

EUROPEAN COMMISSION
Directorate-General for Communications Networks, Content and
Technology
Project: H2020–No 825395



***Guide for Applicants: Innovation Experiments
Open Call 2***

Version 4.0

February 24th, 2021



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 825395.

The information provided in this document is not binding and the agROBOfood consortium reserves the right to update, amend or modify any part, section or detail of the document at any point in time without prior information.

Table of Contents

1	Introduction.....	5
1.1	About agROBOfood	5
1.2	agROBOfood Approach	6
1.3	agROBOfood Open Calls	7
2	Innovation Experiments – Open Call 2	9
2.1	General Information	9
2.2	Topics for Innovation Experiments	9
2.3	Submission Procedure	10
2.4	Language	10
2.5	Documentation Formats	10
2.6	Origin of the Funds	10
3	Proposal Submission and Selection	11
3.1	Open Call Publication	11
3.2	Eligibility Criteria	11
3.3	Eligible Costs	13
3.4	Application Process	14
3.5	Evaluation Process	15
4	Implementation of Innovation Experiments	20
4.1	Implementation Timeline	20
4.2	Financial Support	20
4.3	Implementation Activities	20
5	Applicants' Responsibilities	23
5.1	Intellectual Property Rights	23
5.2	Conflict of Interest	23
5.3	Data Protection & Maintaining Confidentiality	24
5.4	Promoting the Action and Giving Visibility to the EU Funding	24
6	Checklist	26
7	Points of Contact.....	27

List of Abbreviations

AWU	Annual Work Unit
CC	Competence Center
CET	Central European Time
DIH	Digital Innovation Hub
EC	European Commission
ESR	Evaluation Summary Report
EU	European Union
GDP	Gross Domestic Product
IC	Industrial Challenges
IE	Innovation Experiments
MVP	Minimum Viable Product
Q&A	Questions and Answers
RTD	Research and Technological Development
SME	Small and Medium-sized enterprises (including start-ups)
TRL	Technology Readiness Level
UN	United Nations
VAT	Value Added Tax
VC	Venture Capital

1 Introduction

This document provides a full set of information regarding the Second Open Call for Innovation Experiments. The aim of this document is to give applicants specific information about the application process.

1.1 About agROBOfood



agROBOfood aims at boosting the adoption of robotic technologies in the European agri-food sector. There are many excellent organisations working in agri-food robotics across Europe, and many of them are gathered into this agROBOfood consortium as partners or associated partners. Some have roots in agriculture or food and are moving into robotics, others are experts in robots and want to apply these robots in agri-food. The agROBOfood project will establish a network of robotics Digital Innovation Hubs (DIHs) in the agri-food domain, each bringing their own ecosystem of Competence Centres (CCs). By connecting these actors with their different strengths, each will contribute to an overall service offer providing a more joined-up set of automation options for food producers and wider markets for technology providers. The project takes on the challenge of **bridging the gap** between the need to **increase food production** to satisfy global needs and using **robotic technologies**.



Agri-food Challenge

The agri-food sector is a dominant and vital component in the European economy, but under pressure to produce more food on less suitable land and for lower cost – and increasingly to protect the environment too. The workforce is also under pressure, as fewer seasonal workers are available for labour-intensive seasons such as harvest. One way to combine these contradictory pressures is to increase the use of robotic sensing and automation in the agri-food industry. This facilitates precision and organic farming methods with their reduced environmental footprint, automates the heavier and more repetitive jobs e.g. in the food processing industry, reduces the need for seasonal workers, can supply 24/7 vigilance against pests and disease, increases food hygiene and improves food traceability. More food is available at a lower cost, to feed the increasing population. Successful robotics applications are for instance used commercially for milking, cultivating, spraying, harvesting, food processing, picking and placing food items, packaging and palletizing.



Situation in Robotics

The agri-food sector is partially automated but the level of adoption of robotics varies across the segments and the EU member states. The number of agricultural robots is increasing each year; the global agricultural robot market is anticipated to reach USD 8.82 billion by 2025. Europeans produce innovative technologies that could take a good share of this international market as well as benefitting European food producers. However, broad uptake of even established technologies is not common. One reason is that the majority of agri-food companies are not aware of the current abilities of modern robots, nor the advantages that they bring. And if they are both aware and interested, they often do not have the skills, knowledge and business models to apply robotics in a way that best fits their needs. Agri-food robotics expertise is fragmented, which means both that it can be hard for a potential user to find the right support and that each supporting organisation is limited by the experience and expertise of its members.



Envisioned Solution

To overcome these challenges, agROBOfood will network existing robotics DIHs working in agri-food and provide a single united access portal, a “one-stop shop” which provides various expertise online and guides users to their local member organisation. It also enables the connected competence centers (CC) to access expertise across the whole network and thereby provide a better service to their customers. In this way local organisations can apply a

pan-European breadth and depth of expertise to their challenges, creating better and more cost-effective solutions.

1.2 agROBOfood Approach

The **agROBOfood** vision is to ensure that, by the end of the project, every stakeholder from farmers and agribusinesses to robotic SMEs and investors will have access to the services of a nearby DIH connected with our network.

In order to achieve its vision, agROBOfood will develop a pan-European network of Digital Innovation Hubs (DIHs) to stimulate implementation of high-tech robotic concepts for the agri-food sector and to demonstrate their applicability under practical circumstances. The DIHs in this network act as centres of gravity, where various stakeholders such as developers, users, consultants and investors can interact and ensure synergy and cross-pollination of ideas.

