

3rd AKIS Coordination Group Meeting

21.01.2025

Ag Tech, UCD Lyons Farm Campus, Celbridge, Co. Kildare

Introduction

Cormac McGann (CSP Division, Department of Agriculture, Food and the Marine (DAFM)) welcomed those in attendance and thanked them for their ongoing participation in the AKIS Coordination Group. As this is the third meeting of the full group, there is no further need to focus on some of the more technical aspects of the terms of reference, but these documents are available to anyone who newly joins the Group.

The agenda was set out, identifying the focus for the day as AgriTech and Agri-Digitalisation. The chair gave a brief description on how the session fits into the agreed work programme for the AKIS Coordination Group.

Speakers & Presentations: AgriTech & Agri-Digitalisation Information Session

Jonathan Herron (Teagasc) - AgNav

[AgNav](#) has been created for Irish farmers. It supports voluntary climate action and sustainability on farms and provides farmers with accurate and secure data. The Programme is a collaboration between Bord Bia, Teagasc, and the Irish Cattle Breeding Federation (ICBF).

It follows a process to: (i) Establish a baseline, (ii) Analyse potential actions, (iii) Identify specific actions, and (iv) Actualise.

Baseline data is gathered and measured (GHG, Ammonia, Nutrient Loss Risk, Beef footprint) and shows overall emission numbers for farmers. AgNav forecaster highlights improvements. Once the baseline is set and the inputs are optimised, actions can be developed.

Over 10,000 farmers are currently on AgNav. DAFM has funded a research project to include other aspects such as economic and societal benefits.

The Programme benefits include helping and guiding advisors; offering guidance for farmers; maximizing the use of existing databases; no duplication; free service.

Questions answered included:

- Q. Sean McGloin, National Organic Skill Net (NOTS): Are the data sets going to be similarly relevant to grass-based systems? Will that assessment relate back into the system?
 - A. AgNav is provided with data from [ICBF](#) and DAFM. Mart data is also brought into the data set to develop a growth curve for specific animals. Having a continuous input for data sets and outputs offers more reliability.
- Q. Sean McGloin, NOTS: On the research analysis, science moves so fast, especially with AI, how up to date are the data sets that make the analysis?

- A. As the data becomes available it goes into the system. Bord Bia audits the data every 18 months.
- Q. *Darren Carty, Irish Farmers Journal: Where is the fertilizer data coming from?*
 - A. It's coming from Bord Bia and ICBF. The quality of the data sets improves the quality of the data to be utilised by the system. Everybody needs to be on board.
- Q. *Cormac Farrelly, Agriland: 10k are engaging with the system. Why so low?*
 - A. Its driven through the Teagasc Signpost Programme and it is voluntary and not financially incentivised, so in a year and a half 10k is a great number.
- Q. *Hugh Farrell, Irish Cattle & Sheep Association: How many farmers are in the Signpost programme?*
 - A. Not sure, but crop farms and non-Bord Bia farms can't utilise the system yet. Mainly being utilised by beef farmers and some dairy farmers.
- Q. *Tom Medlycott, DAFM: Do you take soil sampling data?*
 - A. The advisors work with the previously existing mapping and modelling. They do not yet link to all available data sources, such as the soil sampling data.
- Q. *Tom Medlycott, DAFM: Are there plans to extend it to land use plans?*
 - A. Yes, trying to align closely with greenhouse gas emissions plan/ framework with the EPA. The farmers will have to input themselves, but it will be in line with the EPA approach.
- Q. *Dave Barry, Munster Technological University (MTU): Are there plans to disseminate to the general farming population?*
 - At the moment it's just with the Signpost farmers. You need the advisor to see the plans. Limited to the capacity of the technical advisors, but it is intended to be rolled out to more farmers, the more farmers the better in the long run¹.
- Q. *Cormac McGann, DAFM: What is the duration of the project and what is the evaluation?*
 - A. It is a 4-year project from DAFM which gets the Signpost to standard and scope. The scientific community will independently review and ensure its above board. So, the plan is to roll it out further going forward.
 - Q. *Cormac McGann, DAFM: is there a plan in place to examine the project and it's impact*
 - A. *This is not currently in the programme.*
- Q. *Patrick Barrett, DAFM: Is there potential for AgriTech and agri-science companies to engage with the platform in the future?*
 - A. It would be good to open the platform further in the future.

