Strategic Working Group (SWG) on Agriculture Knowledge and Innovation Systems (AKIS)

SCAR
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Agricultural Knowledge and Innovation Systems



# REPORT SWG SCAR AKIS 4, 10th Meeting

# BRUSSELS,
30-31th October 2018

SCAR
Standing Committee
on Agricultural Research

casa
Common Agricultural
and wider bioeconomy
reSearch Agenda

## REPORT SWG SCAR AKIS 4 - 10th Meeting
## BRUSSELS,  30-31th of October 2018

The SCAR SWG AKIS4 meeting in Brussels was the tenth meeting of Mandate 4. This meeting included the following topics:

- **AKIS 4 Final Report:**
  - ✓ Progresses on the redaction of the Report
  - ✓ Presentation and exchanges on:
    - Tips and tricks from Multi-actor projects  (Bratislava meeting + others)
    - Synergies between funds (Barcelona meeting)
    - Study on R&I infrastructure improving knowledge flows
    - Study on Synergies among EU Funds (EPRC)
    - Potential approaches and useful interventions for CAP AKIS Strategic Plans (meetings Tallinn and Athens)
    - Outcomes from the Cross-fertilisation meeting between Multi-actor Projects (March 2018)
    - Best practices in Communication in EU AKISs (Warsaw meeting)
    - Policy brief on the Future of Advisory Services
    - Policy brief on Education
    - Joint Policy Brief on Impact
    - Digitisation (meetings Bonn + Brussels)
    - Potential and content for Knowledge reservoirs (meetings Lisbon and Brussels)
    - Guidelines on Evaluation of Innovation (ENRD)

- **AKIS 5 Mandate (endorsed by the SCAR plenary in December 2018)**
  - ✓ Reflections on AKIS 5 mandate

**N.B.** All presentations and slides from the parallel sessions can be found on the SCAR-AKIS team-site.
This report contains the: **1) summary report** and **2) full report** including the discussions.

**CO-CHAIRS**: Anikó JUHASZ & Adrien GUICHAOUA;
**Representative EC**: Inge VAN OOST (DG AGRI);
**Facilitator**: Floor GEERLING-EIFF (report).



**Venue:** Flemish Government - Ellips building in Brussels, Koning Albert II-laan 35  / 35 Boulevard du Roi Albert II, BRUSSELS.

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# SUMMARY REPORT SWG SCAR AKIS
## Mandate 4 – 10th Plenary Meeting

**DAY 1: TUESDAY OCTOBER 30th**, Venue: Ellips Building – meeting room A – 0.04.

**Patricia De Clercq, Secretary-General Department of Agriculture and Fisheries** (Flemish Government, BE), **welcomed the group** on behalf of the Flemish hosts. She mentioned the importance of resilience and environmental measures in relation to the CAP. Knowledge, innovation and entrepreneurship should be supported by AKIS actors. EIP and participating in OGs, allow new knowledge to be utilised in the field more quickly. Furthermore, IT and Big data will support sustainable agriculture, including data driven decision making on farms.

**Els Lapage (Department of Agriculture and Fisheries, BE)**, Coordinator Innovation Measures, followed with a presentation on the **Flemish AKIS**. Is as an open knowledge system, with emphasis on knowledge transfer, strong involvement of the public and private sector and a layered structure (with regional and provincial involvement). Support for on farm innovation is targeted at: operational groups in the framework of EIP, demonstration projects, advice by farm advisory services (KRATOS), innovative investments in agriculture (VLIF) and vocational training in agriculture. Due to the public procurement procedures, there are difficulties with e.g. a limited amount of advisory organisations involved because of its complexity which results in a delay of knowledge flows from research to practice. During the discussion it was mentioned that future CAP will solve the problems around the RD advisory measure linkage with public procurement issues. With the new delivery model there will also be more opportunity to combine measures.

**Joris Relaes (ILVO, Member of the Agrolink Board, BE)** presented **Agrolink Flanders**, a cooperation platform between 18 Flemish Research Institutes in basic and applied agricultural research and advice. It reinforces synergies between constituting partners and promotes and strengthens their international activities. Members of Agrolink Flanders take part in 20 running Operational Groups, 18 H2020 projects with the multi-actor approach, 10 Thematic Networks and 22 running or past Focus Groups. Agrolink accepts that the partners are sometimes competing. Regular communication is very important to continue collaboration.

## *Session 1: AKIS 4 FINAL REPORT*

**Stefan Kah** and **Markus Gruber (EPRC)** provided an up-date on their on-going **CASA Study on synergies among EU funds** (see also the SWG SCAR AKIS Warsaw meeting report for the objectives and preliminary findings). Synergies should be considered at systemic level, not between separate projects (or at thematic level). Most important key factors for synergies are: strategies, enablers and incentives. Other factors (transparency, harmonisation, culture and trust) are supportive factors. Creating a database is not enough to achieve synergies, social aspects are crucial too. It is important to bridge the gap between working in international consortia with EU funds (H2020, LIFE, etc.) and national consortia with EU funds on regional level (ERDF, LEADER, EIP, etc.). Finally, it is recommended to set up a transnational EIP-AGRI scheme under direct EC management.

**Anna Augustyn, Simona Cristiano (CREA, IT) & Floor Geerling-Eiff (WUR, NL)** provided an up-date on the **CASA Study on R&I Infrastructures**. The aim of this study is to provide a map of R&I (soft & hard) infrastructures in Europe which support the flows of knowledge between multiple actors, to upgrade their competence and contribute to the generation and the implementation of interactive innovation in the broad agricultural field. The main objectives are to improve the integrated approach within the European AKISs and the Implementation of EIP by identifying the synergies between R&I infrastructures, including facilities, i.e. AKIS supportive infrastructures. An interactive session was organised with all participants to collect examples of R&I infrastructures in the different MSs.

**Jean-Marc Chourot** and **Elodie Pascal (DGER, FR)** presented the **CASA Study on Best practices in Communication in EU AKISs.** The study showed that first of all, trust is very important in communication and should first be strongly set inside the project consortium in order to build up reliable relationships between partners. Second, the dissemination management plan should be designed at early stages of the project life cycle, ideally at the same time as the communication management plan, and be supported by all actors involved in the project (co-ownership). Third, a knowledge reservoir serving to communicate on multiple projects (e.g. EURAKNOS) can ensure continuity of communication also after the project ended. Fourth, a dedicated communication budget must be ring-fenced and solely used for communication purposes. Fifth, the communication should fit into the AKIS system of the country or region and be carried by its innovation ecosystem on the longer term. Sixth, an ex-ante assessment of the overall communication process by the experts assessing the proposal is recommended.

**Inge Van Oost (DG-AGRI, EC)** provided an **update on EIP-AGRI, new Thematic Networks and discussions on AKIS Strategic Plans in the CAP post 2020**. A new CAP cross-cutting objective takes a focus to intensify networking activities with a view to fostering and sharing knowledge, innovation and digitisation in agriculture and rural areas. Towards creating a single CAP network, Pillar 1 and 2 will be streamlined and simplified where possible, without losing specialisation. In the future CAP there will be more subsidiarity for MSs, including an increased need for peer to peer exchanges, sharing of good practices and stakeholder involvement. CAP networks are an essential part of the integrated approach on modernisation, innovation and knowledge flows and an essential component of a well-functioning AKIS. The mission is to form a platform providing for more exchange of knowledge in order to capture the results and added value of the policy at European level, including the Horizon Europe policy. The 4 main strands for strengthening AKIS will be activities aiming at (1) enhancing knowledge flows and strengthening links between research and practice, (2) strengthening farm advisory services within MS' AKISs, (3) incentivising interactive innovation projects (OGs, H2020 MA) and (4) supporting digital transition in agriculture ( e.g. EIP OGs on digital innovation, build and use repositories with agricultural data for multi-purposes, digital skills development, etc.). See more details in the AKIS brief[1] on the DG AGRI website.

**Alex Koutsouris (AUA, EL)** presented results from **the AGRISPIN project** related to possible elements of the development of innovation support services and elements for the final report. The project aimed at creating space for innovations through amplifying good examples of innovation support systems and through multi-actor learning about ways to stimulate innovation and remove obstacles. The lessons learned from the project were first, to understand innovation as a process and not as an outcome, evolving over time. Innovation should also be understood as a result of multiple interactions. Differentiate between phases of the innovation process for targeted intervention. Finally, it should be understood that specific needs and corresponding innovation support services are typical for the main innovation phases while others, e.g. those in the further development phase (upscaling), are unspecific in this regard.

**Spyros Fountas (AUA, EL)** presented results from the **SMART AKIS** project as possible elements for the final report. The Smart-AKIS project has formed a European Network mainstreaming Smart Farming Technologies among the European farmer community and bridging the gap between practitioners and research on the identification and delivery of new Smart Farming solutions to fit the farmers' needs. The project looked at trends and factors affecting smart farming (SF) adoption in innovation cases, most popular SFT (technology) & applications, policy gaps for SFT adoption and actions to overcome barriers. General recommendations for mainstreaming Smart Farming in Europe are as follows: demonstrate Smart Farming's benefits, improve Smart Farming funding, innovate on business models, ensure rural broadband connectivity, develop user friendly solutions, promote interoperability standards, promote a transparent framework for agricultural data, spur growth from agricultural data, mainstream Smart Farming into Education & Training and strengthen the AKIS role for the digital era.

