinga	Policy
Netherlands	27. Hans Stielstra	Policy
Netherlands	28. Eelke Wielinga	Advise
Poland	29. Ewa Grodzka	Policy
Poland	30. Jacek Węsierski	Advise
Portugal	31. Luis Mira	ISS
Portugal	32. Maria João Maia	Research
Portugal	33. Carla Brites	Research
Slovenia	34. Marjeta Candek- Potokar	Research
Spain	35. Natalia Villalobos	Research
Spain	36. Andres Montero	Research/advise

Spain	37. Jaume Sio Torres	Policy
Sweden	38. Lena Lind	Policy
UK	39. Claire Hardy	Research
UK	40. Julie Ingram	Research
UK	41. Paul Newell	Research

