

**Summary of exchange of views on how to improve MSs'  
 Agricultural Knowledge and Innovation Systems  
 Strategic Working Group on AKIS - Tallinn - Dec 2017**

This summary is a follow-up to the December 2017 Tallinn meeting dedicated to the MSs' plans for improving their AKIS plans. In the February 2018 Athens meeting, the main aim was to go one step forward with these reflections related to the design of the Member States' AKIS plans. The objective there was to cross-fertilize on context-specific AKIS approaches that could make the regional, national and EU AKIS stronger and to draw generalized guidance from those exchanges. This will help prepare and fine-tune Member States' CAP Strategic AKIS Plans for the CAP 2021-2027 period. To this end, this **note summarizes the exchange of views in the December 2017 SWG SCAR-AKIS meeting in Tallinn and includes all inputs received from the members afterward the December meeting.**

Since the specific context in each Member State differs and this summary was made by a group, it **cannot state individual positions of the participating Member States' experts. This note collects the views of the members of the SWG SCAR AKIS as a think tank in Tallinn.** The conclusions of the discussions were further enriched in the SWG SCAR AKIS meeting in Athens and provide food for thought for all involved in the future role of Member States' and regions' AKISs in Europe.

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## **IMPROVING THE STRUCTURING OF MEMBER STATES' AKIS – Design of Member States' AKIS plans**

### **1. Enhancing knowledge flows within the AKIS and strengthen links between research and practice**

As a general line to take:

Improve AKIS to support the CAP by improving farm economic, environmental and social performance => **CAP AKIS plans should be a strategy for sustainable agriculture**, not for AKIS on itself. Give AKIS a role in the implementation of the RD (CAP) programme. Link it to measures on knowledge and information actions, to the use of advice and the setting up of advisory services, to the training of advisors, to the EIP OGs or other innovative cooperation measures, to agri-environment-climate measures etc. Seek to combine measures e.g. Irish OGs to develop farming practices preparing for an agri-environmental measure on habitats for hen harrier, NL farmers' groups implementing AEM, EL OGs developing novel supply chains which could become a producer organisation.

Aim is to safeguard and exploit to a maximum public knowledge on agriculture and enhancing knowledge flows within the AKIS. We need a clear vision on AKIS and its function for rural development.

Therefore knowledge flows need to be strengthened within the AKIS, for instance by:

- Making a CAP AKIS Strategic Plan: producing a **coherent inclusive document with actions** for farmers, researchers, advisors, education institutes (all ultimately impacting farmers' actions)
- **Requesting specific obligations in the CAP AKIS plan to ensure results. Make strategic plans specific** enough, defining the activities and target groups in the plan (e.g. universities, private researchers, international institutes etc.).
- Minimum EU requirements: if the EU does not request involvement of researchers, the Ministry of Agriculture cannot force researchers involvement
- **Further development of the EIP networks + sufficient funding to do so** (technical assistance)

- EIP networks/NRNs (=> MSs' "**CAP networks**") **should know about and share all info on all multi-actor projects** in their country, in other countries and at EU level (at least all OGs and H2020 multi-actor projects for a start)
- CAP networks should summarize and **translate all info relevant for their country** about OGs, H2020 MA projects, other relevant EU or national (research) projects (source: material on EIP website: practice abstracts, videos, photos, links to useful websites and projects etc.)- sufficient funding needed
- Establish **knowledge centers and knowledge reservoirs and systems of exchange of information**, including e-learning
- Organise **farmer-to-farmer exchange** (branche organisations can help)
- Support establishment and networking of **demonstration farms**.
- **Use these demofarms to draw in and connect researchers and advisors on the topic demonstrated.** The CAP networks could organize this and it would be an incentive for researchers to take part in such activities, together with farmers and other stakeholders.
- **Ensure trust and continuity** besides the project approach. Knowledge transfer requires continuity, needs a long-term perspective : only with reliable planning, security and appropriate framework conditions organisations will adapt their services to the EU objectives
- Seek ways to connect national and regional with EU level, e.g. H2020 MA projects should foresee a part of the budget to cooperate with related OGs (E.g. SheepNet including Romania) [EU level rule or dedicated information action?]
- **Facilitate participation of partners of the EU 13 in consortium building for H2020 calls 2018-2020.** Under the current system MS with low budgetary participation in the project often do **not have sufficient funding for dissemination H2020 project results**, which diminishes impact of these projects due to the structural and financial situation of EU 13.
- **Support the preparation of H2020 multi-actor projects with seed funding** for a number of meetings to gather information on the topic, prepare precise objectives, activities, consortium agreement etc. (as for the setting up operation of OGs). Make this process transparent on the EIP website, so that all interested multi-actor partners and OGs have the possibility to know what is being developed and can help to build the project (objectives, activities) and maybe join the consortium .
- Organise **knowledge actions and training in particular on innovative results from OGs and research**, including as specific target group the advisors (not only training for farmers)
- **Researchers need to share their work:** networks should organize on a regular basis meetings between research and advisors at national and international level, e.g. **national thematic networks** gathering research, advisors and networks + other stakeholders (farmers, education, administration, ...), discovering needs from practice and sharing best practices and research results. These could at the same time **produce practical output from what they gather** (e.g. French RMT) + produce project proposals for interactive innovation projects
- **AKIS plans need specific incentives for researchers:** budget-wise; number of publications in dissemination channels for end-users; showing how they reply to practice needs