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[1] https://ec.europa.eu/info/files/building-stronger-agricultural-knowledge-and-innovation-systems_en

**Arno Krause (Centre of Grasslands, DE NRW)** presented **the ProWeideland label** which supportis grazing using the value-add chain by labelling. The ProWeideland label promotes dairy farming on meadows as a nature-related form of exploitation, with positive influence on environmental protection, animal welfare and biodiversity. The label should guarantee a uniform and transparent indication of grass milk products. The consumer honours the added value of this form of livestock farming by paying a higher price for these products. To establish the production criteria, a cooperative network of 27 organizations is responsible including the sector, government and organisations for the environment, consumers and animal protection. They signed a common "Charta" (covenant) committing themselves to common values supporting grazing. ProWeideland is based on expert knowledge and participatory approaches (science, practice and administration), balanced between meaningfulness for consumers and production for relatively large quantities of farmers, aiming at supporting the competitiveness of grazing at farm level and has been introduced in German market by the largest retailers. In general, the EU supports supply chain projects and in the future it will only be stimulated more. ProWeideland could be used as an example to start a thematic network to share and exchange experiences.

**Floor Geerling-Eiff (WUR, NL)** presented an overview of t**he structure of the SWG SCAR AKIS Mandate 4 final report**. The report will reflect all Mandate 4 work by SWG SCAR AKIS and will be delivered in the spring 2019. The report reflects the opinions (and position) of the group as a think tank. Hence, a disclaimer will explain that the report does not represent the/individual MSs involved and that it is based on expert opinions (even if not all members belong to a ministry). The competent staff in the ministries will read and profit from the report.

**Sylvia Burssens (Agrolink, BE-Fl)** held a presentation on Thematic Networks (TNs) and on the **EU knowledge reservoir under preparation in the EURAKNOS project**. Diversity of dissemination material in a TN and between different TNs is important, as well as avoiding duplication of efforts between thematic networks. Widening and broadening the dissemination of outputs and results from TNs is needed as well as networks for benchmarking and international cooperation (integration of different data at several levels). Stronger and more interaction with other H2020 projects is needed (TNs, multi-actor) and OGs and sustainability of initiatives. The EURAKNOS H2020 project (towards a European Agricultural Knowledge Open Source System, 2019-2021) is an EU multi-actor project which intends to build a network of the TNs by connecting all TNs and reflecting together on a common format for outputs, saving costs and efforts for each of the future TNs.

To close the day off, the **co-chairs** highlighted **the (potential) topics for the 5th Mandate** which were discussed in parallel groups and plenary feedback sessions. This resulted in the Mandate 5 document which was granted on December 5, 2018 by the SCAR Plenary group. In short the topics are:
1. AKIS policies at national and EU level feeding further EIP synergies;
2. Achieving greater Impact of the Multi-Actor Approach (MAA) implementation in EU AKISs;
3. The role of Education in the EU Agricultural Knowledge and Innovation Systems;
4. Social innovation and inclusiveness in AKIS;
5. Digitisation and E-infrastructures for knowledge exchange.

*Announcement:*
- Adrien is leaving the group as co-chair. He will stay on as group member. The position as co-chair for the 5th Mandate is open as of now. Suggestions can be sent to Inge and Anikó.

## DAY 2: WEDNESDAY OCTOBER 31th, Venue: Ellips Building – meeting room B – 2.111

**Jannes Maes (President of the European Association of Young Farmers)** held an introductory presentation on which **innovative knowledge young farmers need in a data platform**. CEJA is a forum for communication and dialogue between young farmers and European decision makers. Its main objective is to promote a younger and innovative agricultural sector across the EU 28. CEJA has 31 Member Organisations across 23 EU countries. According to CEJA, innovation for young farmers includes 3 principles: 1) research, 2) development and 3) implementation (essential). A framework how farmers get access to the latest knowledge should be developed, as well as tools to access information and to be able to properly invest in innovation. In particular digital innovation is important for technical improvements, for following up on markets and to be able to connect to the world. Regarding the new CAP, a clear message is that without funding, no policy can be effective. To work with farmers: involve them from the very beginning. If the (innovation) question does not come from farmers, than knowledge is just another news pitch. Even if it is important. Farmers need to feel the need. If a farmer wants to make time for a project, it has to fit his/her priority. Peer-to-peer learning is another key. Regenerate an Erasmus+ programme for young farmers to exchange inter-regionally and to visit other farms about the mutual challenges. Perhaps advisors could play a role in organising different level study/knowledge exchange groups.

### *Session 3: Digitisation and Knowledge reservoirs*

**Tom Kelly (Teagasc, IE)** provided an introduction to the Coordination and Support H2020 multi-actor **FAIRSHARE project**: the Advisory network on digital tools 'Enabling the farm advisor community to prepare farmers for the digital age'. FAIRSHARE stands for Findable, Available, Interoperable, Reusable and Shareable (RUR-13-2018) and has 22 partners involved, including a mixture of advisory services and many EUFRAS members. The project focuses on the digital divide for farmers, advisors and other supply chain actors and aims at getting more farmers to participate in the digital age by sharing, adapting and learning from each other. The project wants to build a FAIRSHARE bridge based on access to tools (existing tools, not developing new ones) and building expertise and motivation for the agri digital divide, so that all advisors and farmers can benefit from digital technology. The difficulty will be in the realisation of the same ambition for different farming levels.

**Daniel Azevedo (COPA)** highlighted the **Code of Conduct (CoC)** on data ownership for farmers (state of play and next steps). The EU CoC on agricultural data sharing by contractual arrangement, is about setting transparent principles, clarifying responsibilities and creating trust among partners. In order to maximise the potential benefits of the technological and digital transformation of agriculture, we must have a coherent strategy at EU level. The farming community should lead this process based on a vision for the sector. Therefore Copa & Cogeca are committed to develop a coherent EU Strategy on Technological and Digital Transformation of agriculture. Find here the link to the Code of Conduct. The next steps include increasing the number of signatories and actions to make sure contracts are compatible with the CoC.

**Sylvia Burssens (Agrolink, BE-Fl)** explained the concept of **EU level High impact knowledge reservoirs**. A knowledge reservoir (KR) is a collection of best materials, practices, instruments, methodologies and tools, which contribute to the use of innovative solutions for sustainable agriculture and forestry. A *high impact knowledge reservoir* (HIKR) strives to maximize impact through best content, structure and methodologies focused on urgent end user needs. It provides the best ways, channels and tools, to reach the end user (farmer, forester, and advisors). How should a HIKR be designed? Technical guidelines are needed on how to produce a HIKR. The EURAKNOS project (presented on day 1) contributes to developing a European open source system based on users end needs, to build in interfaces between different TNs or HIKRs, linked to National Rural Networks, multi-actor H2020 projects and OGs.

**Dimitrios Petalios (Crevis, EL)** presented the **RECAP project** (RE-inforcing CAP, 2016-2018) on digital solutions enabling the delivery of added value advisory services. The RECAP H2020 project aimed at creating an infrastructure and developing knowledge**,** making best use of the satellite data available for the public authorities and the whole agricultural ecosystem. The project broke down this very complex legislation into practical everyday personalized guidance for farmers. Public authorities' procedures can be more transparent and more efficient. The project has achieved more targeted on-field inspections, a better control system based on satellite images & registry information and a reduction of costly & time-consuming procedures, for paying agencies. For farmers, the project achieved personalised guidance, active participation, access to up-to-date information, reduction of administrative burdens, a closer relationship with paying agencies and more transparent execution controls. For advisory services and extension workers, the project supported farmers' compliance, data (availability, accessibility & re-use) and the development of services, under an open approach.

**Bruno Prepin (CEO Agro EDI Europe, FR)** presented an exemplary system on how to enable data platforms to connect disparate data and convert it into valuable insights, delivering real value to farmers. **BD Avicole** is a national database combined to innovative ICT tools for all poultry sectors' traceability in France. It is a collective, federative and professional system, aiming to identify all the holders of living poultry on the French territory (poultry farmers, producers' organizations, hatcheries), poultry production, buildings and outdoor area and movements of living poultry to establish the traceability all along the production for poultry industries. To create one standard was not feasible. Therefore a new solution was found to create transferability for all the chains. It was decided to develop a new data model through which immediate information can be delivered where the animal is (by tracking and tracing), towards a common traceability database for all poultry industries in France. Smaller and bigger companies are involved. At the beginning of this project it was unsure if it would be possible to develop this tracking and tracing system in the French poultry sector. Now we know that it is.

**Peter Paree (ZLTO, NL)** presented **JoinData NL**, a cooperative data hub in the NL. JoinData is an independent data cooperative initiative to tailor data exchange. It was founded by cooperatives and farmer organisations and is open for all data using organisations. All farmers are member through their organisations. Authentication and authorisation are at high level. No organisation can influence the data streams so there is no vendor lock-in. JoinData is an important initiative to facilitate the implementation of the CoC. The aim is to bridge with different member states. ILVO (BE) also started a platform and more possibilities are foreseen to connect to  other dashboards.