¹ "AgNav is currently operating in a closed pilot, limited to farmers participating in the Teagasc Signpost Advisory Programme. Any farmer wishing to use AgNav needs to sign up to that programme whereby they are automatically granted access to the AgNav platform." <https://www.agnav.ie/landing>

Catherine Dempsey (Data & Analytics Division, DAFM) – Strategic Analytics in the Department of Agriculture, Food and the Marine.

- The Data Operating Structure within DAFM was presented outlining the data operations carried out and the governance of this area to ensure that outputs are technically robust, sound and operationally useful.
- Sources of data in DAFM include information from customers, third parties, DAFM generated data, AgriSnap and fishery data.
- DAFM data is analysed in three ways – descriptive showing what has happened, predictive -what could happen in the future based on past events and prescriptive – using data to construct operational machine learning models, for example in use in TB and H5N1 mapping.
- The use of Artificial Intelligence (AI) in DAFM was described with an outline of AI risks and their mitigation.
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Questions answered included:

- *Q. Sean McGloin, NOTS: Is the future of AI the ability to review and collate data? Will Gen AI aid in context of particular issues and specific incongruities in farm action advice? Such as poultry, a disease which transfers between species, will prohibit those species in the same pen. Can the AI be used?*
 - A. Yes, but a model would have to be designed and built with specific target data incorporated for specific issues. It will support policy, but it is not going to replace the decision-making of human individuals. For widespread use it will need a vast amount of AI learning that is not within the remit yet, but the potential is there for the future once the data set is increased.
- *Q. Cormac Farrelly, Agriland: What is the plan for all Departments, will this be a cross-Department system?*
 - A. CSO have rolled out meta data guidance to support early experimentation with AI, and the Department will start taking it on now. For key administrative data sets they will start learning now.
- *Q. Cormac Farrelly, Agriland: What efficiencies are there for data management?*
 - A. Priorities are to adhere to international standards, to be usable and not just be bespoke to DAFM. Examples include control measures for campylobacter and trade analysis for Brexit for operational efficiency. Also, ease of use must be a focus.
- *Q. Cormac Farrelly, Agriland: Has the Department done any work on AI agents?*
 - A. Not yet, there is a need to test proof the use of the AI first before it steps beyond the light touch. It can have a lot of benefits in the future, but we are only beginning early experimentation of its application.

Kevin Doolin (Walton Institute, SETU) - Standards and Platform Development Enabling Innovation in Agriculture

- Demeter is a large scale agri-digitalisation project which ran 20 pilots across Europe.

- Through this project, an agricultural information model was developed, which brings together different data and frameworks to better assess how innovations and extended capabilities benefit from the interoperability mechanisms.
- Further information is available in a completed report: 'Boosting the Twin Transition in Agriculture and a Resilient Innovation Ecosystem'².

Questions answered included:

- *Q. Catherine Dempsey, DAFM: The development of standards, do you think the EU will roll out the best practices?*
 - A. No I don't think so, there are so many different standards out there. I doubt they would even go as far as recommending a particular set of standards.
- *Q. Kieran O'Donoghue, MTU/AgriTech cluster: In interoperability, do you see this challenge being solved? The company wants to sell their system, but the stakeholder wants one system to use for everything.*
 - A. In the Demeter project, they did incorporate a system where it could incorporate other systems. There are so many legacy systems that are out of date or will become obsolete. So, there will need to be advancement.
- *Q. Mark Gibson, Teagasc: How can we use tech to make agriculture more attractive, and use technology to do that? Are there any low hanging fruit that AKIS can tackle?*
 - A. Decision support systems which can integrate with payment systems. Automate the more mundane tasks and support them.
- *Q. Sean McGloin, NOTS: With standards, quasi-standards, will AI not write them for us?*
 - A. No we shouldn't allow them.
- *Q. Sean McGloin: With farmer mental health, is AI going to alleviate that pressure?*
 - A. There are AI systems being developed all the time for farmer wellness (such as the apple watch). I believe advancement in AI will lead to advancement in farmer wellness.

