GUIDELINES
TO VALIDATE INNOVATIONS
FOR THE ICT-AGRI-FOOD KNOWLEDGE
INCUBATOR VIRTUAL SPACE

Table of contents

- **Introduction**

- Background

The development and running of the Knowledge Incubator (KI) are additional activities of the ERA- NET ICT-AGRI-FOOD (Task 7.3). MASAF, as task leader, is responsible for this task, with the support from BLE, ILVO and all the partners as contributors.

The KI addresses **researchers, start-ups and SMEs funded within ICT-AGRI** calls (previous calls, the 1st call and the additional calls) **and further stakeholders**, with a special focus on the **multi-actor approach** within ICT-AGRI-FOOD. During the lifetime of the ERA-NET, several events have been organized to develop and promote the KI, with the aim of connecting researchers with the private sector and stakeholders. A series of activities have animated the communities of funded projects, emphasizing the importance of the Knowledge Incubator.

The following table below shows the activities carried on from June 2020 onwards.

Date	Event
June 2020	Start planning the KI
10 December 2020	Presentation of the KI at the Fast Track to Innovation Workshops
January 2021 – March 2021	A series of meetings dedicated to the option of developing the KI jointly with other existing platforms on Digitalization of Agriculture (e.g. IoF2020)
21 March 2021	KI Kick-off • Definition of the KI and its database of innovations • Co-creation process with participants and definition of the database's categories
June 2021 – March 2022	Building of the dedicated <u>webpage section</u> offering services to exchange ideas and data
24 May 2022	Online workshop "Building the ICT-AGRI-FOOD Knowledge Incubator" • How to describe innovations and upload them in the database of innovations • UN SDGs and the impact of research • How to communicate research through digital stories
28 September 2022	Physical workshop on the KI during the Midterm seminar of the funded projects of the Cofunded Call 2019
30th January to 1st February 2024	Physical workshop in Warsaw End-term Seminar of Funded projects 2019 Cofunded Call Kick-off Seminar of Funded projects 2022 Joint Call

In addition, documents and other materials have been shared among the ICT-AGRI-FOOD community, such as:

- The video recordings and presentation of the online events are available on the following link.
- A short guide on how users can upload their innovation is available on the ICT-AGRI-FOOD website.

1.2 1st step: users inside the ICT-AGRI-FOOD community

In a first phase of developing and launching the KI, potential users within the ICT-AGRI-FOOD community have been involved. All partners of the research projects funded by the calls ICT AGRI 2017, ICT AGRI 2/SusAn/ERA GAS 2018, ICT-AGRI-FOOD Cofund 2019 and ICT-AGRI- FOOD/SusAn/ERA GAS/SusCrop 2021 were invited to upload their innovations. The invited project partners were provided with a short guideline and a presentation on how to upload their innovations.

Project partners from the same funded projects have been provided with the opportunity to upload more than one innovation per project.

Innovations that can be uploaded are described as (OECD, Oslo Manual 2018):
1. **Product innovation**: *a good or service that is new or significantly improved.*
2. **Process innovation**: *a new or significantly improved production or delivery method.*
3. **Marketing innovation**: *a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.*
4. **Organisational innovation**: *a new organisational method in business practices, workplace organisation or external relations*.

A testing phase and a first guided round of uploads of innovations from the ICT-AGRIFOOD funded projects were carried out between May and September 2022.

1.3 2nd step: opening the Knowledge Incubator to projects outside the community

During the testing phase, the ICT-AGRI-FOOD community proposed to **open the KI to external users**, so that innovations can potentially be uploaded by applicants/users not necessarily linked to any ICT-AGRI-FOOD calls.

While no selection is needed on the innovation nor on the applicants when the innovations are uploaded by users inside the ICT-AGRI-FOOD community (since the innovations sourced from ICT- AGRI-FOOD projects already selected for funding), **a validation should be applied** for the external users, **to ensure the high-quality standard of the innovations uploaded in the KI and the reliability of the applicants**.

Here comes these guidelines, to provide an **overview of this validation process identifying roles, principles and information flows to make the process fast and efficient**.

