

ICT-AGRI-FOOD



Welcome to ICT-AGRI-FOOD

Building the high-tech food system of tomorrow

Our day-to-day life will change substantially in the coming decade due to multifold challenges and promising opportunities alike, and so will our activities as consumers in food systems. Digital technologies will find their way in many areas of our life, not only into interactions with the agrifood systems as consumers of goods and services but of course also in each step along the value chain of goods, such as foodstuffs. 01 October 2019 was the official starting date for ICT-AGRI-FOOD ERA-NET Cofund. 34 partner organisations from 22 countries engage interest to do partnering together between funding agencies, Ministries and the European Commission. The vision of ICT-AGRI-FOOD is to bring together actors across the entire agri-food system (including packaging, distribution, consumption) to enable digital solutions for a transformation towards sustainable and resilient food systems. The new ERA-NET will build on the success and achievements in ICT-AGRI and ICT-AGRI2 where focuses were on digital farming and precision farming and how to use the new technologies in reducing the environmental footprint. The new ERA-NET ICT-AGRI-FOOD now broadens its scope and addresses the whole value chain of food systems "from farm to fork". Next to consumers also all other stakeholders will be involved/addressed and digital solutions developed that provide more and better information to them to contribute to more transparency and fairness in food systems.

If digital technologies are really to offer solutions to the climate and environmental challenges, the adoption of digital solutions for the entire food system must be encouraged. ICT-AGRI-FOOD will address these challenge through a coordinated transnational and transdisciplinary approach by pooling significant financial resources in joint calls for research.

We wish you a fruitful collaboration for the coming 5 years of ICT-AGRI-FOOD!

Kind regards, Elke Saggau, Niels Gøtke, Johannes Pfeifer



First Call

Transnational, collaborative, inter-/transdisciplinary research projects on ICT-enabled AGRI-FOOD systems

The first <u>co-funded call</u> between 28 Funding parties from 22 countries was launched on 18 December with a global budget of around 17.5 million euro.

Research projects should investigate, develop and test digital solutions for the rising demand for food, competition for land and other natural resources from other biomass uses globalisation, and threats from animal or plant diseases, environmental and climatic changes, public health considerations and economic constraints. Tackling these challenges will require a coordinated transnational approach, which uses the available financial, intellectual and structural resources to maximum effect.

The deadline for pre-proposal submission is on March 3rd at 13:00 (CET)

The call has two Thematic areas:

- 1) Data-driven ICT platforms and solutions to improve the sustainability of agri-food Systems
- 2) How to identify and address barriers for adoption of ICT technologies in the agri-food systems

Did you know that ICT-AGRI-FOOD reaches out to international partners from New Zealand, USA and Canada?!



INTERNATIONAL BIOECONOMY FORUM

ERA-NET ICT-AGRI-FOOD applicants are encouraged to find international research partners through the International Bioeconomy Forum (IBF), an international research group that addresses key bioeconomy challenges and opportunities. The general concept of the IBF is that of a co-owned platform, organised in ad-hoc working groups, to guide international cooperation on a limited number of R&I priorities and horizontal activities which are crucial for the development a global, sustainable Bioeconomy and addressing related global challenges. The IBF is jointly chaired by the European Commission and Canada, with members from Argentina, China, India, New Zealand, South Africa and US. Australia, South Korea, BioEast and the FAO are present as observers.