*An example from the UK:*

*1) By rewarding academics and researchers under the Research Excellence Framework (REF) as follows: for each submission of a member of staff/team of a research center (such as Rothamsted) or a University:*

- *The quality of outputs (e.g. **publications**, performances, and exhibitions)*
- ***Their impact beyond academia***
- ***The environment that supports research***

*This has put impact right at the heart of the review system and is changing behaviour in the academic and research community. More details are at: <http://www.ref.ac.uk/about/whatref/>*

2) *UK Research and Innovation (UKRI, £7billion per year) forces organisations which are not showing impact or engaging industry are at risk of being closed down before Easter 2018 unless they create a new business plan. This change to UKRI will align funding for research and innovation projects with the REF assessment framework and put even more emphasis on impact.*

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/527803/bis-16-291-ukri-case-for-creation.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/527803/bis-16-291-ukri-case-for-creation.pdf)

- **Pay for cross-visits** for advisors and young farmers: an EU wide "**Erasmus-Agri**" in AKIS: simple framework of implementing, funding and reporting
- Use **problem based learning in agricultural education**
- **Mandatory education for young farmers** as a condition to participate in the young farmer scheme
- Introduce hackathons and start-up methodology into the agricultural sector **to engage also people from outside the sector (citizens, young people) to help solve problems and create new ideas.**
- Soft and informal ways can improve knowledge flows **e.g. co-location of research, advice and networks** (+education, farmers' organization, food cluster ...etc.)
- **Keep the AKIS open and evolving** to be future proof (e.g. include the role of food chains, marketing, banks, farmers ... are not well represented in the AKIS system now). We need a dynamic, intertwined system bridging the gap between research and practice: (applied) researchers, education and other actors also play a part in brokerage, knowledge valorization and bridging the gap
- **Improve communication to consumers** and society

***Potential indicators for this block:***

- 1) Participation in activities/networks facilitating knowledge exchange and interactive innovation***
- 2) Number of supporting networks producing output for agricultural practice***
- 3) Number of selected interactive innovation projects produced by thematic multi-actor networks***
- 4) Number of outputs/publications in agricultural dissemination channels for end-users***

**2. Strengthening farm advisory services within MS' AKISs:**

- Problem with the terminology "advisory services": 95% of the audience only think about 'linear' knowledge transfer => make clear that **advisory services should be interactive**, this speeds up the reflection and decision in farming families
- Describe the term "advisors": in the broad sense of the word/ can also be staff from NGO, farmers' organization, innovation support service etc.
- No public procurement of trainers of advisory services: very limited institutions/training providers have proper know-how and experience meeting the specific requirements of agricultural advisors
- **Advisors could also be innovation support services** (= brokering, facilitation, promotion of innovation, networking etc.). Availability of such services is key
- Create **innovation brokers** and strengthen their role to **incentivize** interactive innovation projects and **capture needs and ideas**
- Further develop innovation support tools
- Enable joint implementation of the measure "use of advice"(art 14) and "knowledge transfer and information actions"(art 14) , this would allow for **implementing complex advisory programmes** for a larger group of beneficiaries, linking different forms and methods of advisory work ( individual advice, group advice, discussion groups, training, workshop, demonstration etc.)