Panel Discussion: Patrick Barrett (DAFM), moderator; Kieran O'Donoghue (AgriTech Ireland Cluster) and Gary Ryan (AgTech UCD Director), speakers

Patrick: What is your programme and how does it function?

Kieran discussed that the Cluster is all about bringing the 'triple helix' together - Industry, Knowledge, Government and the community sphere.

The Agri-Tech Cluster is hosted at MTU, funded by Enterprise Ireland, to build collaborative relationships between stakeholders in the Agri-Tech industry. It involves 3 pillars: (i) industry (ii) information (advisors) (iii) government and government bodies. The objective is to allow a faster pace of development in digital AgriTech. The Cluster currently has 40 members, typically SME, many of whom are exporting overseas. This includes the typical engineering, as well as technology companies – some of which aid farmers in monitoring their farm, and monitoring software such as collar monitoring. In addition, there are also science-based companies involved in breeding, etc. The goal is driving more innovation.

² [SETU | Walton investigates Europe's technology standards and digital...](#)

Patrick: *Tell us about Lyons' role.*

Gary highlighted that the main focus of AgTech UCD to date has been the Accelerator Program for start-ups to assist in developing business plans and moving projects towards commercialisation. They have also developed FAST IP – a new innovation project. Many of the group in the FAST IP cohort have no agricultural background but have a broad spectrum of experience from other areas. The goal is to start with a blank slate and build a project through the FAST IP process, it aims to shrink the timescale of the start-up duration.

New funding streams were discussed such as DAFM-Horizon Europe Partnership and Digital Europe Funding Programme, Pan European Platform for Agri-Food Tech.

Patrick: *How do the activities you mentioned benefit from your programs?*

Gary noted that engaging with other companies who are facing similar challenges allows for innovation and problem-solving based approaches. The great benefit is many of those presenting today for example move within the same circles. The program introduces a lot of new names, new perspectives. It's great for innovation, and a lot of products being developed nowadays within the program, couldn't have imagined things like it in the past, so it's great to have that new perspective and new fresh input to the industry.

Patrick: *Tell us about Agri food Connect*

Kieran shared that it's all about synergies, connecting research and innovation with processing industry. The aim is to have an all-Ireland project (duration 14 months) – Agri Food Connect, which is a collaboration with Queens University. The process involves working with stakeholders on identifying the needs and opportunities for them to work together. The AgriTech industry only spends on average 3% on R&D, which is a deficit which the program aims to tackle, essentially widen the ecosystem. Ireland has the required expertise to really grow the AgTech sector given the readily available skill sets in agriculture and IT. There is the potential to become a global leader in the field.

Questions answered included:

- *Q. Sean McGloin, NOTS: Question more for Gary, when you talked about the latest project, is it AgriTech only or does it feed into the broader field of food and technology.*
 - A. (Gary): It isn't an ag-science program, it is broad spectrum while the crop science is about yield targeting, with the hopeful long-term goal of impacting the international sphere.
- *Q. Monica Gorman, UCC: About recruitment, how are you finding people and are you turning people away?*
 - A. (Gary): Over 5 years 72 'cohorts' were targeted with over 200 applications in year 1 and they had a target of 15 from that initial number. The initial Expressions of Interest I were done through FRS. They carried out the initial screening, followed by the Lyons farm management committee shortening the list further, followed by a final day of workshops where they were grouped into 4's and assigned a task to see how they addressed the identified need.
 - A. (Kieran) 80 in total were involved in the projects. It's about bringing people together in those projects. When you look at the sector at the moment, it employs about 4,000 and has sales of about 1 billion. They have a purpose and there's a big opportunity. His project fulfils the need to address the needs that industry has.

Ireland has a vast expertise in Agriculture, so the opportunities internationally are vast.

Speakers & Presentations: Irish AKIS Development - Feedback

Patrick Barrett (DAFM) - Presentation on Agriculture of Data Horizon Europe Partnership

- The Agriculture of Data Horizon Europe Partnership proposes to use use-cases as an instrument to make sure that the specific objectives in the Strategic Research and Innovation Agenda (SRIA) will be completed and to structure the partnership and to ensure it reaches goals, under data and digitalisation.