The main DIH network structure is based on their geographical location. After all, end users are inclined to search for robotics activities and services close to home. In the agROBOfood project, 7 regional clusters have been identified and will serve as contact points:

North East Europe (NEE), cluster leader: DTI - Danish Technological Institute,

North West Europe (NWE), cluster leader: WR - Stichting Wageningen Research,

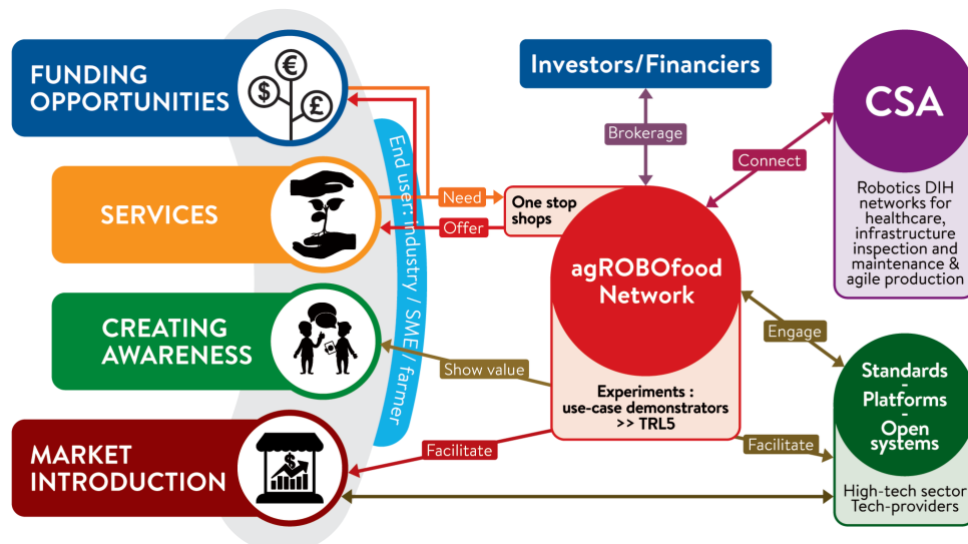
Iberia (IBE), cluster leader: EUT- Eurecat Technology Centre,

France and Italy (F&I), cluster leader: CEA - Commissariat a l'Energie Atomique et aux Energies Alternatives,

Central Eastern Europe (CEE), cluster leader: BIOS - BioSense Institute,

Central North Europe (CNE), cluster leader: Fraunhofer - Fraunhofer Gesellschaft,

East Med (EM) (including associated countries such as Israel and Turkey), cluster leader: AUA - Agricultural University of Athens.



The main components of the agROBOfood approach are:

- Increasing the awareness of what robotics can do for different stakeholders (including SME, start-ups, industrial companies, farmers, advisors) by actually demonstrating robotic solutions. Show the added value (technically, practically, socio-economically) through Innovation Experiments (IEs).
- A one-stop shop both online and physically within reasonable working distance, providing access to appropriate services on a pan-European level.
- Facilitating market introduction of new robotic technologies by maturing research prototypes to TRL 8.
- Advising end users how to fund the digital transformation of their company.
- Engaging in standardization activities and promoting open standards and platforms.
- Connecting to other robotics networks and projects through direct links and the RODIN (Robotics Digital Innovation Network) - <https://rodin-robotics.eu/>

1.3 agROBOfood Open Calls

The aim for all agROBOfood Open Calls is to stimulate, inspire and support innovation experiments and industrial challenges that meet user needs and have clear market potential with important benefits for EU economy and society.

The agROBOfood consortium builds upon an existing network and ecosystem and aims to use the mechanism of Open Calls providing financial support to third parties as a mechanism that will accelerate network expansion, driven by the robotics community and the European agri-food sector. Under this framework the Open Calls aim to:

- Support industry, in particular SMEs of the agri-food sector, in their digital transformation, through demonstrators and platforms development, technology transfer experiments and other services.
- Allow the European automation industry (agricultural machinery, material handling, etc) to benefit from the opportunities of guiding, supporting and teaming up with start-ups and SMEs from the robotics sector.
- Mobilize private matching funds (e.g. acquisitions by big industrial players, corporate VC investments) that will support the scale-up of robotic technologies and accelerate the digital transformation of the agri-food sector.

To achieve these objectives, two types of Open Calls are foreseen – two Open Calls for Innovation Experiments and one Open Call for Industrial Challenges. In total **8 M Euro** budget is allocated on financial support to third parties.

1.3.1 Innovation Experiments

During the course of the project, two Open Calls for Innovation Experiments will give SMEs and start-ups from all over Europe the opportunity to further develop and showcase innovative solutions for the application of robotic technologies in the agri-food industry, while in parallel utilizing the services of the agROBOfood DIHs and CC, thus reaching a two-fold objective.

The first Open Call was launched in spring 2020 and selected 6 innovation experiments for funding.

Innovation Experiments do not contain research activities but demonstrate the technology usefulness from an end user perspective. Amongst others the IEs showcase the use and the added value of use-cases, utilization of the technology, ecosystem and business services and custom technology trainings.

1.3.1.1 Timeline

Important notice 1: The opening and closing dates of each phase can be subject to change in case of any modifications in the project's schedule.

Activity	Date
Open for Submissions	March 1 st , 2021
Deadline for Submissions	May 31st, 2021, 17:00 CET
Information about Selection	July 2021
Contracting	August 2021
Implementation	From September 1 st , 2021 until January 31 st , 2023

1.3.1.2 Funding Schema of the Open Call for Innovation Experiments

Allocated budget for the Open Call for Innovation Experiments is described in the table below:

	Total Amount	Project Size	Number of Projects	Number of Partners per project	Budget per Partner
Open Call 2	2.65 M EUR	300k-500k	±6	2-5	50k EUR-300k EUR

2 Innovation Experiments – Open Call 2

The aim of Innovation Experiments is to directly support the digital transformation of agri-food companies that have not taken full advantage of robotics technologies yet. They will not involve any research and development activities, but will rather focus on innovations that demonstrate the technologies usefulness for and from the end-user's perspective by showcasing and demonstrating activities (e.g. use-cases), while will also utilize technology, ecosystem and business services and custom trainings.