## *Session 4: Any other business*

**Suzanne Von Münchhausen (HNEE, DE)** introduced the **LIAISON project** on optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas. This multi-actor project started in May 2018 and focuses on better rural innovation linking actors, instruments and policies through networks (RUR-16-2017). LIAISON will deliver: 1) a series of in-depth, hands-on 'How To' Guides for fostering co-creation and co-learning when working with projects, networks, or innovation services, 2) policy briefs on improving the institutional environment for interactive innovation projects, networks and initiatives and 3) scientific papers and conference contributions. Furthermore the project will organise a European Rural Innovation Contest in 2019 and the nomination of 14 Innovation Ambassadors.

To conclude, the **co-chairs mentioned** that SWG SCAR AKIS has requested **two additional studies**, to be financed by the **CASA project**:

1) Study on: 'Member States (MS) AKIS implementing tools to bridge the gap between research and practice'. *The key question is how will MS bridge in particular the gap between research and practice and which concrete measures will/could they use?*

2) Study on: 'Exploring digital aspects for AKIS 5th mandate'. *The key question is how various digital tools could be used by and for the various AKIS actors?*

# Full Report SWG SCAR AKIS
# Mandate 4 – 10th Plenary Meeting

## DAY 1: TUESDAY OCTOBER 30th, Venue: Ellips Building – meeting room A – 0.04.

*Welcome on behalf of the Flemish hosts - Patricia De Clercq, Secretary-General Department of Agriculture and Fisheries (Flemish Government)*

Global challenges and trends have led to increasing liberation of the market. In the meanwhile public institutions are faced with smaller budgets. This led to reforming the EU CAP strategy step by step in a situation with more market oriented practices. Resilience and environmental measures have become very important. Farmers have to respond to societal demands to remain viable and competitive. Knowledge and innovation is very important, as well as entrepreneurship is crucial for farmers to adapt. Innovative investments, FAS and vocational education support this. In the innovation spiral, the right subsidy should be applied at the right time to achieve the right type of investments for innovation at farm level. The new CAP should support this. We feel strongly that AKISs need to pay more attention to the interaction between research, advisors and bridging knowledge and practice, scientific science and practical guidance, leading to innovation. Farmers should be able to benefit from cross-collaboration. EIP and participating in OGs, allow new knowledge to be utilised in the field more quickly. In Flanders we are proud that we have been working strongly on this in the past decade. Twelve experimental stations are key to knowledge flows to farmers and there is a close connection between research and extension. To avoid duplication of work, Agrolink Flanders was established to combine scientific, applied and practical knowledge and know-how, which impacted knowledge flows. Furthermore, I'm strongly convinced that IT and Big data will support sustainable agriculture, including data driven decision making on farms. You are all leaders in this field, to improve AKISs.

*The Agricultural Knowledge and Innovation System in Flanders - Els Lapage (Department of Agriculture and Fisheries), Coordinator Innovation Measures*

The Flemish AKIS is an open knowledge system, with emphasis on knowledge transfer, strong involvement of the public and private sector and a layered structure (with regional and provincial involvement). There is a broad range of scattered expertise (many topics and types of research). Farmers are end-users and multipliers of research results. There are several initiatives from out the sector between different AKIS actors. The openness of the system is a condition for most of the funding. There are thematic calls for demonstration projects, for EIP calls have an open and a thematic part, and a number of priority themes listed in a White Paper. Financing is not matched. Support for on farm innovation is targeted at: operational groups in the framework of EIP, demonstration projects, advice by farm advisory services (KRATOS), innovative investments in agriculture (VLIF) and vocational training in agriculture. Regarding the OGs, there is 1 OG in which a Dutch actor is involved and there is knowledge exchange with Germany and the Netherlands. Five of 20 OGs are working on impact concerning the environment. The OG projects are considered quick win projects and may have a link or evolve into to multi-actor research projects. Results often lead to follow-up research projects and there are spill-over effects to other players in the AKIS and beyond (e.g. in the construction and health sector). In KRATOS advisory services were selected by public procurement, as obliged under EU RD regulation in 2014. Due to this procedure, there were only a limited amount of advisory organisations interested because of the complexity of the public procurement procedures. Knowledge flows (from research to practice) are often delayed because the system does not correct this enough and farmers are not sufficiently critical on the quality of the advice delivered by these advisory bodies. There are 14 advisory modules. Another RD measure is funding multi-actor demonstration projects which aim to incentivise farmers to apply proven sustainable methods/techniques in practice. The VLIF supports innovative investments on farms. Farmers can receive 40% support for their investments and costs for research, studies and advice.

CQ&A[2]:
- C: the future CAP is supposed to solve the problems around the FAS public procurement issues. With the new delivery model there will be more opportunity to combine measures;
- A: we would like to analyse the measures on which possibilities there are and will be. Flanders has impartial advisors but there are also a lot of advisors working for commercial companies. It is important to include these advisors in the AKIS system also because they play an important part in advising farmers;
- C: in some countries they are looking for combining advice with environmental measures in the CAP;
- A: the first 2 modules in our FAS concern the business plan and economic advice. Farmers can only ask for certain type of advice after other modules;
- C: demo projects have a duration of 2 years. Do you find that a limitation?
- A: the methods that are being demonstrated, already have to be proven in practice. For most themes, this is not a problem. We do not provide for research in demo projects, it is about dissemination.

*Agrolink Flanders, a cooperation platform between 18 Flemish Research Institutes - Joris Relaes (ILVO), Member of the Agrolink Board*

Agrolink Flanders is a regional collaboration platform for sharing Agri knowledge. It is a consortium of 18 Flemish knowledge centres with a broad range of competences in basic and applied agricultural research and advice. It reinforces synergies between constituting partners and promotes and strengthens their international activities. Members of Agrolink Flanders are involved in the EIP-AGRI in different themes relating to different agricultural sectors. They are taking part in 20 running Operational Groups, 18 H2020 projects with the multi-actor approach, 10 Thematic Networks and 22 running or past Focus Groups. Agrolink Flanders wants to join more forces to contribute to the CAP renewal but also to the global challenges (SDGs), related to agricultural research by making joint efforts in cross-sectoral themes such as water, energy, soil health, etc., also linking with EU partners in European projects.

CQ&A:
- C: Is Agrilink (AL) quite similar to the ACTA network in France, which represents the French technical institutes for agriculture?
- A: AL rather joins all knowledge actors in Flanders to cooperate, including farmers' organisations and the Flemish innovation support service through the agricultural platform;
- Q: you made a tremendous effort in combining these forces in Flanders. Is it the purpose to find each other easier; do you work on synergies, or a different approach?
- A: while working in the framework of AL, we learn from each other and work on synergies. We accept that the partners are sometimes competitors and sometimes we are colleagues (like a small EU). Regular communication is very important to continue collaboration. We have proven in the last 4 years that it works (AL is still quite young) and hope to realise more in the future. Broad collaboration such as this needs time and coordination. It is complex but in the end it is worth the success;
- Q: Is it funded somehow? A: it is not subsidised, the members pay a contribution rate. That is a strength because it creates ownership;
- Q: are farmers represented? A: yes, through the civil institution "Agricultural platform". There is no advisory board (yet) and perhaps we should think about how to further strengthen farmers' involvement.

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[2] Comments, questions and answers.

## *Session 1: AKIS 4 FINAL REPORT*

*Presentation and interaction on the CASA Study on synergies among EU funds - Stefan Kah and Markus Gruber (EPRC)*

Stefan Kah and Markus Gruber provided an up-date on their on-going study (see also the SWG SCAR AKIS Warsaw meeting report for the objectives and preliminary findings). Case studies are: Scotland, Lower Austria, Slovenia, Romania and Tuscany. Synergies should be considered at systemic level, not between separate projects (or at thematic level). Lessons learned from the Lower Austrian region are: 1) community building and trust are a fundament, 2) enablers are a crucial success factor, 3) simple financial incentives for MA projects are a must, 4) a strategic approach and political consensus are required. Actors think that it is quite complicated to synergise with EIP-AGRI at EU level, compared to national funding. Most important key factors for synergies are: strategies, enablers and incentives. Other factors (transparency, harmonisation, culture and trust) are supportive. Creating a database is not enough to achieve synergies, social aspects are crucial too. Simplification would be the best incentive for synergies. However, that might be too difficult to overcome. It is important to bridge the gap between working in international consortia with EU funds (H2020, LIFE, etc.) and national consortia with EU funds on regional level (ERDF, LEADER, EIP, etc.). Finally, it is recommended to set up a transnational EIP-AGRI scheme under direct EC management.