Work packages and use cases focus on information delivered in a very structured approach going from research, through data protection and data technologies, to reach the end users.

- It is important to identify what are the missing links between data and delivery.

Alistair Prior (Policy Analyst, EU CAP Network CAP Implementation Contact Point) - Overview of the EU CAP Network

- The main focus of the EU CAP Network is to implement and support the CAP Strategic Plans of Member States. EU CAP Network activities include developing knowledge, supporting networking activities and the production of publications.
- The work of the CAP Implementation Contact Point and the role and activities of National Networks were described.
- EIP-AGRI services to support Facility Innovation and Knowledge through the EIP AGRI Project Database, Focus Groups, Workshops and Innovation Awards were highlighted.
- The activities of the Evaluation Helpdesk were outlined.

Questions answered included:

- *Q. Cormac McGann, DAFM: What role does the Commission play at the meetings?*
 - A. The EU CAP Networks is operating on a contract paid by the Commission. The Network liaises with the Commission and provide feedback and information to them on the findings and results of the thematic workshops, groups and subgroups that they operate, with a wide range of stakeholders in attendance. They know, as the experts, the elements of the challenges, the policies, and the structure. The stakeholders involved in EU CAP Network activities are a great resource pool which fills the gaps with the Commission, and they can work together very well, and it cuts both ways. Commission experts also regularly attend EU CAP Network meetings.
- *Q. Sean McGloin, NOTS: Network Forums, Were there ideas the EU felt should be done in the EIP's?*
 - A. Stakeholders are invited to make suggestions on what the support and topics should be for the coming year. They are then taken by the EU Commission sub-group and turned into ideas or topics for focus. It's not the EU Commission saying what should be done, rather it's the stakeholders suggesting what the focus should be- is it something new, has it been done, which experts should be brought in to discuss the theme.

- *James Claffey, CAP Network Ireland:* An added point rather than a question, CAP Network Ireland is working with 2 Operational Groups, so if they need help writing applications, award suggestions etc. The same can be said about DAFM and Teagasc.

Róisín Fitzgerald (ERINN Innovation/CAP Network Ireland) - Update on the AKIS Farmer Survey

- The Farmer Needs survey was collaboratively developed by the AKIS Steering Group and CAP Network Ireland managed the process.
- 789 surveys were completed over a period of three months.
- The questions covered communication, advisory services, innovation, trusted sources and farmer needs and sentiment.
- Preliminary results of the survey were outlined, AKIS CG Steering Group will discuss the main insights and next steps.

Questions answered included:

- *Q. Monica Gorman, UCD: Is the survey available to download in full?*
 - A. No, currently only the analysis is available, but this will be discussed further with the AKIS CG Steering Group, as it is very dense and information rich.
- *Q. Sean McGloin, NOTS: The question “Strongly agree, strongly disagree”, is always prone to mistakes, people often misunderstand. Is there any percentage included? Have you factored a margin of error?*
 - A. *Cormac McGann (DAFM):* This is a small cohort of farmers who responded. With a smaller number of respondents, you are possibly prone to mistakes. Less than 1% of farmers responded so error and bias need to be considered. While the results are interesting and tell us much about the needs of the respondents, it would be irresponsible to assume the survey is reflective of the overall sector.
- *Darren Carty, Farmers Journal: Comment - There’s quite a concerning stat of 77% with mental health*
- *Q. Hugh Farrell, ICSA: Would be good to break down the areas that do affect mental health and focus in on it, give feedback to the relevant bodies. Are the slides available from today?*
 - A. Yes, all slides are available.
 - *Cormac McGann:* The survey will be considered but DAFM are already focused on farmers mental health, particularly in the various work packages on health and safety. The emphasis and concern are not unexpected, as it has been raised in other forums as a critical issue. Cormac also acknowledged the important role being played by farm organisations and advisors in the area.
- *Mark Gibson, Teagasc: Comment - Published research has been completed with Dr, John McNamara. working with groups which is available to be discussed, and it may be worthwhile to consider inviting John to address a future AKIS meeting.*

Avion Philips (Teagasc) - Modern AKIS -Supporting AKIS Groups across Europe

- The Modern AKIS project’s main objectives are to improve the capacities of AKIS actors to leverage resources needed for a more coherent, effective and efficient

AKIS system and the transition to more sustainable management of natural resources.

