

Joint Call for Proposals

ERA-NET Cofund on Sustainable Crop Production

- SusCrop -



SusCrop
ERA-NET

Deadline for submission of pre-proposals:

April 4, 2018, 13:00 h (CEST)

Deadline for submission of full proposals:

August 31, 2018, 13:00 h (CEST)

Guidelines for Applicants

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1. Background

One of the Grand Societal Challenges of the 21st century is to ensure food and nutrient security for a growing population under climate change and pressure on natural resources.

Thus, sustainable crop production needs to be secured and enhanced. Current food production methods utilise excess energy, water, pesticides and chemicals. New ways of sustainable crop production are necessary to increase productivity, reduce the amount of used chemicals and/or improve the quality of the crops. This will be crucial to maintain access to affordable safe and nutritious food for a healthy life, and to serve the increasing demand for industrially used biomass whilst keeping and improving a healthy environment, natural habitats and increasing biodiversity. Indeed all aspects of sustainability need to be covered: environmental, economic and social and cultural.

Modern crop production must be addressed by taking into account the whole food value chain, crop diversity and resilience, resource use efficiency, nutrient recycling, ecosystem services, limiting negative environmental impacts, integrated pest management, reducing and re-using waste and achieving food and nutritional security. To meet this challenge, the EU Member States established *inter alia* the Joint Programming Initiative on Agriculture, Food Security and Climate Change: FACCE-JPI (<https://www.faccejpi.com/>). FACCE-JPI developed a strategic research agenda focusing on five core research themes. In this context the ERA-NET Cofund activity SusCrop was initiated to address the core research theme 2 “Environmentally sustainable intensification of agricultural systems”.

SusCrop brings together owners and managers of national and regional R&D&I programmes of EU Member States, EU-associated Countries and third countries with significant experience in research funding and coordination.

This SusCrop co-funded Call aims to attract proposals focused on Sustainable Crop Production in order to tackle the societal challenges of the 21st century. To achieve this, funding provided by national and regional programmes of Member States and other countries will be combined with co-funding from the European Commission to launch this joint Call for transnational research projects addressing sustainability and resilience of crop production.

SusCrop aims to connect partners with different but complementary scientific and technological expertise to maximise resources and share risks, costs and skills.

The SusCrop co-funded Call will support **basic** and **applied** crop research.

Participating funding organisations and countries

The following funding organisations will be participating in this joint Call for transnational collaborative research projects:

-  Forschungszentrum Jülich GmbH (JUELICH/BMBF), Germany
-  Agence Nationale de la Recherche (ANR), France
-  Norges forskningsråd (RCN), Norway
-  Deutsche Forschungsgemeinschaft e.V. (DFG), Germany
-  Department of Agriculture, Food and the Marine (DAFM), Ireland
-  Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (TUBITAK), Turkey
-  Sihtasutus Eesti Teadusagentuur (ETAg), Estonia
-  The Secretary of State for Environment, Food and Rural Affairs (DEFRA), United Kingdom

-  Narodowe Centrum Badan i Rozwoju (NCBR), Poland
-  Fonds de la Recherche Scientifique FNRS (F.R.S.-FNRS), Belgium
-  Ministry of Agriculture and Forestry (MMM), Finland
-  Latvijas Lauksaimniecibas un meza zinatnu akadēmija biedriba (LAAFS), Latvia
-  Agriculture and Food Development Authority (TEAGASC), Ireland
-  Ministry of Food Agriculture and Livestock (TAGEM), Turkey
-  Nederlandse Organisatie voor Wetenschappelijk Onderzoek (NWO), Netherlands
-  Ministerio de Economía, Industria y Competitividad (MINECO) through the State Research Agency, Spain
-  Centro para el Desarrollo Tecnológico Industrial, E.P.E. (CDTI), Spain
-  Bundesministerium für Nachhaltigkeit und Tourismus (BMNT, former BMLFUW), Austria
-  Maaeluministeerium (MEM), Estonia
-  Ministry of Environment and Food (MFVM), Denmark
-  Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR), Italy
-  Unitatea Executiva pentru Finantarea Invatamantului Superior, a Cercetarii, Dezvoltarii si Inovarii (UEFISCDI), Romania
-  Agriculture and AgriFood Canada (AAFC), Canada
-  Ministry of Agriculture (FM), Hungary

2. Project areas and scope

The aim of the Call is to support scientifically excellent transnational research, development and innovation projects that contribute to the improvement of sustainability and resilience of crop production.