CQ&A:

- Q: in the case of Austria, how do you link the farmers in a way that you base this on their trust and entrepreneurial skills?
- A: farmers are represented by different associations. The cluster organises workshops with businesses and farmers to discuss solutions. Then they try to develop simple projects based on these outcomes;
- C: if you have a good idea, a good demo project, it needs effort to push it through. You really have to implement it from the ground. You have to tailor it and help to convince the actors about communication, to spread the word. There are different levels of farming. So farmers themselves could be better linked than the associations;
- A: we have to organise discussions in order to work more closely together, on both public and private challenges;
- Q: did you talk to managing authorities and how they are able to support synergies with different funding rules, on regional or on agricultural level? It is quite complex, even within rural development funds. Did you look at the higher level governance?
- A: mostly there is not enough attention for synergies because of a lack of knowledge/information. The Slovenia ERDF is a great example. Nobody in the MA community knew about it. In most countries there are clear lines between different funds. Synergies at project level are often not worth the effort, so we should really pick it up at a system level;
- Q: for each of the cases, you found one or several critical factors? How can you conclude if a case is successful if not all factors were present during the selection phase? Did you look at the same criteria to measure impact, for the selection? There should be an underlying model to earmark a successful case;
- A: when we selected the cases we didn't look at all the factors. We are not claiming that the cases are perfect. In an ideal case this should be the case but it is likely not to happen;
- C: I am not sure/convinced if it is necessary to harmonise. We have to deal with different levels, problems, etc. It is required to have enablers helping farmers, to help them with these opportunities. Simplification of administration is often difficult to realise, so we need other ways;
- C/A: national innovation networks need instruments to enhance cooperation. There is still a lot to do on ERDF programmes at the very local level. Coordination meetings are often not sufficient. Incentives are needed for better cooperation, because it is (too) often about money. How do you inspire people to work together? Can you show some good practices?

- A: one suggestion is from national level, to step down at regional and local level. The Austrian example is interesting because it is addressed at the local level. This is important, to build trust. It is easier to steer at local than at national level (hence, level it down);
- C: we should also involve civil society. The most interesting examples in synergies are likely to come from bottom-up. It is also a matter of good governance and how to deal with bad governance;
- C: you made quite some effort on the enabling factors; this is valuable. The role of enablers is striking. The Agrispin project, in a slightly different context, also looked at how far we can bridge between field and political level. The mind-set within EIP should be on the role of the enabler. However, the financial incentive to reach synergies among funds is still a bit puzzling. Does this mean 'money to work more efficiently'? Could you develop a simulated perfect case (best practice) how it could work: a virtual case?
- C: enablers such as the Scottish innovation support service which form a one-stop-shop, are very important. Projects are better prepared and competition is being brought together. It is nice to create fora. Budget is required for these events. There were quite some thematic events in the past. It is crucial to link people and let them meet each other. This serves a purpose, which you could perhaps make more explicit;
- C: what is your opinion on the role of the government at higher level? They need to agree and confirm the work on regional and local level. There are different ministries of all sorts. You need the higher level for what needs to be done at the lower level. This is the way to go forward in synergies. We have to bring people together and not only use databases; it should be about the human factor and the IT factor together. Maybe you can add the potential of Erasmus+ in making transnational exchanges and connections?
- A: There are less stricter rules for ERDF and EARD foreseen for the next CAP period. In the new system 40% of the costs, direct and indirect costs may become a unit cost or lump sum. This is a huge simplification. The countries (probably) did not know about this yet. Simplification will be continued in the future. For EIP it is also an issue; we have to make that transition. There is potential for simplification, and not to forget, we will make progress admitting advanced payments which are important.

*Presentation and inspiring examples – CASA Study on R&I Infrastructures and interaction - Anna Augustyn, Simona Cristiano (CREA) & Floor Geerling-Eiff (WUR)*

The aim of this study is to provide a map of Research & Innovation (soft & hard) infrastructures in Europe which support the flows of knowledge between multiple actors, to upgrade their competence and contribute to the generation and the implementation of interactive innovation in the broad agricultural field. The main objectives are to improve the integrated approach within the European agricultural knowledge and innovation systems (AKIS) and the Implementation of the European Innovation Partnership (EIP) by identifying the synergies between research and innovation infrastructures, including facilities, i.e. AKIS supportive infrastructures. An interactive session was organised with all SCAR-AKIS participants to collect examples of R&I infrastructures in the different MSs.

*Presentation and interaction on the Study on Best practices in Communication in EU AKISs - Jean-Marc Chourot and Elodie Pascal (CASA)*

The study showed that first of all, trust is very important in communication. This should first be strongly set inside the project consortium in order to build up reliable relationships between partners. The role of the project coordinator and facilitator in order to fluidize communication processes and interactions, is crucial. Second, the dissemination management plan should be designed at early stages of the project life cycle, ideally at the same time as the communication management plan, and be supported by all actors involved in the project (co-ownership). Third, a knowledge reservoir serving to communicate on multiple projects (e.g. EURAKNOS) can ensure continuity of communication also after the project ended. Fourth, a dedicated

communication budget must be ring-fenced and solely used for communication purposes. Fifth, the communication should fit into the AKIS system of the country or region and be carried by its innovation ecosystem on the longer term (e.g. the uptake of results by advisors, farmers and enterprises should be prepared ex ante). Sixth, an ex-ante assessment of the overall communication process by the experts assessing the proposal is important. It will enable the identification project by project of what could work well, versus what works less, with regard to the allocated resources, task by task and action by action. Finally, a minimum budget dedicated to communication during and after the projects is useful.

CQ&A:

- C: there is a need to translate output into national languages to reach small(er) farmers but we also need to think about an enduring system to collect knowledge after the end of a project;
- A: the best results are the direct answers on the questions by farmers, in their own language;
- C: if we want to communicate properly we need to allocate sufficient budget for that. That's not always the case;
- C: don't make the researchers communicate everything. Make use of other actors who have good communication skills;
- C: if you want to reach impact, you need good communication. Communication needs to be linked to the project activities and should not be (treated as) a separate work package. It should be really supportive. There need to be sufficient resources allocated to do so and communication is not sufficiently checked by evaluators. It is a very important recommendation to improve this;
- C: the EC guidelines for H2020 are very well written but generic and really complicated to follow for agricultural projects. Only specialists in communication might be able to understand it. Hence, guidelines should be adapted to the requirements of each sector and area;
- C: the emphasis on communication grew more important since FP7. We need specialists but people involved in projects also need to have basic communication skills;
- C: interaction within the partnership is perhaps more important than developing guidelines. It is also important that the partners in MA projects know and are affiliated with their target groups or intermediary partners. It helps a great deal if you know each other. Planning communication is very important, as well as its timing;
- C: the end user has to be involved in drawing the communication plan. Attention should also be paid to other end-users than farmers, such as the consumer and the environment;
- A: communication in demand driven projects with a particular research question is quite easy to organise, since it answers one specific question. However, the effort to communicate the results to other target groups, is more complicated and time consuming. In the study, key words were trust and mutual understanding within and outside the consortium. The impact of a project is of course based on the efforts by the project but also relies heavily on the trust of the target groups to use the results in practice;
- C: in the H2020 framework there is a lot on communication already. H2020 consortia deliver periodic reviews to be assessed. Could that be used to improve communication along the process?
- A: there is no consistent approach;
- C: there needs to be a lot of flexibility on the time line of a project to be able to adapt the communication plan. Communication is dynamic and depends on the input and output;
- C: the biggest challenge is to reach farmers. Their time is very valuable so look at integrative approaches which fit with the farmer's business strategy or way of working. How do we build efficient and effective famer communication platforms?
- A: most important factors are trust building and creating legitimate channels. If they read certain news, use that channel. Information is easily outdated so we have to up-date and synchronise. A website or twitter on its own is useless. It has to be a valuable and practical channel;

- C: we should not neglect the issue of information overload but that's perhaps trying to solve a problem, which cannot be solved. Two more comments. First, projects are organised top-down in their nature. Second, if we write a message, there is a good chance it will be understood by the big and highly educated farmers. However, that same message (even translated in native languages) may not be understood easily by farmers who are not that well educated.

*Update on the EIP, new Thematic Networks and discussions on AKIS Strategic Plans in the CAP post 2020 - Inge Van Oost (DG AGRI, EC)*

Inge van Oost updated the group on the EIP network strategy after 2020 regarding the CAP. A new CAP cross-cutting objective takes a focus to intensify networking activities with a view to fostering and sharing knowledge, innovation and digitisation in agriculture and rural areas. Towards creating a single CAP network, Pillar 1 and 2 will be streamlined and simplified where possible, without losing specialisation. In the future CAP there will be more subsidiarity for MSs, including an increased need for peer to peer exchanges, sharing of good practices and stakeholder involvement. CAP networks are an essential part of the integrated approach on modernisation, innovation and knowledge flows and an essential component of a well-functioning AKIS. The mission is to form a platform providing for more exchange of knowledge in order to capture the results and added value of the policy at European level, including the Horizon Europe policy. The 4 main strands for strengthening AKIS will be activities aiming at (1) enhancing knowledge flows and strengthening links between research and practice, (2) strengthening farm advisory services within MS' AKISs, (3) incentivising interactive innovation projects (OGs, H2020 MA) and (4) supporting digital transition in agriculture ( e.g. EIP OGs on digital innovation, build and use repositories with agricultural data for multi-purposes, digital skills development, etc.). See more details in the AKIS brief[3] on the DG AGRI website.

