



ICT-AGRI-FOOD

ERA-NET Cofund on ICT-enabled agrifood systems

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Building the Knowledge Incubator

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Welcome and background



Why a "Knowledge Incubator"?

- The field of research & innovation of sustainable agri-food systems is (still) much scattered and somewhat difficult to overlook. Many actors are involved.
- In order to achieve a breakthrough, all actors are called upon to contribute
- There are so many funding schemes, options, opportunities
- ICT-AGRI-FOOD's Knowledge Incubator has the **ambitious intention** to provide a platform for funded researchers and other interested actors, such as the private sector and stakeholders, **to network** and get a better **overview of their opportunities** to improve our agri-food systems through innovation



Welcome and background



The Knowledge incubator is quite unique – no other ERA-NET offers anything comparable

It is a new way of collaboration, and therefore an "experiment" and a challenge

We hope that, in addition to fruitful collegial exchanges, it will also lead to better guidance from funding agencies



The Research & Innovation Area



• European Innovation Council

 \rightarrow The EIC supports researchers, innovators and companies that have ideas relating to future and emerging breakthrough technologies with grants

- Digital Europe
- European Institute of Innovation and technology and its KICs (such as EIT Food)
- Joint Undertakings
- Structural funds/S3 platform
- EUROSTARS
- EUREKA
- National innovation schemes
- and further more

The Research & Innovation Area



...and now rises the new Framework Programme **Horizon Europe** with additional opportunities and new calls.

As the Knowledge Incubator evolves, we can also offer to help and advise you so you can get the right support and finally bring your ideas to market.

Please tell us also what you want, what you need, what you would like to discuss and exchange on.



One aim is also to make the best out of the existing results and to further develop them. Please have a look from time to time in it and see if it brings benefit for your work.



Objectives of the ERA-NET

ICT-AGRI-FOOD is an <u>European Research Area</u> <u>NET</u>work of national and regional <u>funding</u> organisations promoting and <u>funding</u> European research on ICT-enabled agri-food systems, offering innovative opportunities for the entire food chain. The project is co-funded under the European Union's Horizon 2020 research and innovation programme.

The overall objective of "ICT-enabled agri-food systems" is strengthening the cooperation in research, development and innovation between EU Member and associated States to foster, verifiably and perceptibly, the use of <u>smart</u> <u>digital technology</u> to make European food systems more sustainable and transparent.

> With <u>Joint Calls</u> for transnational research projects the ERA-NET aims to contribute to introducing and exploring digital technology that enhances the sustainability of the agri-food sector to the benefit of our and future generations.



Other joint activities in this thematic area are also implemented, such as the collaboration with other thematic related initiatives, thus contributing to the establishment of a fair and societally accepted bioeconomy in the EU and beyond.



Our Vision

The vision of ICT-AGRI-FOOD is to bring together actors from across the entire agri-food systems with researchers in a **multi-actor approach**, to enable digital technology solutions for a **transformation towards sustainable and resilient agri-food systems**.

These solutions will make use of data from all across the food chain to deliver benefits for the society as a whole and will lead to a more sustainable and transparent food system with empowered stakeholders (e.g. consumers, governmental authorities, industries) who are in the position to take smarter, more sustainable, healthier and more personal food and dietary choices, taking into account data regarding environmental impact, origin, nutrition, safety and integrity.

Potentially the improved use of data can result in transformed agri-food systems characterised by a much **better management of the environmental impact of the sector**, including greater efficiency, reducing inputs, emissions, waste and losses throughout the food system.

Partners





The **34** ICT-AGRI-FOOD consortium partners from **22** countries are a broad and diverse community and the main pillar of the project's successful history. Many countries have already been present from the predecessor ERA-NETs ICT-AGRI and ICT-AGRI 2 since 2009. In this ERA-NET we were happy to welcome also some new partners. Other funding organizations wishing to join are welcome!

The project is lead by the German Federal Office for Agriculture and Food (BLE) as coordinator, and the Danish Agency for Science and Higher Education (DASHE) as deputy coordinator.