The "ICT in Precision Food Systems" working group is one of the four working groups of this forum and addresses the following key concepts that are highly relevant to this funding call:

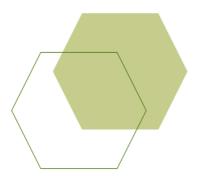
- Redesigning food and bio-based production systems across multiple existing and new land uses, patterns of land use, enterprises and communities
- Utilising cutting edge innovation and technology to produce safe, healthy and sustainable products that deliver to the needs of global populations
- Harnessing the power of big data and digital technologies to deal with complexity and radically improve decision-making
- Creating hyper-transparency around ethics of production, sustainability, and health and nutrition in value chains or networks
- Accelerating the pace, integration and adoption of science through the use of new technology

The working group on ICT in Precision Food Systems is led by New Zealand (Max Kennedy), and this group has from the beginning been working closely with ICT-AGRI-FOOD. **European applicants to the cofunded call are very welcome to get in contact to researchers from IBF countries in order to find consortium partners for their transnational projects! For partnering opportunities, please check the <u>webpage</u> and contact <u>IBF@mbie.govt.nz</u> for further information.**

Further calls and other activities

Further calls and other activities are foreseen in the coming years. These calls/activities will be developed among the partners together by following the project plan and with input from stakeholders.

To keep the partnership relevant we have planned to form an Expert Advisory Group with experts from both academia and industry and to seek synergies with relevant projects and initiatives like <u>EIP-AGRI</u>, <u>ESA</u>, <u>the</u> <u>Smart Specialisation Platform on Agri-food</u> (S3P Agri-Food), <u>IoF2020</u>, <u>FACCE-JPI</u>, and others.



On the international plan, ICT-AGRI-FOOD will pursue its collaboration with the International Bioeconomy Forum (IBF) seek to develop the international agenda concerning precision food systems and seek synergies.

To keep the ERA-NET relevant outreach and communication will be crucial. Besides the webpage, twitter and regular newsletters, ICT-AGRI-FOOD plans to host workshops and seminars and to be present at relevant conferences and fairs.



ICT AGRI-FOOD and ESA

Since ICT-AGRI 2 there have been fruitful contacts with the European Space Agency ESA. In ICT-AGRI-FOOD, Niels Gøtke (DASHE) and Xenofon Tsilimparis (GRNET) maintain this collaboration, as they have a dedicated task (Task 6.1). The Agritech is already today making use of space data and satellite navigation (GNSS and the EC's Galileo system) which are core technologies for the development of Precision Agriculture. The collaboration with ESA has the aim to give input to CAP monitoring and support European companies in making the best use of space data together with other technologies such as Artificial Intelligence, Machine Learning, Unmanned Arial Vehicles (UAV's) or drones and Blockchain.

Competitive farming requires the use of adapted innovative technologies, efficient data computing, etc. but an important aspect is also an increased focus towards the development of better decision support systems providing knowledge to the farmer and other stakeholders (operations optimization, strategic acquisition, etc.). New digital technologies such as Satellite Remote Sensing are more than just to substitute current on-the-spot check systems and advance monitoring/controlling farmers practices. These new digital technologies can also be seen as tools that enable farmers to become active within the forthcoming monitoring system seeking out new digital services.

ESA will now introduce a procedure with their partners / ESA member states to get financial commitments to launch their Kick Start BASS Feasibility Studies probably in 2020. When these discussions are finalised and the timeline decided, ICT-AGRI-FOOD will disseminate the call information.



Kick-off Governing Board meeting

November 2019 organised by BLE in Bonn, Germany

ICT-AGRI-FOOD is a very ambitious partnership, which will require good management, coordination, and support, commitment and engagement from all partners and stakeholders. In the past, coordination was in Niels Gøtke hands. This time we have transferred the official coordination from Denmark (DASHE) to Germany (BLE), changing roles. This means DASHE will continue to be active in the coordination as Deputy Coordinator, leaving the coordination in the hands of Elke Saggau and Johannes Pfeifer from BLE.

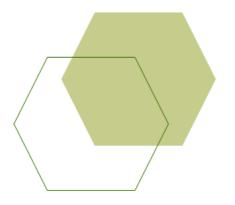
An update on the first activities of ICT-AGRI-FOOD has been given, mainly focusing on the launched co-funded call and the related activities.