CQ&A:

- C: the note that farmers are only leading in 20% of the Operational Groups, makes the real, actual involvement of farmers suspicious;
- A: Leading is not the main issue, it is involvement and co-decision which is important. This statistical conclusion reflects the administration of the projects. We have to further analyse why farmers do not want the administrative burdens of actually leading an OG, it could e.g. be related to the lack of advance payments;
- C: it is not an appropriate indicator to check farmer's involvement;
- C: in the first period of EIP, MAs were reluctant with advance payments to farmers or advisors. More MAs have opened up to it and realise its advantages. Hence, it is evolving in the right way;
- C: regarding communication, national or policy websites are not the right channels to communicate about OG results;
- C: a number of regions and countries have practical information on EIP on their websites, for example in Catalonia. If it is attractive and end-users look there, then it is useful. If not, there may be better channels. You have to see this case by case and focus on where farmers get their knowledge from; we should not generalise. Make use of the media which farmers use most;
- C: H2020 is trying to involve more SMEs in their projects. Farmers only are interested in projects which are useful to them (mostly on a practical level). Hence, further connections between OGs and H2020 should be stimulated;
- but why are there no OGs on digitisation?
- C: we are sure there are at least 12-20% of all OGs working on digitisation but the typology chosen for in the pie chart in the presentation do not make that visible. Often digital applications are categorised under the problem they are solving, so it is not easy to have a correct number to cover all OGs with a digitisation aspect.

*AGRISPIN: Possible elements on innovation support services - Alex Koutsouris (AUA)*

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[3] https://ec.europa.eu/info/files/building-stronger-agricultural-knowledge-and-innovation-systems_en

The project aimed at creating space for innovations through amplifying good examples of innovation support systems and through multi-actor learning about ways to stimulate innovation and remove obstacles. The main target group were intermediates who connect initiators to other actors for involving them in creating innovations, such as farmers, knowledge workers, actors in the value chain, administrators, civil society groups, etc. The lessons learned from the project were first, to understand innovation as a process and not as an outcome, evolving over time. Innovation should also be understood as a result of multiple interactions. Differentiate between phases of the innovation process for targeted intervention. Finally, it should be understood that specific needs and corresponding innovation support services are typical for the main innovation phases while others, e.g. those in the further development phase (upscaling), are unspecific in this regard. In the beginning it is more about forming the network (both formally and informally). The enabling environment is more important before the start and during the execution phase of an innovation project. The scientists in the Agrispin project are still working on the data for a scientific paper (to be published in 2019). The approach included cross-visits with both scientists and practitioners. The partners utilised the spiral of innovation which was important for the work. Innovation is not a linear process but exists in loops. When you hit a problem, you have to look back.

CQ&A:
- There was discussion on the fact if the enabling environment plays a more or less important role in the beginning of the innovation phase, in particular looking at the multi-actor approach (MAA). In the beginning it can be very informal. A challenge is to connect people who don't know each other, an important aspect in the preparation process;
- C: we have to bear in mind that this study started before the implementation of the OGs, so experience was still limited;
- C: in some countries farmers are not willing to operate in OGs. There should be more clarity on both payment and risk management possibilities.

*SMART AKIS: Possible elements for the final report - Spyros Fountas (AUA)*

Smart-AKIS is a European Network mainstreaming Smart Farming Technologies among the European farmer community and bridging the gap between practitioners and research on the identification and delivery of new Smart Farming solutions to fit the farmers' needs. The project looked at trends and factors affecting smart farming (SF) adoption in innovation cases, most popular SFT (technology) & applications, policy gaps for SFT adoption and actions to overcome barriers. The following recommendations were presented. To enhance innovation-driven agricultural research within the EIP-AGRI ecosystem, farmers' participation should be increased (by fund proposals' preparation, demos, visits, etc.), TNs and MAA projects should be coordinated to organise joint workshops, integrated platforms and translation. Furthermore, the intermediary role of advisory services and other facilitators should be reinforced and small networks of end-users should be created, empowering NRNs and TNs outreach to OGs. The RDPs budget for creation of OGs should be increased, including cross-border OGs and synergies should be facilitated between EIP-AGRI (H2020, EARDF) and INTERREG for territorial cooperation and Erasmus+ for education and training (a challenge-based approach). Simplify access to R&D and innovation funding and reporting and close the gap between agricultural research and rural development (Smart Villages Act). General recommendations for mainstreaming Smart Farming in Europe are as follows: demonstrate Smart Farming's benefits, improve Smart Farming funding, innovate on business models, ensure rural broadband connectivity, develop user friendly solutions, promote interoperability standards, promote a transparent framework for agricultural data, spur growth from agricultural data, mainstream Smart Farming into Education & Training and strengthen the AKIS role for the digital era.

CQ&A:
- C: the smart villages programme is a good initiative for farmers to be involved in activities on digitisation in small villages/communities;
- Q: more should be invested in broadband connections? A: yes, wider broadband connections with further/better reach, in particular for farming practices;

- C: for some rural EU areas there might be barriers with establishing better broadband connections because there is quite some private (financial) involvement;
- C: some of the recommendations seem a bit contradictive;
- C: it would be a good idea to develop (more) demo centres for digitisation in agriculture.

*ProWeideland: Supporting grazing using the value-add chain by labelling - Arno Krause (Centre of Grasslands)*
The PRO WEIDELAND label is a product designation for dairy products, which is subject to special criteria. In particular the label promotes dairy farming on meadows as a nature-related form of exploitation, with positive influence on environmental protection, animal welfare and biodiversity. The label should guarantee a uniform and transparent indication of grass milk products. Based on defined criteria for the production and processing of milk, every farmer and every dairy is compliant with this directive. The aim is to keep livestock farming on grassland economically attractive by compensating the extra costs for dairy farming on grassland. The consumer honours the added value of this form of livestock farming by paying a higher price for these products. To establish the production criteria, a cooperative network of 27 organizations is responsible including the sector, government and organisations for the environment, consumers and animal protection. They signed a common "Charta" (covenant) committing themselves to common values supporting grazing. It constitutes the basis to establish and maintain criteria for meadow based production in a multi-stakeholder dialogue. The label is managed and granted by PRO WEIDELAND (Deutsche Weidecharta GmbH). To conclude, ProWeideland is based on expert knowledge and participatory approaches (science, practice and administration), balanced between meaningfulness for consumers and production for relatively large quantities of farmers, aiming at supporting the competitiveness of grazing at farm level and has been introduced in German market by the largest retailers.
CQ&A:
- C: do discussions between DG RTD and AGRI influence the support for supply chain projects?
- C: the EU has always supported supply chain projects and in the future it will only be stimulated more;
- C: one problem in supply chain projects is still the fact that other chain partners do not look sufficiently at the benefits for the farmers, to gain a win-win situation. That needs to change;
- C: There was an EIP workshop in Lyon (FR) with 9 multi-actor projects and 44 OGs operating on Innovation in the supply chain. The results are useful to learn from;
- C: trust building and alignment for chain projects can take up to two years but is key to success;
- C: supply chain projects should work on a paradigm shift towards equal treatment for farmers. Sharing examples on this paradigm shift, is key and is starting to gain importance. New SMEs and agri-food business models are also working towards this paradigm shift, mapping all the different persona in and around the supply chain with whom and how they want to interact. It does not have to be a disruptive form. For example, Apple didn't invent the smart phone but made it applicable and attractive to a broader audience. Hence it is about niches and windows of opportunities for these niches to adapt to existing regimes;
- C: however, we need to stay focused on potential risks and build in risk management;
- C: it are the consumers who need to be convinced;
- C: you should think carefully on the question why we need a new milk tag. Other farmers might block you, hence it is also a matter of counteracting resistance to change. If you don't reveal the risks, you have a problem. Hence, make the hidden agendas explicit;
- C: it is good to form consortia with 'old friends' and some new partners. There needs to be a basic level of understanding and trust;
- C: the different partners learn from each other and they learn from the next. Cross-regional alignment helps understanding different cultures and ways of working;
- C: It could be a good basis to start a thematic network to share and exchange experiences.

*Overview of the structure of the report - Floor Geerling-Eiff (WUR)*

Floor Geerling-Eiff presented the draft Table of Content and structure for the final report (SCAR AKIS Mandate 4). The report will reflect all Mandate 4 vwork by SWG SCAR AKIS and will be delivered in the spring of 2019. CQ&A:

- Q: what are the criteria to select the projects which will be described as examples?
- A: we will make use of all but only the projects that have been presented and discussed in the SWG SCAR AKIS;
- C: it would be good to mention that it are often the usual suspects engaged in thematic networks. Newcomers do face difficulties getting started. Hence, peer-to-peer learning should be stimulated in managing MA projects and newcomers should be promoted;
- C: one of the recommendations for FP9 is to organise trainings on this;
- C: there were some comments on widening participation in the previous SCAR AKIS reports. So look back at what was said on this topic previously;
- C: newcomers can really make a difference in H2020 projects;
- C: multi-actor projects should stimulate more newcomers. Maybe a mentoring aspect could be added/further stimulated;
- C: it is good to reflect on what we take back home from all of the discussions and the work by the group. Perhaps there could be a few lines as a result of a self-assessment?
- C: some of the SWG SCAR AKIS members are not a policy representative in the group. They will communicate within their organisation but who takes home the main messages to their respective ministries?
- C: one important issue is the fact that the report reflects the opinions (and position) of the group as a think tank. Hence, a disclaimer will explain that the report does not represent the/individual MSs involved and that it is based on expert opinions (even if not all members belong to a ministry). It is the only effective way to have a qualitative report, there is no alternative. The competent staff in the ministries will read and profit from the report.