The submitted proposals must be multidisciplinary and should address **at least one** of the following topics:

- I. **Enhancement of predictive breeding technologies and development of new genotypes leading to new phenotypes and crop varieties for improvement of plant health, protection, production and resilience**
- II. **Development and exploitation of novel integrated pest and crop management methods and practices**
- III. **Improvement of resource-use efficiency of crops and cropping systems**
- IV. **Systemic research on agricultural crops as part of an ecosystem including interactions between plants and other organisms (“the plant as a meta-organism”)**

The Call is open for both fundamental and applied research.

This includes research on basic biological processes relevant for crop improvement and/or industrial research and development actions.

Regarding all topics, applying research consortia should clearly state how their project aims will be relevant and/or contribute to the UN Sustainable Development Goals (<http://www.un.org/sustainabledevelopment/sustainable-development-goals/>) including the sustainability and resilience of crops or cropping systems, considering environmental challenges due to climate change, the scarcity/limitation of natural resources etc.

It is encouraged that proposals include bioinformatics along with information and communication technology (ICT) sciences and that they demonstrate how these will be used to promote innovation.

→ Please carefully check the national/regional funding regulations (under Call Documents on <https://www.submission.suscrop.eu>) because some of the topics described and types of research may not be suitable/eligible for all funding organisations.

Funding will be provided for scientifically and technologically excellent projects managed by universities, other research organisations and companies from SusCrop partner countries. Funding will follow the *nationality principle* meaning each participating national or regional funding agency will fund its respective national/regional research partners in a particular project consortium.

Research project coordinators and their partners must follow the corresponding national/regional funding regulations and limitations which can be downloaded from the Call Documents in the submission portal (<https://www.submission.suscrop.eu>).

In addition, applying research consortia are encouraged to interact with and/or include partners of the private sector (e.g. SMEs), stakeholders and/or end-users (e.g. farmers) while preparing the proposal and/or carrying out the project. Where possible SMEs and other stakeholders should be encouraged to participate in the consortia, to enhance impact, facilitate knowledge exchange and uptake of results to deliver measurable benefits to Sustainable Crop Production in Europe. However, the inclusion and support of any type of

stakeholder as an active partner in the research consortia depends on the national/regional funding regulations defined by the funding organisation (see Call Documents in the submission system at <https://www.submission.suscrop.eu>).

Further, projects are required to consider the following principles:

-  All project partners should contribute to, and benefit from, equitable and balanced cooperation.
 -  Results of collaborative projects must be shared within the research consortium through a controlled process that adequately protects and equitably allocates intellectual property used in, and generated during, joint research and development.
 -  Each **full proposal** must include a one page Data Management (DM) Plan to ensure the availability of data generated by the research proposed. Applicants are encouraged (but not obliged) to utilise available DM services. Further information on the development and preparation of a data management plan is provided in the document “Guidelines for Applicants” (download from <https://www.submission.suscrop.eu>).
 -  Each **pre-proposal** must allocate an appropriate budget for communication, dissemination and exploitation of the results, whereas each **full proposal** must also include a one A4-page plan for communication, dissemination and exploitation of the results and an appropriate budget for those activities. Applicants are also advised to take into consideration the guidelines on “Communicating EU Research & Innovation” by the European Commission (download from http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm_en.pdf).
- Exploitation of the project results can aim at different target groups, support policymakers, and be used in industry and/or education etc., as appropriate, particularly from applied research proposals.

2.1. Project budgets and project duration

The project duration must not exceed 3 years. Project budgets must convincingly allow the achievement of the project goals and must not exceed national or regional funding limits for each partner.

2.2. Budget & funding modalities

Funding of project partners is provided by the national or regional funding organisations according to the **national/regional funding regulations** (under **Call Documents** on <https://www.submission.suscrop.eu>). Note that national/regional budgets differ, which limits funding possibilities for lower ranked proposals.