2 When is the validation of innovations needed?

Source of the innovation to be uploaded	Selection criteria to apply
a) Project selected for funding in *ICT-AGRI-FOOD* calls.	*Innovation* accepted without a validation process. *Applicant* accepted without a validation process. *Formal check* as usual by Ministry (MASAF).
b) R&I project selected for funding in the *Horizon 2020/Horizon Europe* frameworks.	*Innovation* accepted, if fit with the ICT-AGRI-FOOD Vision, without a validation process. *Applicant* accepted without a validation process. *Formal check* as usual by Ministry (MASAF).
c) R&I project selected for funding in regional/national calls *outside* the Horizon 2020/Horizon Europe frameworks.	The *innovation* needs to be validated by the **Experts' Group**. *Applicant accepted* without a validation process. *Formal check* as usual by MASAF.
d) Any other case, including R&I project *self-funded* by start-up/SMEs *or funded by private and public innovation programmes*.	The *innovation* and the a*pplicant* need to be validated by the **Experts'Group**. *Formal check* as usual by Ministry (MASAF).

3 Roles and Governance

3.1 ICT-AGRI-FOOD Governing Board

The ICT-AGRI-FOOD Governing Board will:
- Approve the **opening of the KI** to users outside the ICT-AGRI-FOOD community.
- Once a year, **review the functioning** of the KI and consider the need for improvements.
- Approve the **"Guidelines for validation"** of the innovations to be uploaded and any revisions.
- Approve the **composition of the Expert Group** and any integrations.
- Propose and approve **strategic communication and channels** to be used for the promotion of the KI.

3.2 Applicant:

The applicant will:
- **Upload** the innovation on the database of the KI.
- If requested by the Editorial board and/or the **Experts' Group**, **revise** the content of the innovation.

The applicant can contact the Editorial Board for receiving support in describing the innovation.

3.3 Knowledge Incubator Editorial Board

The **Editorial Board**, composed of MASAF, BLE and ILVO, will:
- **Offer support** when required **to applicants in describing their innovations** (e.g., choice of the proper language, most suitable way to describe the project results, etc.)
- Once the innovation has been uploaded, **approve the publication of each innovation** in the database **or send it back** to the applicant for any improvements (unless for minor/formal changes, that can be carried out directly by the Editorial Board).
- In case of validation needed, **identify the experts**, among the Experts' Group, contact them and provide them with the innovation to be evaluated, together with the other needed information.
- Prepare and submit to the Governing Board a **yearly report** of the progress of the KI.

Please note that the Editorial Board is not expected to review the content of the innovation description. The Editorial Board can, in some cases, identify innovations that are not in line with the ICT-AGRI-FOOD vision and block their submission.

3.4 Experts' Group

The **Experts' Group** responsible for the validation process will be created based on the

availability of experts from the External Advisory Group (EAG) of ICT-AGRI-FOOD or experts proposed by the ERA NET ICT-AGRI-FOOD partners. BLE will contact the EAG members before opening the KI, sharing with them this document and checking their availability in being part of the KI Experts'Group. Each validator will be selected according to his/her competences.

For each innovation, 3 validators will be consulted.

Once an expert from the Experts' Group will be selected in order to evaluate an innovation, she/he will:

- Receive the innovation description.
- **Prepare the validation report** for each innovation, following the instruction on the document, taking into account the guideline for validation.
- **Communicate the result of his/her validation** to the Editorial Board.

4 Reporting procedure

The experts will be asked to address a series of issues together with their final validation to accept/not accept the proposed innovation and/or applicant in the ICT-AGRI-FOOD Knowledge Incubator validation form.

The main issues to be considered are:

1. ***Contribution to solve concrete problems***
   a. *Operational> How much the application of this innovation is contributing to solve the problem stated?*
   b. *Environmental> How much the application of this innovation is contributing to solve environmental issues?*
   c. *Power in the food chain> which are the end users of the innovation? Which are the actors taking advantage from its use?*

2. ***Technical and Scientific Value***
   a. *Future Scenarios> Is the innovation part of a future alternative scenario than the present agrifood production model?*
   b. *Vision> Is the proposed innovation coherent with the ICT-AGRI-FOOD Vision?*
   c. *Relevance> Is the innovation relevant for the Agrifood System, or could it potentially be relevant?*
   d. *Scientific background> Is the research background of the innovation clear?*