*Thematic Networks and knowledge reservoirs - Sylvia Burssens (Agrolink Flanders)*

From the experience with Thematic Networks (TNs) discussed in the SWG SCAR AKIS, we learned that diversity of dissemination material in a TN and between different TNs is important, as well as avoiding duplication of efforts between thematic networks. Widening and broadening the dissemination of outputs and results from TNs is needed as well as networks for benchmarking and international cooperation (integration of different data at several levels). Stronger and more interaction with other H2020 projects is needed (TNs, multi-actor) and OGs and sustainability of initiatives. In several parallel sessions the group discussed the following topics in previous meetings: 1) coordinating common issues for TN's, 2) constructing multi-actor consortia including synergies and 3) practical, financing and administrative aspects. EURAKNOS (towards a European Agricultural Knowledge Open Source System, 2019-2021) is an EU multi-actor project which intends to build a network of the TNs by connecting all TNs and reflecting together on a common format for outputs, saving costs and efforts for each of the future TNs. The scope is to reinforce the EU agricultural knowledge base (RUR-17-2019). It aims to increase the sharing of multi-actor project know-how and spreading of practical information between as many geographical areas and agricultural sectors in Europe as possible, drastically improving dissemination to end-users. The project will produce recommendations and technical specifications which favour greater interoperability and integration of EU and Members States' knowledge bases for practitioners in the future, in order to improve long-term access to practical knowledge produced by the Horizon 2020 multi-actor projects.

*Presentation and discussion of potential Topics for the 5th AKIS mandate (Anikó Juhász, Adrien Guichaoua & SWG SCAR AKIS)*

Potential topics for the 5th Mandate were presented and discussed in parallel and plenary feedback sessions. This resulted in the Mandate 5 document which was granted on December 5 by the SCAR Plenary group. In short the topics are:

1. AKIS policies at national and EU level feeding further EIP synergies: to support the European R&I community on their way towards well-functioning and effective AKISs and the implementation of EIP-AGRI;

2. Achieving greater Impact of the Multi-Actor Approach (MAA) implementation in EU AKISs: to set-up and implement more impactful MAA projects in the field of agriculture and interrelated fields, where some of the deliverables are useful blueprints to solve national and regional challenges;

3. The role of Education in the EU Agricultural Knowledge and Innovation Systems: to raise awareness of Member States to include education at several levels in their AKIS and to highlight the importance of effective interactive education to EC DGs;

4. Social innovation and inclusiveness in AKIS: acknowledgement and recognition of the real need for Member States to include social innovation in their AKIS strategy and action plans, taking into account the full range of rural socio-cultural contexts in the different Member States;

5. Digitisation and E-infrastructures for knowledge exchange: to incentivise digital applications and tools which boost effective knowledge flows in AKISs.

*Announcement:*
- Adrien is leaving the group as co-chair. He will stay on as group member. The group thanks him for his great effort, commitment and involvement;
- The position as co-chair for the 5th Mandate is open as of now. Suggestions can be sent to Inge and Anikó.

Closure of day 1 with a touristic walk through Brussels and a social dinner, organised by the Flemish government.

## DAY 2: WEDNESDAY OCTOBER 31Th, Venue: Ellips Building – meeting room B – 2.111.

*Introductory Presentation Which innovative knowledge do young farmers need in a data platform? -Jannes Maes (President of the European Association of Young Farmers)*

CEJA is a forum for communication and dialogue between young farmers and European decision makers. Its main objective is to promote a younger and innovative agricultural sector across the EU 28. CEJA has 31 Member Organisations across 23 EU countries. According to CEJA, innovation for young farmers includes 3 principles: 1) research, 2) development and 3) implementation (essential). Regarding knowledge, farmers are in general better educated than before, which is also due to the improvement of agricultural knowledge. A lack of knowledge leads to less trust to innovate. If research leads to certain results, there are a few trade-offs. An important question is if the farmers can afford the investment. That does not mean that it's not valuable. Explaining again and again why it should be implemented, creates frustration because farmers feel patronised. So, as a researcher, make sure to listen why certain knowledge cannot be implemented. Finally, research should focus on social, technical and economic aspects. Digital innovation is about technical improvements. Sharing information in order to follow up on markets, is essential for farmers. We have to know what kind of markets there are. If a computer does not show the graphs you need, it becomes useless. If you are not sufficiently educated/trained or do not know what you can do with the information, it also becomes useless. Depopulation of rural areas is a problem if there are no good broadband connections. For business but also for livelihood. If a young person is not able to access the social media he/she would like, they will not be motivated to stay in rural areas.

A framework how farmers get access to the latest knowledge should be developed, as well as tools to access information and to be able to properly invest in innovation. In particular digital innovation is important for technical improvements, for following up on markets and to be able to connect to the world. Regarding the new CAP, a clear message is that without funding, no policy can be effective. A new strategic CAP approach should not lead to re-nationalisation. Hence, a structure is required to translate global strategies into local action for which farm advisory is key and should be developed as a system which communicates cross-border. Farmers should not (be facilitated to) take the easy approach. Renewal requires the concern across the EU, to create a guideline document within the new strategic plans. Administrative burdens cannot be an excuse to avoid renewal.

To work with farmers: involve them from the very beginning. Congratulations on EIP, in that sense. If the (innovation) question does not come from farmers, than it's just a new news pitch. We do not want to create solutions for problems that are not clearly explained. Even if it is important. Farmers need to feel the need. A vast majority of farmers can bring input on the table for vast solutions. In general, farmers consider their distant friends important. However, their farmer neighbour is their good friend which they trust 100%. Peer-to-peer learning is another key. Farmers can have a good relationship with their veterinarian but they know that there is a commercial interest, the same as with their feed advisor. Governments do not have that commercial background but there will always be a reflex within the farming community that policy makers make the policy up from behind their desk. This is a distrust that is naturally built in. It's your task to realise this and act upon this fact.

Regenerate an Erasmus+ programme for young farmers to exchange inter-regionally and to visit other farms with mutual challenges. This gives insight for your own farm. To learn from each other and realise that the barriers that we face, are common barriers. It is applicable to farmers (feasible). The level of knowledge between farmers is huge. At the same time those at the middle and bottom of the group will also understand what we say. For example, some farmers are well educated and other farmers can learn a lot from them. They (can) basically teach the advisors, which feels quite frustrating. So high level knowledge should be connected to high level intelligent farmers. It will be challenging to organise because you can only know what is the level of knowledge and expertise of the farmer, when you actually know him. Perhaps advisors can play a role in organising these different level study/knowledge exchange groups.

Finally, emotion is very important to farmers. There is no greater place for children to grow up than on a farm. The trade-off plays a large role. We could gain more with our dairy production but it is contradictive

to keeping our farm the way it is. Getting the maximum is not always what farmers want. Farming is a family business and a way of life.

CQ&A:

- Q: young farmers are not as much in the lead as we would like. How do we achieve that?
- A: some farmers have an idea what EIP is but not that many know of demonstration projects or AKIS. Maybe that is not fully necessary but acknowledge the fact that famers are unaware of which possibilities there are. Farmer organisations are often interconnected, so maybe we should organise the involvement of your farmers more efficiently. Most of the projects we are involved in fit with our future prospects. It is also good to reflect with society. The intensity of farmers is increasing. If a farmer wants to make time for a project, it has to fit his/her priority. This could mean e.g.: being involved with your own farm, data related and including economic aspects;
- C: learning from each other is the best way forward. Farmers can talk about one aspect and then find out there are other aspects more or as equally important. In general, getting people on the farms, is the best way to gain trust;
- Q: what is CEJA's position on new entrants? A: we welcome new entrants but we do not want to focus on a stream of retired people buying farms to live in and maybe just hold a few sheep and a vegetable garden, without economic purposes. Co-farming is an interesting possibility to introduce new, young people who are taking over farms.