All project partners are required to sign a Consortium Agreement (CA) before the official project start or in any case no later than three months of the project start, addressing the points given in the *Consortium Agreement guidelines* (available on <https://www.submission.suscrop.eu>). It is advisable to contact the respective funding organisations in order to check if there are the national and/or regional requirements about the obligation of the signature of a Consortium Agreement before applying for a grant.

3. SusCrop eligibility requirements

SusCrop has developed formal criteria that are applied in the eligibility check and evaluation process to select the best projects. These criteria have been agreed on by all participating national/regional funding organisations and the SusCrop Call Steering Committee and are described below.

-  Projects must address the scope of the Call as outlined in the Call Text (Announcement) and in Section 2 of this document. Pre-proposals not addressing the scope of the Call will be rejected. **Additionally, applications should fit to the specific remit of the national/regional funding organisations; it is strongly recommended, that applicants contact their National/Regional Contact Persons before submission.**
-  Pre-proposals and full proposals must be written in English.
-  Pre-proposals must be submitted by **April 4, 2018 (13:00 CEST)** via the SusCrop submission website (<https://www.submission.suscrop.eu>).
-  Full proposals must be submitted by **August 31, 2018 (13:00 CEST)** via the SusCrop submission website (<https://www.submission.suscrop.eu>).
-  If national/regional forms are required, these must be submitted directly to the national/regional agency by the deadlines stated in the national/regional funding regulations (see Call Documents at <https://www.submission.suscrop.eu>)
-  The project duration must not exceed 3 years.
-  Consortia must include at least **three** eligible partners requesting funding from **three** different SusCrop member countries who contribute funds to the Call.
-  If a proposal does not meet the minimum number of partners, or if **one or more** partners are ineligible, it will be rejected before the pre-proposal evaluation phase.
-  Project outputs are expected to provide benefits to all partner countries. Consortia need to be balanced between countries both in terms of number of partners and distribution of work; such that all project partners contribute to and benefit from an equitable and balanced cooperation.
-  The requested funding budget of each partner must not exceed national or regional funding limits (please check the national/regional funding regulations (under Call Documents on <https://www.submission.suscrop.eu>). No single applicant, region or country can represent more than 70% of the budget of the proposal.
-  Funding is provided according to the “nationality principle”, meaning that each participating national/regional funding agency funds their respective national/regional researchers in a particular project consortium. Funding is subject to national/regional eligibility regulations (see Call Documents at <https://www.submission.suscrop.eu>) and project partners should check their eligibility for funding prior to submission.
-  Partners from countries not participating in the Call may participate in a project at their own expense, if their contribution is important to achieve the project goals. The coordinator should take steps to ensure that sufficient funds are secured from these additional partners, and evidence of the availability of funds should be provided prior to project submission (Letter of Commitment). The same applies for partners who are not eligible for or do not seek national/regional funding from the agencies participating in the Call. **Partners participating at their own expense do not count towards the minimum number of participants.**

- The coordinator of any applying consortium must be from an organisation that is eligible for funding from one of the agencies participating in the Call, i.e. an organisation that plans to participate at their own expense, without public funding provided via the SusCrop joint call, cannot act as consortium coordinator.

Within a joint proposal, each partner will be the contact person for the relevant national or regional funding agency. All research groups agree to abide by the rules and agreements of the SusCrop call.

3.1. Responsibility of the project coordinator

- The project coordinator will lead the consortium through the application procedure and is fully responsible for the overall project coordination.
- The project coordinator has to make sure the project complies with SusCrop requirements as detailed above and in the Call Text (Announcement). While all partners should resolve possible queries with their respective national or regional funder(s), the project coordinator has a responsibility to coordinate these activities in close contact with the SusCrop Call Office and the contact persons of his/her national /regional funding organisation.
- All communication with SusCrop concerning the project will be through the project coordinator. Consequently, the project coordinator has to disseminate information provided by SusCrop to all consortium partners.
- Before submission of a pre-proposal the coordinator has to make sure that all (three or more) consortium partners requesting funding from SusCrop are eligible for support from their respective national/regional SusCrop funding organisations. For additional partners who are not eligible for support from at least one of the SusCrop funding organisations (e.g. international partners from non-SusCrop countries) the coordinator has to ensure that each of these partners possess the required financial security to fulfil their tasks within the project via a letter of commitment/support. This letter can be uploaded as pdf file (max. 5 MB size) only by the coordinator in a separate upload field in the submission system under www.submission.suscrop.eu. A template for such a letter is provided there under the Call Documents.
- The project coordinator is responsible for the timely submission of the pre- and full proposal via the submission system.