2.1 General Information

Open Call 2 aims at selecting approximately six (6) Innovation Experiments that tackle a commercial need within agri-food and offer a solution based on robotic technologies. Selected consortia will receive up to 500 thousand euros. Chosen experiments will go through a 17-month process that consists of three phases. After positive evaluation, each phase is followed by financial support (see section 4).

2.2 Topics for Innovation Experiments

We are looking for robotic solutions that address challenges for the agri-food sector. Examples bellow illustrate some of the current areas of interest, but other robotic technologies with direct positive impact in the broader agri-food sector will be considered.

Agricultural Robotics for Crop Production: Robotic solutions and application areas

- Disease detection (Robots for disease detection; Robots for harmful insect detection (Greenhouse focused))
- Monitoring (Robots for plant stress detection; Robots for yield estimation; Robots for sugar/anthocyanin/estimation)
- Phenotyping (Robots for plant phenotyping (genotype, growth measurement, growth stages))
- Harvesting (Robots for selective harvesting; Robots for bulk harvesting)
- Seeding (Precision seeding robots)
- Spraying (Spot spraying robots; Spraying robots)
- Weeding (Intra Row weeding robots; Herbicide spraying robots)
- Insect control (Automated insect control (Drones))
- Multipurpose (Modular robots; Robots that can be fitted with various attachments/Robotic platforms)
- Various (Pruning/Trimming robots; Mowing robots; Ploughing/Hoeing robots; Irrigation robots; Hoeing robots)

Food Supply Chain Robotics

- Sorting (Robots for food handling; Robots for classification; Robotic swarms; Robots for logistics and palletizing)
- Packaging (Robots for fruit and vegetable packaging; Robotic platforms for intelligent packaging; Robotic arms for wrapping chopped and granular food; Robots for beverage packaging)

- Processing (Robots for food cutting; Robots for food preparation; Robots for handling animal product)
- 3D Printing (Robots for 3D printing of food; Robots for synthetic food production)
- Sensing (Robots for quality assessment; Robots for monitoring)

Livestock Robotics

- Livestock production (Robots for shearing, Robots for milking, Robots for Slaughtering, egg handling and milk processing)
- Livestock management (Robots for health, production and animal monitoring, Robots for herding, Robots for feeding, Robots for cleaning)

2.3 Submission Procedure

The entry point for the submission of all proposals to agROBOfood Open Calls is the agROBOfood website: <https://evaluation.agrobofood.eu/apply>

Submissions received by any other channel will be automatically discarded.

Documents required in subsequent phases will be submitted via dedicated channels, which will be indicated by the agROBOfood consortium in the contracting phase.

2.4 Language

English is the official language for agROBOfood Open Calls. Submissions done in any other language will not be evaluated. English is also the only official language during the whole execution of the agROBOfood project. This means any requested submission of deliverable will be done in English in order to be eligible.

2.5 Documentation Formats

Any document requested in any of the phases must be submitted electronically in PDF format without restrictions for printing.

Important notice 2: When filling in the proposal template, make sure to keep set formatting of the document, including margins, font size and do not exceed the defined maximum of 30 pages.

2.6 Origin of the Funds

The funds provided through the Open Calls come directly from the funds of the European Project agROBOfood funded itself by the European Commission under Grant Agreement Number 825395.

In order to receive funding, any selected proposer will sign a dedicated Sub-Grantee Funding Agreement with the agROBOfood consortium.

More details on obligations of beneficiaries can be found in Chapter 5.

3 Proposal Submission and Selection

The aim of Open Call is to stimulate, inspire and support innovation experiments and industrial challenges that meet user needs and have clear market potential with important benefits for EU economy and society.

3.1 Open Call Publication

Open Call will be published on the agROBOfood website: <https://agrobofood.eu/> on March 1st, 2021. and will be supported by:

- **Call Fiche**, which provides the scope and objectives of the open call.
- **Guidelines for Applicants**, this document.
- **Proposal Template**, word document to be submitted as a PDF in the application phase.
- **Declaration of Honour**, which declares that all conditions of the Open Call are accepted by an SME legal representative (to be filled in individually by every member of the consortium).
- **Consortium Declaration**, with signatures of legal representatives of each member of consortium.
- **SME Declaration**, which declares that the applicant is an SME according to EC standards (to be filled in individually by every member of the consortium).
- **Data Privacy Policy**, which addresses the aspect of data privacy.
- **Frequently Asked Questions & Answers** published at the agROBOfood website.

3.2 Eligibility Criteria

agROBOfood Open Calls are aimed at European SMEs and start-ups working in the field of agri-food and robotics. Detailed eligibility criteria are described in this section. Overall eligibility criteria for the agROBOfood Open Calls are:

- Applicants need to be SMEs (see 3.2.1)
- The coordinating SME needs to have a valid VAT number.
- Applicants need to apply as consortia (see 3.2.3)
- Existing consortium members of agROBOfood project are not eligible for the Open Calls of agROBOfood.
- The proposal is delivered before the defined deadline, applying the requested submission procedure.
- Proposals shall only ask for funding for that part of the work that is not yet accomplished and will be carried out after having been selected for funding. Of course, this does not exclude the usage of e.g. results, IP, infrastructures or approaches already hold by the proposers.
- Current agROBOfood beneficiaries (Open Call 1 beneficiaries, Industrial Challenges beneficiaries), IAB members and agROBOfood partners are not eligible.
- SMEs are encouraged to apply to all 3 Open Calls. However, only one proposal per beneficiary can be selected for funding. SMEs that receive funding within one Open Call, either as consortium leaders or as partners are not eligible to apply for additional funding in other agROBOfood Open Calls.