Horizon Europe Partnership "Agriculture of Data"

"Environmental observations for a sustainable EU agriculture"

Agriculture of Data – general introduction

What is the partnership about?

→ Support to sustainable agriculture in Europe as well as policy monitoring and implementation by using the possibilities that digital and data technologies in combination with environmental observation and other data offer.

How?

Development of **innovative data-based solutions and services** for the private and public domain and **scale them up** (geographically and from innovation to deployment) through the capitalisation of data.

EO, other environmental Digital & data Technical and **Research**technologies agricultural domains oriented data actions Policy Agricultural **Targeted** End userproduction / monitoring / end users oriented evaluation farmers actions

Domains addressed by AgData Partnership

Scope

- Sustainable agricultural production and policy monitoring needs can be supported through the provision of tailored data and databased solutions.
- Integrating different sources of data (i.e., EO, in-situ, socioeconomic) would lead to even more relevant information in this context.
- Digital technologies can increase farms' sustainability performance and competitiveness, e.g., through precision farming.
- The effectiveness of digital technologies strongly depends on the input data.

Agriculture of DATA. What data??

All kinds of data that are relevant to achieve the objectives of the partnership

- > geospatial observations (e.g. environmental data and Earth observation)
- agricultural data (public and private data including e.g., farm data, IACS data held by paying agencies, socio-economic as well as modelled data)



EU added value

Why a partnership?

- Increased demand for sustainability, adaptation to climate change, and performance orientation
- Avoiding digital divides and closing of market gaps
- Achieving an "umbrella effect" and contribute to "defragmentation" in the field of the development of data-based solutions for the agriculture sector and policy monitoring following a common approach
- Achieving a "critical mass" of the provision of reference data sets needed for the effective application of "Big data" technologies
- Covering several biogeographic zones to allow for the development of climate adaptation approaches for the sector
- **Covering whole Europe** to create data sets for policy monitoring and evaluation and avoiding "white spots" in the provision of independent data services to the sector and stakeholders

Implementation

Core Actions

- R&I projects that address needs from SRIA
- Review & development of novel reference data sets/data based solutions
- Upscaling promising pilots
- Providing data services

□ Strategic Framing Actions

- ID of policy monitoring/evaluation data needs
- Data provision to partnership actions
- Linking and adding up to data provision services
- Umbrella function bringing initiatives together
- Sustainability of the partnership

□ Management, Governance, Communication/outreach

Target groups

Partners

- *MS* & *AC*
- Ministries of agriculture
- R&I agencies
- Environmental protection agencies
- Paying agencies
- RPOs
- National Space Agencies
- □ Stakeholders
 - Primary producers
 - AKIS at national and regional levels
 - Input providers, Machinery, precision application systems, plant breeding
 - Data-based solution providers
 - Citizens
 - <u>Scientific community</u>



Partner composition and resources

- <u>Partners</u>: Member States and eligible Associated Countries (preferably all) ensuring large geographical coverage
- Countries can be represented through ministries (e.g. ministries of agriculture, research & innovation and environment); (paying) agencies; RPO's, universities, space agencies etc.
- No private sector actors as formal partners; yet, involvement of private sector essential for the effectiveness of the partnership (advice as end users!)
- <u>Composition drafting Core group</u>: Austria, Belgium, Bulgaria, Czech Republic, Germany, Denmark (co-chair), Estonia, Spain (co-chair), Finland, France, Hungary, Ireland, Italy (co-chair), Latvia, Lithuania, Slovakia, The Netherlands, Norway, Poland, Portugal and Turkey. Also involved: ICT-AGRI-FOOD ERA-Net and ERA-PLANET ERA-Net
- <u>Resources</u>: EU contribution: € 100 million (2023 2027), total budget : around € 333 million

Funding model

30% EC top-up 100 Mio EUR from EC 233 Mio EUR from MS/AC (<u>in-cash and in-kind possible</u>) → Overall budget 333 mio EUR



Thank you for your interest. Let us work together.

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