Note that the inclusion of a non-eligible partner without a letter of commitment in a proposal will result in the rejection of the entire proposal.

3.2. Project funding

All consortium partners must prove sufficient financial stability to conduct the project properly. National/regional funding organisations will check the financial status of partners from their respective country/region.

4. Application procedure

4.1. Application scheme

The application process is divided into two steps (pre-proposals and full proposals).

4.2. Pre-proposal submission

In the first step, pre-proposals are submitted via the SusCrop submission website (<http://www.submission.suscrop.eu/>) before the submission deadline of **April 4, 2018, 13:00 (CEST)**.

The information given in the pre-proposal is binding and changes (composition of consortia, objectives of the project, requested budget or other fundamental changes in the project) between the pre-proposal and the full proposal are subject to approval by the funding organisations involved. Thus, any changes between pre- and full proposals must be communicated to the SusCrop Call Office (suscrop-call@agencerecherche.fr) before the evaluation phase with detailed justifications and will only be allowed by the Steering Committee under exceptional circumstances.

Pre-proposals that are submitted correctly and within the deadline will be checked for eligibility. The eligibility check will focus on the “General Eligibility Criteria” as laid down in the Call Text (Announcement) and “National/Regional Regulations and Eligibility Criteria (see Call Documents at <http://www.submission.suscrop.eu/>). **Non-eligible pre-proposals will result in rejection of the entire project.** Only proposals, which meet all eligibility criteria will be considered for evaluation. Eligible pre-proposals will be peer-review evaluated and ranked by an international expertpanel (IEP) according to the following criteria:

 **Relevance** of the project to the scientific scope of the co-funded Call.

 **Excellence**

- Clarity and pertinence of the objectives,
- Soundness of the concept,
- Credibility of the proposed methodology,
- Quality and expertise of the consortium as a whole,
- Degree of novelty and innovation of the proposed research.

 **Impact**

Extent to which the outputs of the project will be relevant for, or contribute to, impacts on:

- Economic aspects,
- Environmental aspects,
- Societal aspects such as Ethical, Legal and Social Aspects (ELSA),
- Transnational added value,
- Knowledge generation.

***Note:** Depending on the type of the research project, **basic** or **applied** crop research, the expected relevance for or contribution to impacts on the different sub-criteria may vary.*

Each reviewer/expert will be independent of any funding organisation involved in this call. The SusCrop Call Office will ensure that no Conflict of Interest exists concerning the experts and the proposals evaluated. Each pre-proposal will be reviewed by up to three reviewers/experts from different institutions.

Following this, the SusCrop Call Steering Committee (composed by representatives of all SusCrop funding organisations) will select proposals for the second application step based on the ranking proposed by an international panel of external reviewers.

The SusCrop Call Office will inform the project coordinators of the results of the first assessment step via e-mail from **Mid-June, 2018**. Coordinators of selected pre-proposals will be invited to submit a full proposal via the SusCrop submission website (<http://www.submission.suscrop.eu/>).

Completing the pre-proposal form

-  Please fill in the pre-proposal form in the SusCrop submission system under www.submission.suscrop.eu and check that all fields are completed with the required information.
-  The project description should:
 - provide a scientific/technological overview,
 - specify the expected project impact and relevance to the call scope,
 - describe the added value for European research and Innovation,
 - provide information on the project management and responsibilities of the project partners and give a short overview of the division of the collaborative project into work packages,
 - be in line with the requirements stated in the Call Text (Announcement) and sections 2 and 3 of this document.