3.2.1 Definition of an SME eligible for agROBOfood Open Calls:

An SME will be considered as such if complying with the European Commission Recommendation 2003/361/EC¹, and the SME user guide². Furthermore, slightly bigger SMEs fulfilling the criteria defined by RODIN are also eligible for this Open Call. As a summary, the criteria which define an SME are:

- Independent, partner or linked enterprises, with financial and staff figures calculated in accordance with instructions given by Recommendation 2003/361/EC³.
- It is a legal entity established and based in one of the EU Member States or an H2020 Associated country as defined in H2020 rules for participation⁴ (see section 3.2.2).
- Headcount in Annual Work Unit (AWU) less than 500.
- Annual turnover less or equal to €100 million.

If applicants are **not sure whether they comply with the SME criteria**, an online SME self-assessment questionnaire is provided by the EC, for these purposes, on this link: [SME self-assessment questionnaire](#).

For British applicants:

AgROBOfood network takes into account the impact of the Brexit Withdrawal Agreement and subsequent trade deal between the EC and the UK upon EC collaborative projects and, particularly, the Networks of DIHs. In terms of UK participation in Horizon 2020, there will be no change as under the deal the UK will continue to contribute to the EC Framework Programme funding. In terms of UK recipients of H2020 Financial Support for Third Parties (FSTP) grants, new grants can be issued to UK recipients.

It should be noted that in some areas the detail of operation is subject to further negotiation and agreement. While the trade agreement was conducted by the EC for the areas within its competence, in some areas the issues are shared competences with national states and are therefore open to interpretation, elaboration and / or change by national governments within the EC. From an EC perspective a good summary of the outcome of the trade agreement can be found at [Questions & Answers: EU-UK Trade and Cooperation Agreement \(europa.eu\)](#). A summary of the main research impacts can also be found at [UK-EU research deal at a glance | Science|Business](#).

3.2.2 Definition of eligible countries

Participants, SMEs, established in the following countries and territories will be eligible to receive funding through agROBOfood Open Calls:

- The Member States (MS) of the European Union (EU), including their outermost regions.
- The Overseas Countries and Territories (OCT) linked to the Member States: Anguilla, Aruba, Bermuda, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, French Polynesia, French Southern and Antarctic Territories, Greenland, Montserrat, Netherlands Antilles (Bonaire, Curaçao, Saba, Sint Eustatius, Sint Maarten), New Caledonia and Dependencies, Pitcairn, Saint Barthélemy, Saint Helena, Saint Pierre and Miquelon, South Georgia and the South Sandwich Islands, Turks and Caicos Islands, Wallis and Futuna Islands.

¹ European Commission Recommendation 2003/361/EC. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:en:PDF>

² SME definition: <https://op.europa.eu/s/ouL1>

³ <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:en:PDF>

⁴ Association to Horizon 2020 is governed by Article 7 of the Horizon 2020 Regulation. The list of associated countries is available at: http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

- The associated countries (AC): Iceland, Norway, Albania, Bosnia and Herzegovina, North Macedonia, Montenegro, Serbia, Turkey, Israel, Moldova, Switzerland, Faroe Islands, Ukraine, Tunisia, Georgia and Armenia.

3.2.3 Definition of eligible consortia

- Consortia must be formed by minimum two (2) and maximum five (5) partners.
- At least one SME in the consortium needs to be an end-user and at least one SME a technology provider.
- The consortia must have a cross-border (coming from different eligible countries) and/or cross-sectoral (coming from the agri-food and robotics sector) character.
- Proposals involving consortia that gather SMEs coming from countries that are not already represented in the agROBOfood consortium will receive **additional points based on evaluation criterion 2**: Albania, Anguilla, Armenia, Aruba, Bermuda, Bosnia and Herzegovina, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Croatia, Czech Republic, Estonia, Falkland Islands, Faroe Islands, French Polynesia, French Southern and Antarctic Territories, Georgia, Greenland, Hungary, Iceland, Israel, Latvia, Luxembourg, Malta, Moldova, Montenegro, Montserrat, Netherlands Antilles (Bonaire, Curacao, Saba, Sint Eustatius, Sint Maarten), New Caledonia and Dependencies, North Macedonia, Norway, Pitcairn, Poland, Republic of Cyprus, Romania, Saint Helena, Saint Pierre and Miquelon, Saint Barthelemy, Slovenia, Slovakia, South Georgia and the South Sandwich Islands, Sweden, Switzerland, Tunisia, Turkey, Turks and Caicos Islands, Ukraine, Wallis and Futuna Islands.

3.2.4 Proposal eligibility criteria

In order to be eligible for agROBOfood Open Call applicants and their proposed solutions must:

- Tackle a commercial need within the agri-food domain.
- Offer a solution that uses robotic technology to address challenges in the agri-food sector.
- Agree to actively support Project's dissemination activities.
- Demonstrate a plan and an approach for testing, prototyping and demonstrating the products in cooperation with Digital Innovation Hubs and/or Competence Centers.
- Establish contact with one of the (associated) DIHs in their country in order to ensure transfer of information and collaboration in the network (the list of DIHs is available at the agROBOfood website – <https://agrobofood.eu/>).

Important Notice 3: Services requested will be assessed by the partner in charge and delivered according to their availability.

In addition, proposals must fulfil following technical criteria:

- Be submitted before the deadline.
- Contain all signed documents that are part of the Open Call.
- Be submitted by actors defined earlier in this section.
- Must be submitted in the correct format, following the formatting rules defined in the Project Proposal Template, in terms of font size, margins, maximum number of pages. Proposals that fail to follow these rules will be penalized.

3.3 Eligible Costs

1. Personnel Cost

Costs of the personnel realizing the deliverables. Calculate personnel costs according to

the rules and regulations of your country and real labour market data regarding the relevant positions. For the proposal template, only the final amount allocated to personnel costs is necessary. Personnel costs are considered direct costs and can't be managed as indirect cost.