The first keynote presentation was an inspiring speech on the Research Campus represented by Prof. Ralf Pude from the University of Bonn. It was very exciting for the consortium to learn how different actors from a region can work together in a regional network of SMEs, academia and authorities to realise a waste-free circular economy and to make sustainable processes visible and "tangible". He told us more about the development of a Tree Eater for apple trees, movable greenhouse facilities, Biomass Plants and resource efficiency of Miscanthus through lignocelluloses. For more details, please feel free to download the <u>presentation</u>.

In the introductory round, representatives of each work package presented a poster with a short overview of their activities with some expectations: What results do you need to achieve in the WP? - How much time do you have? - Who is a participant in your WP? - How many WPs of this kind have you already managed? - What have you done in this WP so far? - Where were the difficulties? - What was very good?

The kick-off meeting was a perfect opportunity for all partners to meet and review the project objectives and the work plan. The project is off to a good start and all partners are looking forward to the next steps.





Brokerage webinar event

ICT-AGRI-FOOD has organised an online "brokerage webinar event" on the 15 of January 2020.

The purpose of this webinar was to describe the call and to explain how to find other researchers via our webpage tools on <u>www.ictagrifood. eu</u>. Over 100 potential applicants from research and technology communities followed this webinar.

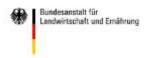
We started the webinar with an introduction and a brief explanation of the call, given by our coordination manager Johannes Pfeifer from BLE (Germany).

Then, Livia Ortolani from MIPAAF (Italy), a member of the Call Secretariat presented an overview of the call and the call documents to help you prepare your proposal.

Siham Kourdi and Marijke Hunninck from ILVO (Belgium), explained how to find partners via <u>Finding partners</u>, and via the opportunity to publish preliminary pre-proposals. They also showed every step on how you can create new consortium.

After the presentation and demonstration, we took the time to answer the questions we have already collected, and then we opened the floor to researchers to ask further questions. The webinar was recorded and is available on the <u>website</u>, together with the presentation and assembled Q&A.

Meet the ICT-AGRI-FOOD partners



BLE, the Federal office for Agriculture and FOOD

Who are they?

The Federal Office for Agriculture and Food (BLE) is an independent authority under public law within the area of responsibility of the Federal Ministry of Food and Agriculture (BMEL). As a central implementing authority in the agricultural sector, the BLE fulfils a variety of tasks including measures, which strengthen agriculture, food production, fishery and forestry as well as rural areas.

How are they involved in ICT-AGRI-FOOD?

The BLE unit "European Research Affairs" has its focus on the coordination and collaboration towards ERA and is currently a partner in 12 ERA-NETs and 2 JPIs along the whole value added chain. The BLE is also member of the Standing Committee on Agricultural Research (SCAR) on behalf of BMEL and Chair of the SCAR Foresight Group.

With its Unit on "European Research Affairs", BLE is also engaged in the establishment of the Collaborative Working Group on Sustainable Animal Production under the SCAR and is coordinator of the resulting ERA-NET Cofund "SusAn". Read more on their <u>website</u>

Who is involved: Elke Saggau and Johannes Pfeifer



Danish Agency for Science and Higher Education

Who are they?

The Danish Agency for Science and Higher Education (DASHE) is an agency under the Ministry of Higher Education and Science. The agency has responsibility for all tasks that require particular expertise within the areas of research and education. DASHE is responsible for EU research policy implementation and global cooperation within education and research. Since 2010 DASHE has been involved in many ERA-NETs, JPIs and other partnering initiatives. DASHE has no funding function. But DASHE has a close collaboration with Innovation Fund Denmark.

How are they involved in ICT-AGRI-FOOD?

DASHE coordinated and lead the two first ERA-NETs (ICT-AGRI and ICT-AGRI 2). In ICT-AGRI-FOOD DASHE has handed over the coordination role to BLE. DASHE will assist BLE as active deputy coordinator. DASHE is responsible for WP7 additional activities. This work package includes connection between ICT-AGRI-FOOD and a wide range of relevant stakeholders.