The space in the pre-proposal part “Project description” is limited to 20,000 characters incl. spaces (~ 5 pages DIN A4, Arial 11pt, line pitch at least 1.15). Implementation of up to three graphics/images is allowed (formats must be jpg, png or gif, max. resolution 600x600px, max. file size 2MB). No additional documents will be considered.

Note: Although no specific description of the data management of the proposed project is foreseen in the pre-proposal, the consortia must consider the costs for data management and communication & dissemination activities in their pre-proposals. Please also check the national/regional funding regulations, if these costs can be covered by your funding organisation.

4.3. Full proposal submission

The SusCrop Call Office will invite the coordinators of the selected pre-proposals via e-mail from **Mid-June 2018**.

The deadline for submitting full proposals via <http://www.submission.suscrop.eu/> is **August 31, 2018 (13:00 CEST)**. Only full proposals submitted by consortia explicitly invited by the Call Office will be accepted.

The information given in the pre-proposal is binding and changes (composition of consortia, objectives of the project, requested budget or other fundamental changes in the project) between the pre-proposal and the full proposal are subject to approval by the funding organisations involved. Thus, any changes between pre- and full proposals must be

communicated to the SusCrop Call Office (suscrop-call@agencerecherche.fr) before the evaluation phase with detailed justifications and will only be allowed by the Steering Committee under exceptional circumstances.

The basic project data, such as project title, project acronym, project area, project duration, consortium composition, project coordinator, total requested funding, requested funding by each partner etc., provided in the pre-proposal cannot be changed in the full proposal phase.

Full proposals that are eligible according to the above stated eligibility criteria, submitted correctly and within the deadline will undergo peer-review evaluation by an international panel of experts with relevant expertise in the scientific field(s) concerned. Each expert is independent of any funding organisation involved in this call and no Conflict of Interest will exist in relation to the proposal evaluated. Each proposal will be reviewed by at least three external reviewers/experts from different institutions. The composition of the international evaluation panel is decided by the SusCrop Call Steering Committee. Full proposals are subjected to a thorough quality assessment according to the evaluation criteria:

Excellence

- Clarity and pertinence of the objectives,
- Soundness of the concept,
- Credibility of the proposed methodology,
- Quality and expertise of the consortium as a whole,
- Degree of novelty and innovation of the proposed approach.

Impact

Extent to which the outputs of the project will be relevant for, or contribute to, impacts on:

- Economic aspects,
- Environmental aspects,
- Societal aspects such as Ethical, Legal and Social Aspects (ELSA),
- Transnational added value,
- Knowledge generation.

*Note: Depending on the type of the research project, **basic** or **applied** crop research, the expected relevance for or contribution to impacts on the different sub-criteria may vary.*

Quality and efficiency of the implementation

- Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables,
- Appropriateness of the management structures and procedures, including risk and innovation management,
- Complementarity of the participants and extent to which the consortium as a whole brings together the necessary expertise,
- Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role,
- The project budget is appropriate to the planned work and allows the achievement of the project goals.

For both pre- and full proposal stages evaluation scores will be awarded for each of the three main criteria. Sub-criteria are aspects that the expert will consider in the assessment of that criterion. Each criterion will be scored out of 5 and equally weighted.

The 0-5 scoring system for each criterion indicates the following assessment:

- 0 - The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.*
- 1 - Poor. The criterion is inadequately addressed, or there are serious inherent weaknesses.*
- 2 - Fair. The proposal broadly addresses the criterion, but there are significant weaknesses.*
- 3 - Good. The proposal addresses the criterion well, but a number of shortcomings are present.*
- 4 - Very Good. The proposal addresses the criterion very well, but a small number of shortcomings are present.*
- 5 - Excellent. The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.*

The **threshold mark** for individual criteria will be **3**. The overall **threshold mark**, applying to the sum of the three individual scores, will be **10**. Thresholds will only apply during the full proposal evaluation.

At the end of the evaluation process, the evaluators will decide on one final ranking list of proposals. Based on the ranking list and the available funding, the SusCrop Call Steering Committee will decide which projects will be recommended for funding according to national and/or regional budget availability. The final decisions will be made according to the national rules of the involved funders.