2. Travel Cost

Travel costs necessary for the execution of the experiment.

3. Equipment Cost

Borrowing or loaning of the necessary equipment is not eligible, only depreciation costs for purchased equipment are eligible.

4. Other goods/services

Other goods and services include, for instance, consumables and supplies, dissemination (including open access), protection of results, certificates on the methodology, translations and publications.

5. Subcontracting

Subcontracting should be clearly justified. Costs must be reasonable and comply with the principle of sound financial management. Coordination tasks cannot be subcontracted. You should ensure that there are sufficient details for: the action tasks, the estimated budget, the procedure that will be followed to ensure best value-for-money. Any kind of organization (DIHs, CCs, Large Companies, Midcaps etc.) could be subcontracted, provided that they are not part of the core agROBOfood consortium. The evaluators will assess the scope and value-for-money aspects of subcontracting and their assessment will be reflected in the score of each proposal. Subcontracting is allowed for up to maximum of 25% of the proposed budget when properly justified. When submitting the proposal applicants should only write the total amount for subcontracting. Selected consortia should follow the standards for subcontracting set by the European Commission, ensuring best value for money and absence of conflict of interest, during the project implementation. Procurement should be done according to the national and European regulation that is applied to your institution.

6. Indirect costs

Indirect costs (overheads) could be up to 25% of the direct cost. Subcontracting is not included in indirect cost calculation.

3.4 Application Process

Interested applicants should register at the agROBOfood website:

<https://evaluation.agrobofood.eu/apply> – a software platform that provides all necessary information about the Open Call and the registration process. The platform will be the entry point for all applications in the Open Call.

The application for Open Call 2 will have two parts. In the first part, applicants will be asked to fill in general information about their company and provide contact information. The second part of the application will look more into the way the application and the solution it offers fits with the objectives of the agROBOfood project.

The application for this Open Call will consist of a template (detailed template is a separate document) with different sections:

- General Information (title of the proposal, the challenge it addresses, information about the applicant)

- Information about the proposal (objectives, workplan, activities, expected results and deliverables)
- Information about the business impact and scalability
- Information about the technology impact and adoption of standards, as well as the starting and target TRL level
- Sustainability impact, systemic relevance and financial impact
- Information on multi - actors' involvement
- Connection with Digital Innovation Hubs/Competence Centers and utilization of their services.
- Costs justification and funding

Applicants may submit **up to three additional documents** of their choice, these documents are optional, they can serve as additional material to support the application. Additional documents should be submitted using the designated section on the application page.

Total size of all submitted documents **may not exceed 100 MB**, and they must be submitted in a format explained in the tooltip on the application page.

Applicants who wish to upload a video as an additional material can do that by providing a valid YouTube or Vimeo link, (public or unlisted) without restrictions for viewing, in the designated field within the project proposal template.

Important notice 4: Evaluators may choose not to pay attention to additional documents or video links, and give points only based on the proposal template and official Open Call documentation.

Important notice 5: Technical issues may occur with large documents in different formats. agROBOfood project does not bear responsibility for technical problems at any stage. Make sure to check and test upload on time. If technical issues do arise, applicants may contact agROBOfood team for support, via email: evaluation@agrobofood.eu, up to May 28th at 17:00 CET.

All proposals must be submitted by **May 31st, 2021 at 17:00 CET**. Proposals submitted after the deadline will not be taken into consideration.

3.5 Evaluation Process

The evaluation will be done by a carefully selected pool of external reviewers. Each proposal will be reviewed by three different reviewers, each offering a specific expertise – business development, agri-food and robotic technologies.

The evaluation process consists of two phases – (I) a remote application review and (II) an interview with short listed proposals. In both phases, each proposal will be reviewed by a minimum of three external evaluators.

Both evaluation stages have distinct objectives and provide the agROBOfood consortium with a complete overview of each proposal, working in synergy to provide a controlling mechanism for early detection of potential implementation issues within the projects.

The second stage of the evaluation is based mainly on the interview of the project team, it has the objective to establish trust in the project consortium and confidence in regard to future implementation. This evaluation should be understood as a new, complementary evaluation.

Written proposals submitted through the agROBOfood website will be ranked based on overall score. The top ranked proposals will be invited to interviews with external evaluators. After the

two-stage evaluation process all proposals will be ranked based on their scores. The list of accepted proposals at stage-1 and stage-2 will be delivered as well as the information about the non-eligible proposals. All applicants will receive their Evaluation Summary Reports.

Evaluators will rate each proposal under specific evaluation criteria. The maximum number of points is 100, with additional 20 that can be given as extra points for demonstrated financial and systemic impact.

3.5.1 Key points for evaluation

Criterion	Description	Weighing	Scores	Max points
Suitability of the overall proposal	Concerns the general fitness of the proposal concerning the topic of the agROBOfood call, the composition of the consortium and what will be delivered for the requested budget.	30%		30
<u>Topic coverage</u>	This criterion assesses how far the proposed solution addresses the topics of the Open Call.	30%	0-5	
<u>Consortium composition & ability</u>	This criterion rates how far the consortium represents all necessary skills and experiences to develop and commercialise the proposed product or service.	40%	0-5	
<u>Value for money</u>	This criterion rates to what extent the proposed activities and promised results justify the requested budget.	30%	0-5	
Geographical impact: cross-border character	Concerns the coverage of the involved stakeholders over different member states. Advantage will be given to proposals that include applicants from countries that are not already part of the agROBOfood consortium (see 3.2.3.) and have the potential to increase the overall impact of the project.	10%		10
<u>Involvement of stakeholders/partners in more countries</u>	Every application with stakeholders/partners in a country not already part of agROBOfood consortium (see 3.2.3.) receives points. The objective of this criterion is to extend the coverage of the agROBOfood experiments geographically, within the EU and/or associated countries. 1 additional country: 1 point; 2 additional countries: 3 points 3 or more additional countries: 5 points	100%	0-5	
Business impact: business plan and scalability	The proposed product or service should be accompanied by a viable business model that is scalable in the future. Proposals need to confirm that they will provide access to their lessons learnt, best practices, tutorials, guidelines and an overview of the realised solution.	25%		25
<u>Business Model</u>	Credibility of the business planning regarding sustainable exploitation (including data brokerage), market entry & expansion, financial projections and resources.	60%	0-5	
<u>Scalability</u>	This criterion rates the ability of the proposed solution to upscale quickly on the European and international markets.	40%	0-5	