Who is involved: Niels Gøtke



Who are they?

From farm to fork... from science to spoon... The Flanders Research Institute for agriculture, fisheries and food (<u>ILVO</u>) performs multidisciplinary, innovative and independent research aimed at economically, ecologically and socially sustainable agriculture and fisheries. Through this research, ILVO accumulates fundamental and applied knowledge which is vital for the improvement of products and production methods for quality control and the safety of end products, and for the amelioration of policy instruments as a foundation for sector development and agricultural policy for rural areas.

To perform its research and to support policy and to address sector-driven questions, ILVO has a large infrastructure. Customers from industry and research institutes can test new food and feed process techniques and monitor the food quality and safety in the renewed <u>Food Pilot</u> processing plant. Furthermore, ILVO has 200 hectares of experimental fields, 15,000 m2 of glasshouses and more than 20,000 m2 of experimental animal housing, many analyses and detection labs, a diagnostic center, and accredited laboratories for food and GMOs, plants, animal feed and spray technology; and several advice centers for the whole agrifood chain.

How are they involved in ICT-AGRI-FOOD?

ILVO has been an active member since the ICT-AGRI initiative started in 2009. Our mean role in ICT-AGRI was aiming to help to coordinate European research in ICT and robotics and to develop a common Strategic Research and Innovation Agenda (SRIA). ICT-AGRI was supporting the development and implementation of these new technologies for a competitive, sustainable and environmentally friendly agriculture already since 2009.

In ICT-AGRI-FOOD, ILVO actively contributes to nearly all the Work Packages. As WP5 lead (Communication, Exploitation, and Dissemination of the results), ILVO is responsible for all communication and dissemination activities. Furthermore, ILVO takes up several tasks in WP2 (Adaptation of online call management tool and communication about the call), WP4 (Develop a common reporting procedure), WP6 (Additional activities) and WP9 (Ethics requirements).

Who is involved: Jürgen Vangeyte and Marijke Hunninck

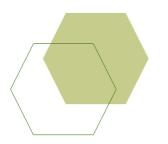
ICT-AGRI-FOOD network activities

ICT-AGRI-FOOD will be present at the MANUFUTURE AET side-event of AgEng 2020 on the 6th July 2020 in Evora/Portugal from 14:00 to 18:30.

The **AgEng2020** Conference will be held in Évora, Portugal, between 5 and 9 of July 2020 with the focus on **New Challenges for Agricultural Engineering towards a Digital World**.

This event is an opportunity to bring together engineers, scientists, technicians, academics and industry people to exchange knowledge, ideas, to present innovations and to discuss the state of the art and future perspectives for agricultural engineering as a motor for the sustainable future of agriculture. More information will follow soon.





Other Funding Opportunities

The 2nd DIVA project call opens on 26th of November 2019 and closes on 31st of January 2020 (17:00 CET/Brussels Time)

As was the case in the year 2019, HORIZON 2020 project DIVA announces its 2nd call to support innovative SMEs in 2020 to develop new value chains in agrofood, forestry, and environment sectors. DIVA competitive calls fund the implementation of innovation actions through three different types of vouchers: maturation, demonstration, internationalization. Don't miss the opportunity to apply!

For more information please follow the link: <u>https://www.projectdiva.eu/funding-calls/</u>

Continuous news updates

To find out more about ICT-AGRI-FOOD activities follow the @ictagrifood on twitter or check our <u>website</u>

Send us input for the ICT-AGRI-FOOD newsletter

If you have relevant information for the ICT-AGRI-FOOD network based on innovation in ICT-AGRI-FOOD, a video, a funding opportunity, an inspirational idea, a call for contributions, a survey, a report, then please send it to us <u>info@ictagrifood.eu</u>.

This newsletter will be sent regularly (at least twice per year). It is sent automatically to everyone who has registered for the newsletter under <u>http://www.ict-agri.eu/</u> or on <u>www.ictagrifood.eu</u>.

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