- Such **advisory programmes could be implemented by joint consortia of advisory services and research centers**, and foresee adequate (higher) support for this
- The term FAS should be replaced by AKIS.
- Use industrial PhDs in agriculture
- **Better link the usual technologic farm advice with sustainable agriculture topics** (train and convince the trusted advisor)
- **Strengthen support from the AKIS for advisors** (don't pay for front-office advisors but for areas where the society wants to see progress e.g. environmental issues, public goods, climate change, digitization, food chain, circular economy, animal welfare, water management, nature...) => after the privatization wave, **give advisory services again a public role**
- **Common education and training: train advisors regularly + in particular on new topics:** e.g. how to broker and facilitate **interactive innovation** projects, digitization, use of digital technologies for fast diagnosis, prognosis and decision-making, on-farm processing, production system advising and business management, start-ups...
- A **more 'systemic' advice** should be provided, e.g. management of land resources, type of production, expected outputs, recycling of natural resources, quality and uniqueness of products, rural development support, branding and marketing, use of digital equipment and decision-support systems, use of social networks, new machines, local traditional foods, energy production, rural tourism, payments for stewardship of the Natura 2000 sites, etc.
- **Enable creative freedom for new themes and instruments** (e.g. whole value chain approach, bio-based chains, dialogue with society...).
- **Link research facilities services to advice** (e.g. food pilot BE-FL testing new food processing techniques is linked with advice to the farmer under Art 14)
- **Pay for the time advisors spend with researchers:** sharing ideas and needs from practice and learning about new research results. The most useful (paid) time for an advisor is while giving advice, but the advisor should also spend time on learning and networking
- Advisors should be given more time for i) collecting new research results, knowledge or other know-how, ii) connecting with national & international networks iii) compiling the data collected, and iv) connecting to their (regional) clients and tailoring all AKI to the farm system and local context for PROVISION AND ADAPTATION of the collected AKI to the specific situations.
- The EU-13 should be especially required to support financially **BSc and MSc programmes for educating and training AKI 'system-oriented' advisers**. Their training programme should address not only the modern extension methodologies, research methodologies and individually-tailored client advice, but also the skills to use large (open-sources) data, systemize knowledge and use digital technologies for prediction, modeling and decision-making, participatory skills, communication skills, etc.
- **Support advisors' internships and placements in experimental research centers and training facilities, in cooperation with international partners**
- It is important to support advisors' **technological training, as well as methodological and social competences of advisors**
- **Allow** secondary school students and university **students to join advisors' training**, as well as teachers of vocational schools
- **Foresee dedicated actions to involve private advisors:** not only training but other information flows e.g. use of common advisory tools (nutrient management planning tool, disease levels weekly info ...), pay for their contacts with research and for regular info (newsletters) => back-office support for all advisors public and private.

- **Support digitization of advisory work:** fund establishment and maintenance cost of an IT knowledge platform, containing knowledge reservoirs, good agricultural practices, e-learning modules and various instruments used in advisory work. The IT platform could allow for multi-level communication and be shared by several advisory bodies (e.g. regional, national or even international)
- **Simplify administration for advisors: for instance a voucher system** for advice and capacity building of farmers, a voucher system for training and skills development of advisors, vouchers for advice accompanying (innovative) investment support, etc.
- Avoid a dense control system for advising, replace by quality management system (regular training on issues/challenges for agriculture). Make use of best practice examples.

***Potential indicators for this block:***

- 1) Number of trained advisors***
- 2) Share of farmers using support for advice, training and knowledge exchange***
- 3) Number of advisors involved in EIP OGs***
- 4) Number of shared digital tools supporting advisory work***

### **3. Incentivize interactive innovation projects**

- **Continue current EIP OG approach**
- **in particular: foresee sufficient funding + enable advance payments**
- Clarify that costs related to work of advisors and researchers are eligible and that resources for dissemination shall be reserved
- Make clear that **costs of international cooperation** are eligible (e.g. study tour for advisors in other MS, business placement...)
- Further strengthen the multi-actor approach of **OGs: make them more interactive** (ES) => ensure minimum criteria for the selection: combine relevant complementary knowledge targeted to the project objectives tackling needs/problems from practice
- **CAP networks should facilitate cross-border OGs** (within one country and between countries):
  - Take care of planning common timelines for cross-border OG calls by timely coordination between MS/regions Managing Authorities to prepare cross-border OGs (if at EU level, loss of flexibility) or H2020 MA projects.
  - CAP networks should list all finished, running and potential (in preparation) OG projects per theme and organize workshops to develop common themes of interest and capitalize on former projects
    - => MS/regions organize cross-border calls
    - => EU must enable measure for transnational OGs (as a kind of "Interreg")
  - Peer-to-peer learning: organize cross-border visits for OGs or for specific actors who can incentivize (ISS, advisors, farmers' groups, ....): contacts can be found through EIP website
  - Help the search for "foreign" experts to join in national/regional OGs as experts
- Involve education in OGs
- **Involve young people** (researcher, farmer, etc. ) in OGs: they push for change
- OGs should be able to find an "after"-life, e.g. can become start-ups (help from innovation support service connecting with banks etc.)