Technology impact and use of standards	The proposed product or service must consist of an innovative, credible technological concept.	25%		25
<u>Robotic solution, concept and innovation</u>		60%	0-5	
This criterion rates the innovativeness, credibility and feasibility of the technological robotic concept. The innovative step, compared to the current state of the art, will be taken into consideration. Starting and target TRL will be taken into account as well, with a preference for a higher starting TRL, above 6.				
<u>Interoperability, replicability and reusability of the developed solution.</u>		40%	0-5	
This criterion rates in how far the use case demonstrates interoperable, replicable and/or reusable components, systems or solutions. The usage of standards is highly appreciated, while using open system initiatives will be positively evaluated.				
Sustainability impact	agROBOfood has committed itself to improvement of sustainability, e.g. by achieving the UN Sustainable Development Goals. It should be indicated how the proposal contributes to improving sustainability in a realistic manner.	10%		10
<u>Sustainability impact</u>		100%	0-5	
This criterion rates in how far the proposed solution is able to contribute to sustainability improvement in a realistic manner.				
Systemic relevance, Financial Impact	This demonstrates the overall connection with local/regional innovation ecosystems, as well as connection and impact on agROBOfood network. Proposals should describe any relevant implication and support (both financial and non-financial) from public or private entities either from outside or within the proposing consortium.	Additional points		20

3.5.2 Redress procedure

Within 2 working days of the reception of the Evaluation Summary Report, applicant may submit a request for redress if they believe that there has been a shortcoming in the way their proposal has been evaluated that may affect the final decision on whether they are selected as beneficiary or not, or if they believe the results of the eligibility checks are incorrect.

A designated internal review committee of the agROBOfood project will examine requests for redress. The committee's role is to ensure a coherent interpretation of such requests, and equal treatment of all applicants.

Requests for redress must be:

- Related to the evaluation process or eligibility checks.
- Clearly describe the complaint and reasons for potential consideration.
- Received within the time limit (2 working days) from the ESR information letter delivered.
- Sent by the same SME legal representative that has submitted the proposal.

The committee will review the complaint and will recommend an appropriate course of action. If there is a clear evidence that a shortcoming(s) could have affected the eventual funding decision, it is possible that all or part of the proposal will be re-evaluated by the internal review committee.

Please note:

- This procedure is concerned with the evaluation and/or eligibility checking process. The committee will not call into question the scientific or technical judgement of appropriately qualified experts.
- Any redress request that calls into question the scientific or technical judgement of appropriately qualified experts will be automatically rejected.
- A re-evaluation will only be carried out if there is evidence of a shortcoming that could have affected the final decision on whether to fund it or not. This means, for example, that a problem relating to one evaluation criterion will not lead to a re-evaluation if a proposal has failed anyway on other criteria.
- The evaluation score following any re-evaluation will be regarded as definitive. This score could be lower than the original score.

Only one request for redress per proposal will be considered by the committee. All requests for redress will be treated in confidence and must be sent to the official agROBOfood email:

evaluation@agrobofood.eu

Important notice 5: By applying to the agROBOfood Open Call, the applicant automatically accepts all the rules and conditions set in Guideline for Applicants.

Important notice 6: Applicants bare sole responsibility for all technical aspects during the application and submission procedure. The agROBOfood team will not consider requests for redress based on technical issues faced during submission. If technical issues arise, applicants can contact agROBOfood for support via evaluation@agrobofood.eu until 28th of May 2021. at 17:00 CET.

4 Implementation of Innovation Experiments

Once the selection and contracting process is finished, selected beneficiaries will start implementing the experiments. Implementation consists of three phases, where each phase is followed by reporting requirements that lead to a release of a designated part of the payment.

4.1 Implementation Timeline

Implementation of Innovation Experiments starts on **September 1st, 2021** and finishes on **January 31st, 2023**. Timeline split by phases is presented below.

	Phase	Date
Implementation	Phase 1 - Design	September 1 st , 2021 – November 30 th , 2021 (3 months)
	Phase 2 - Develop	December 1 st , 2021 – July 31 st , 2022 (8 months)
	Phase 3 - Market	August 1 st , 2022 – January 31 st , 2023 (6 months)

4.2 Financial Support

Selected Innovation Experiments will receive up to 500k € financial support from agROBOfood according to the implementation timeline defined in Chapter 4.1. The agROBOfood consortium will closely monitor this allocation of resources and the financial support to consortia will be based upon the review of deliverables. The financial support is considered as a global amount deemed to cover all costs of the action or a specific category of costs i.e. lump-sum costs as defined in Article 5 of H2020 AMGA — Annotated Model Grant Agreement.

4.3 Implementation Activities

By entering the agROBOfood Open Call, applicants agree to comply with the program outline and deliver results expected in each phase. Only after proof of successful implementation has been provided will the predefined amount of the funding granted be released.