## Session 3: Digitisation and Knowledge reservoirs

*Introduction to FAIRSHARE - the Advisory network on digital tools 'Enabling the farm advisor community to prepare farmers for the digital age' - Tom Kelly, Teagasc*

The Coordination and Support H2020 multi-actor project Fairshare stands for Findable, Available, Interoperable, Reusable and Shareable (RUR-13-2018). There are 22 partners involved, including a mixture of advisory services and many EUFRAS members. EUFRAS plays an important role in covering all EU member states. The project focuses on the digital divide for farmers, advisors and other supply chain actors. The scope of the call is on digital advisory tools including: communication tools, info graphics, video, specific social media tools, farm software, web and phone applications, benchmarking tools, digital education and training materials and supports, games, etc. FAIRSHARE aims at getting more farmers to participate in the digital age by sharing, adapting and learning from each other. The project wants to build a Fairshare bridge based on access to tools (existing tools, not developing new ones) and building expertise and motivation for the agri digital divide, so that all advisors and farmers can benefit from digital technology. This will be structured around 40 user cases which will look at specific farm advisory services. By using a multi-actor approach (MAA) in each case, a vision will be developed and documented, gaps and obstacles will be identified and reported, a strategy will be formulated and agreed upon and a roadmap will be developed as action plan. The gain for advisors will be to see a range of digital advisory tools (DATs), good practice in DAT use and user case learning on new DATs and ideas. The effort by advisors will be to engage in the MAA, sharing experiences, participate in user cases, travel as DAT experts/users and to deliver better support to farmers. Advisors and their farmer clients will work in workshops on their strategy, trainings and experience.

CQ&A:

- Q: how will the farmers become the drivers in the seat?
- A: the difficulty is in the realisation of the same ambition for different farming levels. The project does not only focus on the forerunner farms. The farmer doesn't need to realise that he is participating in this project. There will be a limited amount of information on the project itself. The focus will purely be on the digital benefits for the farmer;
- Q: do you include private advisors? A: Yes;

- Q: 1) the project includes 40 user cases, what are the selection criteria and 2) related to WP2 on best practices; which criteria do you utilise there?
- A1: there is 7 mln. euro available for this project of which half of the budget is for the user cases. This will be part of the MA approach. The targeting of the user cases should not be on the tools itself but on the experience.
- A2: related to the criteria, we felt that we couldn't really indicate that in advance. We prefer to judge from the digital tools what we should focus on. We did an initial mapping but it wasn't scientifically analysed, it was rather practical.

*The Code of Conduct (CoC) on data ownership for farmers: state of play and next steps - Daniel Azevedo (COPA)*
COPA COGECA is a joint and one of the biggest and most active lobby organisations in Brussels. Copa represents 23 million European farmers and family members. Cogeca represents 22,000 European agricultural cooperatives. Copa and Cogeca welcome the initiative "Smart Villages" because the agri-food chain is a major driver of the EU economy and agriculture is the backbone of EU rural areas. Agriculture and food production will remain as a key element of the smart villages concept. Innovation needs to provide concrete solutions and all farmers need to access latest technology in order to respond to dynamic markets and maintain high quality of agricultural produce. In order to maximise the potential benefits of the technological and digital transformation of agriculture, we must have a coherent strategy at EU level and not have 28 different plans. The farming community must lead this process based on a vision for the sector. Therefore we are committed to develop a coherent EU Strategy on Technological and Digital Transformation of agriculture. The EU code of conduct on agricultural data sharing by contractual arrangement is about setting transparent principles, clarifying responsibilities and creating trust among partners. Find here the link to the Code of Conduct. The next steps include increasing the number of signatories and actions to make sure contracts are compatible with the CoC.

Regarding the necessity of developing the CoC, there were 2 clear reasons: 1) political and 2) technical. The code is about data ownership. Everyone is talking about farmers' data but how to deal with it? We went from 3 pages to 20 pages. We defined what data is, what personal data, etc. We ended up with a check list what kind of principles we ought to look at. How to regulate data, non-personal data, machinery data. In the CoC we want to cover the whole process what's happening in agriculture and make that explicit. Agriculture is a driver in the EU economy. Taking into account that we are important, we need to understand what we need from technology. The CoC is helping to provide services, to help managing logistics in a way that they can have a better position in the value chain, etc. Not only for the farmer but for the whole family. In a global market and we don't want to commit to the lowest price. We are building a strategy. What does this mean? That we need to work more closely together. FAIRSHARE contributes to this aim, for one. We need to work on the infrastructure and we cannot only ask the EU to do so. Regarding data governance we wanted to take our responsibility too. The guidelines indicate that the farmer should have the power to control the data created on the farm. He/she provides the data. Everyone should gain though and it is not only about money. But the farmer needs to gain too and be paid for the data he is creating. Most valuable is the trust in his product, by the consumer from the farm to the fork. However, the principles of the CoC were difficult to identify. For example, both farmer and machinery manufacturer need to know how much yield was taken from a machine in order to assess when it needs renovating/to be replaced. How to deal with that?

So, what are the next steps? All the stakeholders around the farm should be included. We need to know whether there will be an evaluation on data sharing. We have contact with several organisations and there is quite some international attention. The Japanese are very interested and in Africa there is discussion if we could transform this to a global exercise. We also work on translating the CoC, in Spanish for example. And we are discussing a support system with DG Connect, which will cover the different sectors on ownership of data. We will have to look carefully at what the Commission is going to do in the next 5 years and how that will relate to the CoC. What kind of infrastructure are we going to put to place to implement the CoC? We need data to be compatible and translatable and the contracts should be respected. Setting up the right infrastructure will be key. The Netherlands have already been working on exemplary initiatives which can

support the concept to manage the data.  How to make it work at a vaster pace? Codes should be developed and implemented at national level. The Dutch have it already and the Germans are working on it, as well as the French. We are happy to see that the initiative is moving forward. Please, see the webpage or follow us on Instagram and twitter.

CQ&A:

- Q: is it only about data produced by machinery?
- A: nowadays, 99% of farm data will be machinery/sensor produced;
- Q: what about bookkeeping and economic data?
- A: we try to cover all the aspects;
- Q: how you can use data collected on the farm on different scales? How to deal with different data interpretations and definitions?
- A: good point. It is a voluntary initiative. The paying agencies have data but they cannot share it with other authorities. The farmer collects the data with sensors. Those data can be collected for several purposes. However, paying agencies should not share data with third parties;
- Q: how to deal with differences in variables and values?
- A: it would be good if the paying agency could get the information directly out of the cloud. Therefore, we want to identify which data could be publicly made available. The Commission is working on this and our concern was to identify what is farmer data and what w/should be public data. Data on soil for nature protection is useful for everyone.

*EU level High impact knowledge reservoirs - Sylvia Burssens (Agrolink-Flanders)*

A knowledge reservoir (KR) is a collection of best materials, practices, instruments, methodologies and tools, which contribute to the use of innovative solutions for sustainable agriculture and forestry. A *high impact knowledge reservoir* (HIKR) strives to maximize impact through best content, structure and methodologies focused on urgent end user needs. It provides the best ways, channels and tools, to reach the end user (farmer, forester, and advisors). How should a HIKR be designed? Technical guidelines are needed on how to produce a HIKR. On the long term, the EURAKNOS project aims to develop a European open source system (European repository system for agricultural knowledge) based on users end needs, to build interfaces between different TNs or HIKRs, linked to NRNs, multi-actor H2020 projects and OGs. It contributes to widening and connecting existing multi-actor Thematic Networks (TNs) as knowledge reservoirs within the EIP-AGRI and beyond, through knowledge exchange and cross sectorial linkages and cross-border visits. Furthermore, it will collect and evaluate (analyse and compare) the knowledge, materials and tools that have been produced by thematic networks, also reaching out to linked operational groups (OGs) and multi-actor projects. Third, it will develop a harmonised approach through technical guidelines on how to make a TN high impact knowledge reservoir (HIKR). It will explore the possibility and added value of creating an EU-wide dynamic open source agricultural knowledge innovation data base, an e-Knowledge Reservoir Platform (e-KRP), with readily applicable knowledge for the end-user (farmers, foresters, and advisors). Finally, the project will facilitate and support TNs helping them with start-up tools and securing the longevity of the project outcomes through linking to other TNs and similar initiatives at EU and national level, and feeding into national educational and training programmes. A strategic innovation board (SIB) will act as main source of neutral (external) advice to the project. The SIB will consist of  experts from  international organisations such as FAO and OECD, European farmer and advisors organisations such as EUFRAS, CEJA, and COPA COGECA. A Knowledge and Innovation Panel (KIP) will assist EURAKNOS in the assessment and evaluation of existing networks and to come up with a harmonised approach, best format, tools, and ways to collect and disseminate knowledge oriented to the end-users' (farmers and foresters) needs. The KIP will be composed of representatives of different organisations (NGOs, government agencies, chambers of agriculture, extension services, research organisations), with a strong core group of end-farmers and advisors. They will be continuously involved, if the end users agree to this. Until now we have 127 participants from all member states. Most of them are advisors and farmers. We will need the SWG SCAR AKIS for feedback.

CQ&A:

- C: there is a new H2020 call for which there should be a strong connection with EURAKNOS. This next phase should be on multi-actor projects which are not thematic networks and there should be a strong link.

*Digital solutions enabling the delivery of added value advisory services: RECAP project - Dimitrios Petalios (Crevis)*

The RECAP H2020 project (RE-inforcing CAP, 2016-2018) aimed at creating an infrastructure and developing knowledge, making best use of the satellite data available for the public authorities and the whole agricultural ecosystem. The project breaks down this very complex legislation into practical everyday personalized guidance for farmers. Public authorities' procedures can be more transparent and more efficient. The project has achieved more targeted on-field inspections, a better control system based on satellite images & registry information and a reduction of costly & time-consuming procedures, for paying agencies. For farmers, the project achieved personalised guidance, active participation, access to up-to-date information, reduction of administrative burdens, a closer relationship with paying agencies and more transparent execution controls. For advisory services and extension workers, the project supported farmers' compliance, data (availability, accessibility & re-use) and the development of services, under an open approach.