The coordinators of the research consortia will be simultaneously informed about funding decisions. Evaluation summaries will be provided. The coordinators of the research consortia are responsible for forwarding all information to their consortium partners.

Completing the full proposal form

-  Please check the information given in your full proposal and make sure it is correct.
-  No changes in the core data submitted with the pre-proposal are allowed. If you feel that any changes are necessary, please contact the SusCrop Call Office under suscrop-call@agencerecherche.fr for approval.
-  Please follow the template and be aware that the project description should allow the evaluators to assess properly all evaluation criteria as laid down in the Call Text (Announcement) and in this document.
-  Your full proposal must include a separate
 - Data management plan (**one A4 page**).
 - Communication, dissemination and exploitation plan, reaching out to the wider public (**one A4 page**).

- The project description is limited to a maximum of ~20 DIN A4 pages (Arial 11pt, line pitch at least 1.15). Up to 1 additional DIN A4 page (Arial 11pt, line pitch at least 1.15) is foreseen for the publishable project summary. Different subsections may vary in length. Implementation of up to six graphics/images is allowed (formats must be jpg, png or gif, max. resolution 600x600px, max. file size 2MB). No additional documents will be considered. More updated details on the full proposal submission will be published on <https://www.suscrop.eu> when the server is re-opened for full proposal submission.

4.4. Information, communication & further assistance for applicants

- Each funding organisation has nominated contact persons (see Call Documents in the submission system at <https://www.submission.suscrop.eu>) who will provide information about specific national or regional regulations and requirements. **It is strongly recommended to contact the relevant contact persons prior to the proposal submission process.**
- The SusCrop Call Office is the central contact point for all official communication between the project consortium and the SusCrop Call Steering Committee. The project coordinator is the only contact person for the SusCrop Call Office in all relevant questions during the application procedure. The project coordinator must provide all relevant information to the partners (see also Section 3.1).
- For technical questions and problems with the submission system, please contact the technical helpdesk at Project Management Jülich (ptj-suscrop@fz-juelich.de).
- For further assistance, please check the SusCrop submission website at <https://www.submission.suscrop.eu>.
- For additional information and support, please refer to the nominated contact person of the relevant national/regional funding organisation(s) listed under the Call Documents.

5. Ethical aspects

Ethics is an integral part of research activities funded by the European Union within the H2020 and ethical compliance is considered as pivotal to achieve research excellence. This SusCrop call is co-funded by the European Union, and therefore, all proposals must describe ethical issues raised and how they will be addressed so as to conform to National, European and International regulations. Guidance on ethics within H2020 is provided in the [H2020 online manual](#) and a guideline for self-assessment can be found [here](#) and applied to this Call.

If any ethical issues are expected to arise during the proposed project, these must be addressed in the pre- and full proposal. Proposals may be rejected from funding on ethics grounds if they do not comply with the European and national/regional legislation.

6. Ethical, Legal and Social Aspects (ELSA)

Ethical, Legal and Social Aspects (ELSA) approach refer to research activities that anticipate and address ethical, legal and social aspects of emerging life scientific fields like, genetics genomics, biotechnology and nanotechnology but also information and computer technologies. The basic principles of almost all ELSA methodologies are proximity, anticipation

and interaction and interdisciplinarity¹. Applicants may apply ELSA approach for studying the possible societal impact of their project in the near or distant future related to their research topics within the current call.

7. Life Cycle Assessment (LCA)

LCA is an internationally standardised methodology ([ISO 14040](#): 2006) which helps to quantify the environmental pressures related to goods and services (products), the environmental benefits, the trade-offs and areas for achieving improvements taking into account the full life-cycle of the product².

The applicants in this SusCrop call are encouraged to use [LCA](#) or other internationally accepted methodology in order to assess the environmental implication and potential environmental and social benefits of products, services, processes and technologies to be developed or improved within the project.

8. Data management issues

Data Management (DM) is an essential component to the success of projects using systems/synthetic biology approaches and/or tools in bioinformatics. Representatives from academia, industry, funding agencies, and scholarly publishers designed and jointly endorsed a concise and measurable set of principles referred to as FAIR Data Principles³ with the intention to provide a guideline for reusability of data holdings. Four foundational principles – Findability, Accessibility, Interoperability and Reusability – are a necessity of data management. The EU Commission promotes the [FAIR Data Management](#) approach within H2020.