3. ***Impact on the Agrifood System***
   a. *Originality> Is it an innovation already used and largely diffused? Is it new only for a specific case or region? Does it go beyond the state-of-the-art?*
   b. *Competitivity improvement> Is the innovation contributing to cost saving or to improve the competitiveness of the specific company of the agrifood system?*
   c. *Social Goals> Is the innovation offering a product or service useful to reach social goals?*

For each of these issues some questions have been identified. The expert should put a value of 0 to 5 for each question. A threshold of 3 in all criteria need to be reached in order to have the innovation accepted, or, if this threshold is not reached for any criterion, if the 3 experts still recommend the innovation to be approved/accepted, it is possible to upload it in the system.

The expert will shortly answer the above questions writing a brief paragraph or a few bullet points that will be shared with the Editorial Board in order to make clear if each issue has been properly addressed.

5 Communication during the reporting process

MASAF will look at innovation uploaded on the KI, before they become published and will verify if the innovation submitted and the applicant need to be validated. In case the validation is needed, MASAF will identify, together with BLE the validators and will provide them with the innovation description for validation. The expert will complete the validation.

If the innovation is approved, MASAF will make minor revisions and will ask ILVO to publish it. If there is a need for clarification in the innovation description, MASAF will contact the applicant and ask for clarification. MASAF will then provide the new version of the innovation description to the expert for a second validation process.
If the innovation is not approved, it will be communicated to the applicant and it will not be published in the KI.

6 Intellectual Property Rights

Intellectual Property Rights (IPR) issues have to be taken into account in the description of the innovation. In case of a breach to any confidentiality agreement, the ICT-AGRI-FOOD consortium will not assume the expenses derived from it.

7 Privacy policy

The person describing the innovation agrees to adopt a privacy policy in order to fulfil the requirements regarding handling and processing of personal data in research projects indicated in the GDPR regulation.