CQ&A:

- C: the project was granted by DG Connect, focusing on E-public services. It identified the value problems connected to paying agencies. It was not a Coordination and Support Action but an Innovation Action;
- Q: the most interesting part is the added value of digital services. There is a lot you can do with that info. How do you register, who will own it, how do you make it sustainable?
- A: the platform has been built to support the beneficiaries, the paying agencies. They are going to be the main users. However, farmers and advisors can use the platform by themselves. The way the platform will be used will be based on how the actors are linked to it. If farmers are willing to use it, they have the opportunity to do so. However, the data are provided by the public authorities. The public agencies are the main target groups for the platform and others can be stakeholders. They have to be willing but they should be linked to the public authorities;
- Q: if we want to connect, should we go to the paying agency?
- A: no, it's for all beneficiaries of the CAP. The platform can be used by anyone. There are already different approaches where services and tools will be provided to anyone who wants to use it;
- Q: is it open source and do you want to build on it further?
- A: that is what we want to achieve. But this needs to be checked when it comes down to the actual algorithm. It has been developed by a technical partner so we need to check if adapting is a possibility. The platform has an open license, all services provided will be opened. We continue with the approach, ensuring all services will be provided;
- C: if we want innovation, we need open systems and we need to build on one another. Let's work together on exchanging and putting potential to good use.

*How to enable data platforms to connect disparate data and convert it into valuable insights delivering real value to farmers? Bruno Prepin (CEO Agro EDI Europe)*

BD Avicole is a national database combined to innovative ICT tools for all poultry sectors' traceability in France. It is a collective, federative and professional system, aiming to identify all the holders of living poultry on the French territory (poultry farmers, producers' organizations, hatcheries), poultry production, buildings and outdoor area and movements of living poultry to establish the traceability all along the production for poultry industries. BD Avicole aims at increasing productivity, increasing quality and providing new services to the sector. Due to several crises, the sector has to regain the consumer's trust and come up with solutions. It is not possible to continue like before. There is a gap with what the consumer wants and what is being produced. We have high quality products but the consumer does not know the whole history of the product. The

objective is to have better knowledge of the French production, to make data reliable and improve the reactivity of the sector, answer to regulatory obligations and provide services. The supply chain of the poultry sector is very complex. Each sector has a different procedure regarding livestock aspects. Actors do not want to change their systems and organisations. We wanted to create one standard, but it is impossible. We tried to find a new solution to create transferability for all the chains. It was decided to develop a new data model through which we can have immediate information where the animal is (by tracking and tracing), towards a common database for traceability of all poultry industries in France. There are bigger and smaller companies involved. At the beginning of this project we didn't know if it would be possible to develop this tracking and tracing system in the French poultry sector. Now we know that it is.

The system is available and operational for all the flesh poultry chain, the foie gras palmipeds chain and the egg-laying chain in France. It is based on an already existing internal traceability tracking system. Traceability information of every actor is collected in a shared system according to the governance to batch identification information and information on the history and the management of the batches (movements of products). Thanks to the history of movements, the system can reconstitute the links of traceability between the actors and thus ensure the external traceability. The result is the implementation of interfaces between the actors' systems and the shared system, to automate actors' data supplying and updating in the shared system and to establisha governance within each poultry industry involved in the common database. 5.818 actors and 13.789 productions areas are identified in the data base, of which 90 producers organization and 116 independent producers.

CQ&A:

- Q: how do you handle GDPR, personal data?
- A: we created a governance structure by agreeing on how and which actors can handle the data. We have to take the competitiveness into account. It is mandatory for people to agree to the terms to get connected to the platform;
- Q: how many farmers have agreed?
- A: 6.000, which is manageable.

*JoinData NL: A cooperative data hub in the NL - Peter Paree (ZLTO)*

ZLTO is the largest Dutch farmer's organisation and partner in diverse regional, Interreg, national and H2020 projects on data. Peter presented the example of the compost calculator for optimum use of compost, maximum improvement of soil, logistics and minerals. Farmers have a need for a simple decision support tool. The basis can be a soil scan / field zones and task maps for machinery. Another example is the Capsella project on Soil Health, an app for practical soil quality testing, raising awareness among farmers and others (students, citizens). With a community based approach, leading to practical tools for farmers and citizens, Capsella could make a difference, appreciated by farmers and challenging professionals. Finally, Peter presented JoinData, an independent data cooperative initiative to tailor data exchange. It was founded by cooperatives and farmer organisations and is open for all data using organisations. All farmers are member through their organisations. Authentication and authorisation are at high level. No organisation can influence the data streams so there is no vendor lock-in. Starting competition on data platforms, will not work. ZLTO already had an accountancy platform. When it comes down to standard tax involvement, the accountants provide extra service to the farms by making economic overviews. They got a lot of transaction data on this platform. Hence ZLTO wanted to make a dashboard and standardisation for every farm. On every aspect of the farm, there is information you provide to others or not. JoinData is an important initiative to facilitate the implementation of the CoC. The aim is to bridge with different member states. In order to manage the data, ICT platforms are required. JoinData focuses on transaction and sensor data with one authorisation for all. We plan to make a dashboard and we want to be useful for all farmers. ILVO (BE) also started a platform in Belgium and we foresee more possibilities to connect to other dashboards.

Peter Paree sent the SCAR AKIS members an email to answer the following 2 questions. What can you do as person in your network for these projects? And what do you see as chances?

## *Session 4: Any other business*

*Liaison project - "Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas" - Suzanne Von Münchhausen (HNEE )*

The LIAISON multi-actor project started in May 2018 and focuses on better rural innovation linking actors, instruments and policies through networks (RUR-16-2017). The scope is to optimise interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas. The budget is 5,5 mln. euro, divided over 17 partners, including NO and CH. WP1 contains the conceptual framework. WP2 focuses on how we work together, reflect on our own work and develop recommendations on our own experiences. The WPs operate as a funnel for our case study work. WP3 involves a light touch review of 200 projects and initiatives. In WP5 methods are tested and used for assessing the effectiveness and impact of interactive innovation approaches. WP7 brings target groups to the project and includes the dissemination of results (as a cyclic process). Finally, WP8 involves the coordination and WP9 the ethics part, including GDPR (personal data). The project focuses on geographical coverage and macro regions. LIAISON aims to deliver 1) a series of in-depth, hands-on 'How To' Guides for fostering co-creation and co-learning when working with projects, networks, or innovation services, 2) policy briefs on improving the institutional environment for interactive innovation projects, networks and initiatives and 3) scientific papers and conference contributions. Furthermore the project will organise a European Rural Innovation Contest in 2019 and the nomination of 14 Innovation Ambassadors. There will be cooperation with institutions and working groups at European level (with DG-Agri, EIP-Agri Service Point, SCAR-AKIS) and at national level with managing authorities, innovation support / advisory services, experts / reviewers. Results will be translated in EN, FR, DE, ES, PL. A web-based Interactive Innovation Tool Box and videos will be developed.

CQ&A:
- Q: how do you plan the translation part? A: in WP 7. Language is a major obstacle in interactive innovation projects which we want to reflect upon.

*Further AKIS studies funded by the CASA project - Outcomes from the 26-27 September SCAR Steering Group meeting*

SWG SCAR AKIS has requested two additional studies, to be financed by CASA:

3) Study on: 'Member States (MS) AKIS implementing tools to bridge the gap between research and practice'. The SWG AKIS in its 4 mandates has raised awareness on the importance of understanding AKIS flow mechanisms, in order to step-up the impact of research and innovation in EU countries. Now also the new CAP regulation will ask for a strategic approach on AKIS. This study would collect MSs' implementing approaches for their AKIS strategies and organise cross-fertilisation between MS. *The key question is how will MS bridge in particular the gap between research and practice and which concrete measures will/could they use?* Special attention will also be given to the role and potential of AKIS coordination bodies as well as to the potential of education;

4) Study on: 'Exploring digital aspects for AKIS 5th mandate'. The 4th mandate of SCAR SWG AKIS identified digitisation as a core issue also in the development of future AKISs in EU countries. The aim of this study is to provide a map/overview of existing digital platforms (from H2020 projects or any other source) and further digital tools in Europe which might be adapted broadly to enhance knowledge flows within the AKIS, and will also help to the implementation in the next CAP period. The study will contribute as a valuable input for defining the digital aspects of the next mandate of SCAR SWG AKIS. *The key question is how the various digital tools could be used by and for the various AKIS actors?* Special attention will be given to the already existing good MS level solutions on AKIS actors using digital tools for CAP compliance and their possibilities to extend or adapt in other countries.

*Any other business*
A comment is made on the link between a study on government systems related to advisory services which can feed into the next mandate.  The SCAR AKIS management team will look into this.

Closure Day 2.