Phase 1 – Design

Description	Expected outcome and report	Funding
Within this stage selected experiments are to be planned and detailed, jointly by the beneficiaries and Digital Innovation Hub representatives. Together they will design a work plan of the different activities and resources to be executed along the duration of the experiment.	Beneficiaries will produce a report/deliverable that summarizes the plan for the implementation of the experiment.	30%

Phase 2 – Develop

Description	Expected outcome and report	Funding
-------------	-----------------------------	---------

In this stage, the selected projects perform their technical development and realise the work plan.	Beneficiaries will produce a report/deliverable that summarizes the results of the development.	40%
---	---	-----

Phase 3 – Market

Description	Expected outcome and report	Funding
In this stage the selected projects focus on exploitation of the results and achievements (preparation and performance of demonstrations; contacts with potential partners, investors, customers; participation at conferences and events to promote and sell the achievements and results of the experiments).	Beneficiaries will produce a report/deliverable that summarizes the market associated activities (even the ones performed along the challenge development)	30%

4.3.1 Reviews

Each project will go through 3 reviews, each one highlighting the end of a phase. The reviews will be organized by the agROBOfood consortium. The experiment coordinator should deliver at least 1 week in advance the deliverable, so that the reviewers will be able to read it. During the review, the consortia representatives should present their work, answer questions and demonstrate their experiment. The tentative timeline of reviews is depicted below and may be subject to changes in accordance with reviewers' availability.

Review	Phase 1 - Design	December 2021
	Phase 2 - Develop	August 2022
	Phase 3 - Market	February 2023

4.3.2 Payments

Each challenge will receive the funding on a lump sum scheme and according to the terms of the contract signed between agROBOfood consortium and the selected project representative. In more details, each challenge deliverable will be associated with a specific cost of relevant phase.

After each challenge review and successful evaluation of each deliverable, its cost will become eligible. Deliverables that are not accepted will be re-evaluated at next review. If this is the last review, the cost of these deliverables will not be paid to the beneficiary and their cost will be automatically reduced from the subcontract.

As soon as a deliverable cost becomes eligible, the sub-project coordinator should provide a Financial Statement to the agROBOfood coordinator. The funding per each phase (i.e. Design, Develop and Market), should not exceed the Open Call funding scheme (up to 40%, 30% and 30% respectively).

4.3.3 Questionnaires

agROBOfood as a network is still being built and we want to learn and improve. Each experiment funded through this call provides information to help build the network. For this reason, each

beneficiary is requested to fill out questionnaires on project progress, value of network interactions, etc. Project progress must be reported on a monthly basis. Information on network interactions and services required is to be reported twice – during the Phase 2 ‘Develop’ and at the close of Phase 3 ‘Market’. Questionnaires are not ‘reporting tools’ – instead, a review of the collected data will be used to build ‘best practice’ – for others to be inspired, share, learn – for the benefit of the network.

5 Applicants' Responsibilities

The consortia members implementing Innovation Experiments (sub-projects) are indirectly beneficiaries of European Commission funding. As such, they are responsible for the proper use of the funding and ensure that the recipients comply with obligations under H2020 specific requirements as described in Horizon 2020 - the Framework Program for Research and Innovation (2014-2020). The obligations that are applicable to the recipients include:

5.1 Intellectual Property Rights

The following Intellectual property Rights conditions should be followed:

- The proposals submitted should be solely based on original works by the applicants and their foreseen developments are free from third party rights, or they are clearly stated.
- All IPR created by the applicants via the agROBOfood funding will remain to the applicants, who will be the unique owners of the technologies created within the framework of their sub-granted projects.
- Any communication or publication by the funded applicants shall clearly indicate that the project has received funding from the European Union, and agROBOfood project displaying the EU logo and H2020 logo on all printed and digital material, including websites and press releases.
- Parts of the projects selected for funding (including the publishable summary of the proposal) will be used for agROBOfood dissemination purposes.
- Selected applicants shall, throughout the duration of the Project, take appropriate measures to engage with the public and the media about the project and to highlight the financial support of the EC. Moreover, all measurements of the project experiments should be published as open data (unless an exception it is fully justified), respecting agROBOfood Data Management Plan and any Ethical issues defined by the European Commission and National Regulations.

Any publicity made by the project consortium in respect of the project, in whatever form and on or by whatever medium, must specify:

- a) that it is funded by the European Commission via the agROBOfood project and
- b) that it reflects only the author's views and that the EC and agROBOfood is not liable for any use that may be made of the information contained therein.

Moreover, the EC and the agROBOfood consortium shall be authorized to publish, in whatever form and on or by whatever medium, information related to the project.

5.2 Conflict of Interest

Selected applicants must take all measures to prevent any situation where the impartial and objective implementation of the sub-project is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest ('conflict of interests').

They must formally notify to the Commission (via the agROBOfood coordinator) without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation. The agROBOfood coordinator may verify that the

measures taken are appropriate and may require additional measures to be taken by a specified deadline.

If the sub-contract beneficiary breaches any of its obligations, the sub-contract may be automatically terminated. Moreover, if case costs are not explicitly included in the sub-project, they may be rejected. Finally, the cost of the deliverables, which are clearly specified in the sub-project and are accepted during a review process, becomes eligible. Deliverables that are not accepted will be re-evaluated at next review. If this is the last review, the cost of these deliverables will not be paid to the sub-project.

5.3 Data Protection & Maintaining Confidentiality

During implementation of the sub-project and for five years after the end of the sub-project, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at sub-contract signing time ('confidential information').

If a beneficiary SME requests, the Commission and the agROBOfood consortium may agree to keep such information confidential for an additional period beyond the initial five years. This will be explicitly stated at the sub-contract.

If information has been identified as confidential during the sub-project execution or only orally, it will be considered as confidential only if this is accepted by the agROBOfood coordinator and confirmed in writing within 15 days of the oral disclosure. Unless otherwise agreed between the parties, they may use confidential information only to implement the Agreement.

The sub-project consortium may disclose confidential information to the agROBOfood consortium and to the selected reviewers, who will be bounded by a specific Non-Disclosure Agreement.

5.4 Promoting the Action and Giving Visibility to the EU Funding

The 3rd parties (sub-contract recipients) must promote the sub-project, agROBOfood project and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner and to highlight the financial support of the EC.