8 Annex

8.1 ICT-AGRI-FOOD vision

The ERA-NET Cofund ICT-AGRI-FOOD will strengthen the transnational coordination of research programmes and ensure better cooperation and use of resources in the area of digital agri-food research, development and innovation. In ICT-AGRI-FOOD 28 funding organizations from 22 countries and 3 European regions take part. The scope of this co-funded call covers the entire value-added chain of the agri-food sector from farm to fork and puts a special focus on the sustainability and transparency of the sector.
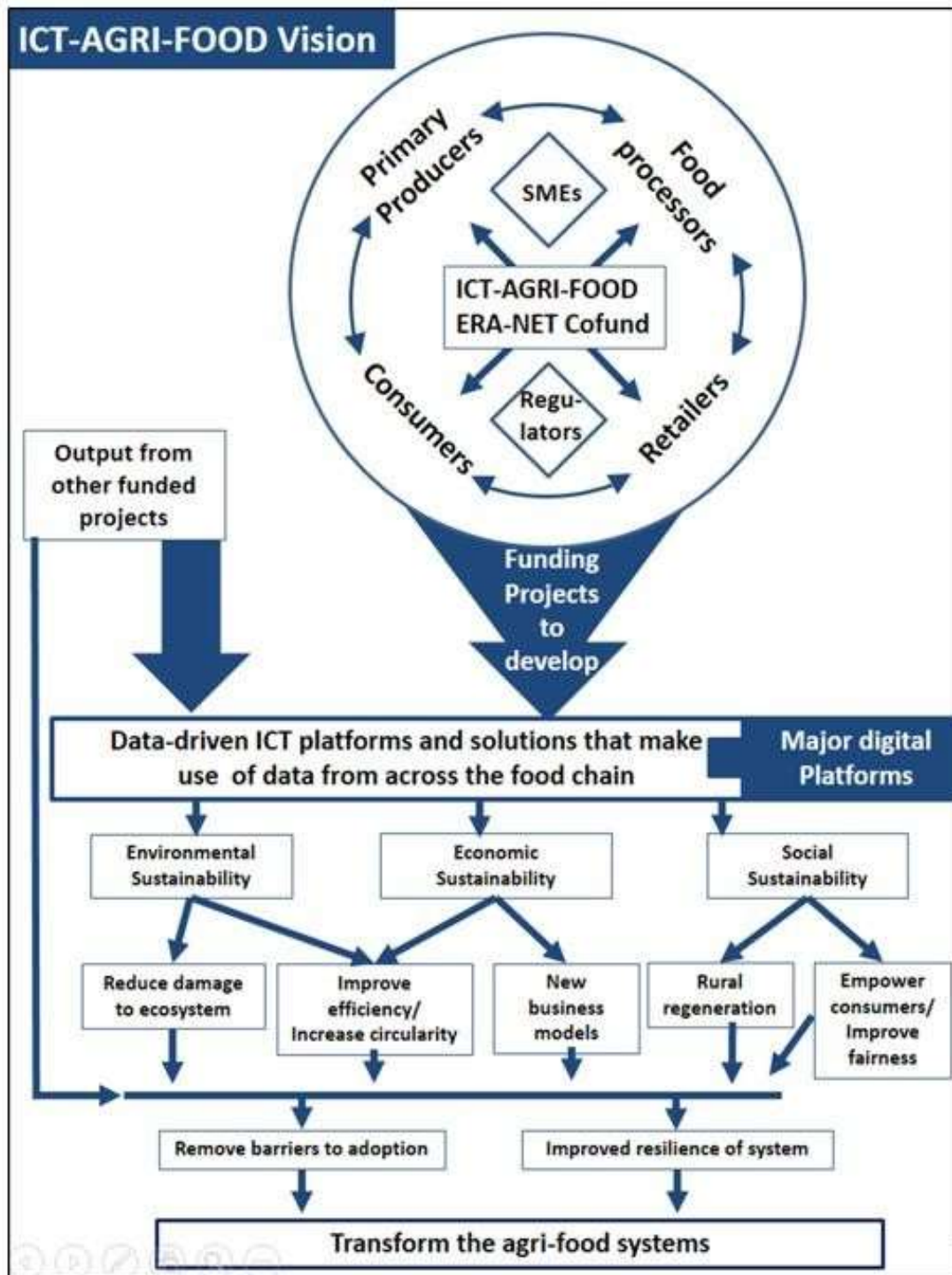

Figure 1: Vision for ICT-AGRI-FOOD ERA-NET

The vision for the ERA-NET Cofund ICT-AGRI-FOOD (illustrated in Figure 1) is to bring together actors from across the entire agri-food systems including primary producers (comprising both conventional and organic), advisors, SMEs, food processors, food retailers, consumers and the public sector (e.g. ministries, policy makers and regulatory bodies) with researchers in a multi-actor approach, to enable digital technology solutions for a transition 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 characterized 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. Such an integrated systems perspective will facilitate the development of entirely new business models, whereby actors in the system other than primary producers may be willing to bear (some of) the cost of new technology in exchange for the downstream benefits of its adoption. Ultimately, this will help to remove barriers to adoption of digital technologies and will lead to increased food security and resilience, reduced competition for resources, improved competitiveness of the sector and a balanced strengthening of all pillars of sustainability (economic, environmental, social and governmental). The digital technologies will build on the standardization efforts and platform developments from existing projects and will integrate with existing major digital platforms from food actors, ICT solution providers and consumers.

8.2 Validation form

Validation form

Applicant name		
Innovation title		
Type of Innovation		
Contribution to solve concrete problem		
	Operational	
	Environmental	
	Power distribution	
Technical and Scientific value		
	Future Scenarios	
	Vision	
	Relevance	
	Scientific background	
Impact on the Agrifood Systems		
	Originality	
	Competitivity Improvement	
	Social Goals	
TOTAL		

Please provide a value from 0 to 5 for each criterion, you can find the questions below. In order to be accepted, each innovation should pass the threshold of 3 in all criteria.

Definition of Innovation
Type of Innovation
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1. ***Contribution to solve concrete problems***
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c. <u>*Power in the food chain*</u>*> which are the end users of the innovation? Which are the actors taking advantage from its use?*

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    a. <u>*Future Scenarios*</u>*> Is the innovation part of a future alternative scenario than the present agrifood production model?*
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