- Modern AKIS Project has 31 partners in 27 Member States,

Key resources were highlighted including: AKIS Connect Platform and AKIS Connect Training modules which include 3 modules 1) The need for the systems approach; 2) Understanding the AKIS as a system; 3) Diagnosis of the AKIS.

Modules and upcoming webinars are available online at the following link:
<https://akisconnect.eu/training-materials>

Closing Remarks:

Cormac McGann (DAFM) gave closing remarks and thanked the speakers for their presentations. Presentations and a note of the meeting will be circulated to Group members and feedback is welcomed. Plans for the next meeting of the AKIS Coordination Group, likely before the summer will be confirmed shortly.

Notes:

Due to time constraints, the review of the workshop undertaken in the 2nd meeting, which was a presentation on developing and enhancing flow paths of knowledge and information, presented by Cormac McGann (DAFM) was cut from the agenda. This matter will be addressed at the next meeting.

	Name of Organisation	Nominee
Government Departments	NPWS	Brian Reidy
Agencies	Teagasc Knowledge Transfer	Jonathan Herron
	Teagasc Knowledge Transfer	Avion Phillips
	Teagasc Knowledge Transfer	Mark Gibson
Farm Bodies and Representative groups	Irish Cattle and Sheep Farmers Association	Hugh Farrell
	Irish Organic Association	Stephen Meredith
	National Organic Training Skillnet	Sean Mc Gloin
	Irish Local Development Network	Philip O'Donnell
	Agricultural Consultants Association	Breian Carroll
	CAP Network Ireland	Claire Kearney
	CAP Network Ireland	James Claffey
	CAP Network Ireland	Niamh Concannon
	CAP Network Ireland	Roisin Fitzgerald
	CAP Network Ireland	Paddy Malone
	CAP Network Ireland	Sarah Glascott
	EU CAP Network	Alistair Prior
Environmental NGOs	Environmental Pillar	Charles Stanley Smith
Education and Research Institutions	UCD	Prof Monica Gorman
	UCD	Leo Mc Grane
	UCD	Gary Ryan
	University of Galway	Prof Maura Farrell
	Walton Institute	Kevin Doolin
	MTU	David Barry
	MTU	Bobby Woods
	MTU	Kieran O'Donoghue
	ATU Galway/Mayo	Michael Gill
Agri-Food Processing	ABP	Stephen Connolly
Media	Agriland	Cormac Farrelly
	Irish Farmers Journal	Darren Carty
DAFM	Organics & Market Supports	PJ Long
	Knowledge Transfer	Ciara Conlon
	Biodiversity, Nature and Land Use	Tom Medlycott
	Agri Environment & On-farm Investment (EIPs)	Tracy O'Donoghue
	Agri Environment & On-farm Investment (EIPs)	Seamus O'Sullivan
	Agri Environment & On-farm Investment (EIPs)	Anne Maguire
	Vet (Animal Health & Welfare)	Alan Johnson
	Data Analytics Unit	Catherine Dempsey
	Research & Codex	Patrick Barrett

	Research & Codex	Matthew Halpin
	CAP Strategic Plan	Cormac Mc Gann
	CAP Strategic Plan	Edel Meenan

Apologies	
Natural Capital Ireland	Noreen Byrne
Dawn Meats	Gill Higgins
Macra na Feirme	Maria Snell
Teagasc	Stan Lalor
Irish Natura and Hill Farmers Association	Vincent Roddy
University of Galway	Prof. Maura Farrell
Irish Farmers Association	Shane Whelan
ATU Galway	James Moran
DAFM	Ted Massey
DAFM	Niall Ryan
DAFM	Jack Nolan
DAFM	Corina Roe
DAFM	Karl Walsh
CAP Network Ireland	David Murphy
Ag Tech Ireland	Catherine Lascurettes