Unless the European Commission or the agROBOfood coordinator requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.), any publicity, including at a conference or seminar or any type of information or promotional material (brochure, leaflet, poster, presentation etc.), and any infrastructure, equipment and major results funded by the grant must:

- display the EU emblem
- display the agROBOfood logo and
- include the following text:

For communication activities: "This project has indirectly received funding from the European Union's Horizon 2020 research and innovation program, via an Open Call issued and executed under project agROBOfood (grant agreement No 825395)".

For infrastructure, equipment and major results: "This [infrastructure][equipment][insert type of result] is part of a sub-project that has indirectly received funding from the European Union's Horizon 2020 research and innovation program via an Open Call issued and executed under project agROBOfood (grant agreement No 825395)".

When displayed in association with a logo, the European emblem should be given appropriate prominence. This obligation to use the European emblem in respect of projects to which the EC contributes implies no right of exclusive use. It is subject to general third-party use restrictions which do not permit the appropriation of the emblem, or of any similar trademark or logo, whether by registration or by any other means. Under these conditions, the Beneficiary is exempted from the obligation to obtain prior permission from the EC to use the emblem. Further detailed information on the EU emblem can be found on the Europa web page.

Any publicity made by the Beneficiary in respect of the project, in whatever form and on or by whatever medium, must specify that it reflects only the author's views and that the EC or agROBOfood project is not liable for any use that may be made of the information contained therein.

The EC and the agROBOfood consortium shall be authorized to publish, in whatever form and on or by whatever medium, the following information:

- the name of the sub-project coordinator and the beneficiary SME
- contact address of the sub-project coordinator and the beneficiary SME
- the general purpose of the project
- the amount of the financial contribution foreseen for the project; after the final payment, the amount of the financial contribution actually received by the sub-project
- the geographic location of the activities carried out;
- the list of dissemination activities and/or of patent (applications) relating to foreground;
- the details/references and the abstracts of scientific publications relating to foreground and, if funded within the sub-project, the published version or the final manuscript accepted for publication;
- the publishable reports submitted to agROBOfood;
- any picture or any audio-visual or web material provided to the EC and agROBOfood in the framework of the project.

The sub-project coordinator shall ensure that all necessary authorizations for such publication have been obtained and that the publication of the information by the EC and agROBOfood does not infringe any rights of third parties.

Upon a duly substantiated request by the sub-project coordinator, the agROBOfood consortium, if such permission is provided by the EC, may agree to forego such publicity if disclosure of the information indicated above would risk compromising the beneficiary's security, academic or commercial interests.

6 Checklist

- 1) **Does your planned work fit with Open Call 2 for Innovation Experiments?** Check that your proposed work does indeed address one of the topics open in this call.
- 2) **Does your proposal address robotic technology in agriculture?** Check that your proposed work does indeed address robotic technologies in the target sector.
- 3) **Is your proposal eligible?** The eligibility criteria are given in chapter 3 “Proposal”. Make sure that you satisfy the minimum participation requirements (entity from eligible countries).
- 4) **Have you contacted a local DIH?** One of the eligibility criteria is having local DIH support. Please fill in the contact details of your local DIH in the designated field in the proposal.
- 5) **Is your proposal complete?** Have you completed all mandatory questions?
- 6) **Have you checked all technical details related to submission?** Difficulties with application and submission arising from technical aspects will not be taken into consideration by agROBOfood project. Applicants should do test rounds and make sure to submit everything on time.
- 7) **Does your proposal fulfil questions requests/ comments?** Proposals should be precise, concise and must answer to requested questions, which are designed to correspond to the applied evaluation. Omitting requested information will almost certainly lead to lower scores and possible rejection.
- 8) **Have you maximised your chances?** There will be strong competition. Therefore, edit your proposal tightly, strengthen or eliminate weak points.
- 9) **Have you submitted your proposal before the deadline?** It is strongly recommended not to wait until the last minute to submit the proposal. Failure of the proposal to arrive in time for any reason, including network communications delays, is not acceptable as an extenuating circumstance. The time of receipt of the message as recorded by the submission system will be definitive.
- 10) **Have you provided the necessary annexes?**
- 11) **Do you need further advice and support?** You can reach out to the Open Call team via evaluation@agrobofood.eu. Technical team can provide assistance to the extent possible, **up to May 28th at 17:00 CET**.

Do not forget that it is mandatory for the SME to have a valid VAT number during contract preparation time.

7 Points of Contact

Digital Innovation Hub by Region	Countries	Name	Contact
Regional Cluster Network Coordinator		Erik Pekkeriet	erik.pekkeriet@wur.nl
North West Europe – WR	The Netherlands, Belgium, Luxemburg, United Kingdom, Ireland	Erik Pekkeriet	erik.pekkeriet@wur.nl
North East Europe - DTI	Denmark, Iceland, Norway, Sweden, Finland, Estonia, Latvia, Lithuania, Belarus	Jacob Kortbek	jkk@teknologisk.dk
France and Italy - CEA	France, Italy	Farzam Ranjbaran	farzam.ranjbaran@cea.fr
Iberia - EURECAT	Spain, Portugal	Jesús Pablo González	jesuspablo.gonzalez@eurecat.org
Central Eastern Europe - BIOS	Slovenia, Croatia, Bosnia and Herzegovina, Serbia, Romania, Moldova, Ukraine, Bulgaria, North Macedonia, Albania, Montenegro	Marko Prokin	prokin.marko@biosense.rs
Central North Europe - Fraunhofer	Germany, Switzerland, Austria, Czechia, Poland, Slovakia, Hungary	Ahmad Issa	ahmad.issa@ipa.fraunhofer.de
East Med - AUA	Greece, Turkey, Cyprus, Israel	Michael Koutsiaras	mqkoutsiaras@aua.gr