- **Combine OGs with the new complex advisory programme** (mentioned above), supporting also demonstration of the new production methods on-farm
- **Ensure sufficient coordination within MS** and ensure that learning from each other is possible (e.g. NL provinces have different approaches, Spanish diversity between regions requires a national platform with the different actors linked to training, field visits; filtering lessons learnt in the regions to the national platform)

Potential indicators for this block:

- 1) *Participants in collaborative innovation projects (EIP OGs + innovative cooperation projects)*
- 2) *Number of innovation support services*
- 3) *Number of interactive innovation projects developing generational renewal*
- 4) *Number of innovation cooperation agreements*
- 5) *Number of young people participating in OGs*
- 6) *Number of education actors (students, teachers, trainers) participating in OGs*
- 7) *Number of farmers and advisors trained in the innovative results of OGs*
- 8) *Number of cross-border OGs and OGs incorporating cross-border expertise*

#### 4. Support digital transition in agriculture:

- Interlink all public data by a consortium of all involved stakeholders (example Estonia: Land Parcel Information System and location of farm building and landscape elements + soil fertility map + environmental monitoring + spread of harmful organisms + areas with environmental restrictions + agricultural statistics, animal movements => incentivize farmers to use it by agro-environmental measure + enable farmers to transmit their machinery data), example BE VLM advice on biodiversity measures, erosion etc., cooperation agreement NL between farmers' organization, dairy, bookkeepers, etc.,
- Organise training, OGs and national multi-actor projects on digitization

Potential indicators for this block:

- 1) *Share of farms having access to broadband*
- 2) *% of EIP operational groups working on digital innovation*
- 3) *Share of farmers using digital technologies (e.g. precision farming)*

#### 5. General remarks related to the Strategic CAP AKIS plans

**Financial envelope is needed:** a certain proportion of the CAP budget should be spent on the various ways of improving the AKIS (blocks 1-4 above) to ensure that the issue is taken serious and that the plan is implemented with real actions => for instance **"target" a dedicated part of CAP funding to knowledge and innovation, e.g. 10%** (not: "ringfence", because flexibility is needed).

**Conditionality is OK for the approval of the AKIS plan, as a sign that actions need to be taken** and will be followed up. Important sign to our national policy makers. Different ministries need to coordinate: sign a collaboration agreement between the institutions involved (gives responsibility and also visibility).

**A CAP strategic AKIS plan is good for the future, will trigger improvement step by step** and helps to understand what kind of AKIS each country has. We need public knowledge and the flexibility to make it happen. Develop the strategic AKIS plan in a transformative process together with different stakeholders: by means of a participatory process with skilled facilitators. Ideally the plan would have a longer term perspective (longer than the programming period, e.g. 10 years). The content of the plan should use project planning and management tools like SWOT, Gant Chart, scenarios, key performance indicators + reflect on how to blend in the finance (national, regional, various EU resources, e.g. also Cohesion Funds, regional funds). Beyond researchers, advisors and networks, have

also farmers and rural actors participating in the formulation of the plans, as well as the younger generation of researchers (up to 10 years after PhD), they are more transition enthusiastic.

The Commission should **request that all the relevant Ministries are involved in the plan together**, to make them cooperate and share responsibilities for the implementation (e.g. Min of Agriculture, Min of Education, Min of Research, Min of Rural Affairs, Min of Innovation, Min of Food/Economy, Prime minister, etc. ...). Adopt a National Partnership Programme of all AKIs related organisations, promoted and financed by the MS' respective ministries. A coordination unit could be made responsible for AKIS stakeholder relations and for supporting large scale national implementation of innovations.

There is a need for a **specific framework for reporting, evaluation** and control practices (not reporting as investment measure or as area-based payments), adapted to R&I. Training, education: human capacity are difficult to measure.

Setting specific result indicators is needed (see potential indicators per block)