Participation in this SusCrop call requires high quality DM standards to ensure the overall sustainability of crop production research and its expected outcome(s). Thus, each **full proposal** must include a one page Data Management Plan to ensure the availability of data generated by the research proposed. Applicants are encouraged (but not obliged) to utilise available DM services. The DM plan should be written according to the information in *Annex 1* of this document **only during the full proposal stage**. In case the proposed measures and activities of the DM Plan are expected to cause additional costs, **an appropriate budget must be included during pre-proposal submission**.

9. Communication, dissemination and exploitation of the results

Communication and dissemination of project activities and exploitation of the results are essential part of the Responsible Research and Innovation approach. Responsible Research and Innovation means that societal actors (researchers, citizens, policy makers, business, third sector organisations, etc.) work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society.

¹ Zwart H., Nelis A. (2009) What is ELSA genomics? Science and Society Series on convergence research. EMBO Reports 10 (6), 1-5. <http://link.springer.com/article/10.1186/s40504-014-0011-x>

² <http://ec.europa.eu/environment/ipp/lca.htm>

³ <http://www.nature.com/articles/sdata201618>

Each consortium passed into the full proposal phase has to develop and submit a one A4-page plan for communication, dissemination and exploitation of the results. Further guidance to write this plan is described in *Annex 2* of this document.

In addition, general guidance on communication planning for projects within the H2020 programme is available under:

http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm_en.pdf.

Proper reference must be given to **FACCE-JPI** and **SusCrop** in all related publications, exhibitions, lectures and press information.

10. Open Access

Correspondingly with the EU Commissions [Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020](#) where possible, research data and scientific publication generated with SusCrop funding should be made available in an open access repository whenever feasible, but taking account *inter alia* of European and national data protection rules.

Further to ensuring adherence with the principles of open access all beneficiaries of SusCrop funding will be encouraged to:

-  As soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications.
-  Aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publication(s).
-  Ensure open access to the deposited publication - via the repository - at the latest:
 - on publication, if an electronic version is available for free via the publisher,
 - or
 - within six months of publication (twelve months for publications in the social sciences and humanities) in any other case

11. Confidentiality

SusCrop ensures complete confidentiality to applicants, i.e., the proposal will only be read by the national or regional funding organisations involved and by the international experts, and be handled by the SusCrop Call Office. All persons in charge will have signed a confidentiality agreement before they get access to the proposals.

12. Conflict of Interest

In order to exclude individual conflicts of interest, the applicants are encouraged to provide a maximum of two persons (e.g. direct competitors), who should be excluded from reviewing the proposal. The full name(s), affiliation (research institution, organisation) and reason for refusal of the expert(s) has to be provided during proposal submission. The information will be confidentially treated.

13. Project start and follow-up of the projects

All project partners are required to sign a Consortium Agreement (CA) before the official project start or in any case no later than three months after the project start. On request, the CA must be made available to the national or regional funding organisation(s), together with any other information required by national or regional regulations. The [DESCA model](#), recommended by the European Commission can be used, but it is not an obligation.

The follow up of each project is conducted by each of the national or regional funding organisations involved, according to national or regional regulations and to individual contracts between applicants and agencies/ministries.

In addition, project coordinators are required to provide both a **mid-term and final report** as well as a non-confidential **summary of the outcomes** of their project for publication via the website (<https://www.suscrop.eu>) and the SusCrop newsletter. Hereby, SusCrop wants to reach out to the wider research community and interested public, therefore a summary of research results is needed that can be understood by a wide audience. SusCrop will provide a template for this summary as well as for the mid-term and final reports.

The coordinators of the funded projects are also obliged to present their projects at three seminars to the ERA-NET SusCrop partners, other interested parties and relevant stakeholders:

-  an initial research project seminar (kick-off meeting), explaining objectives and expected results;
-  a midterm seminar (mid-term meeting), presenting the mid-term reports including project status, preliminary results and future work;
-  a final seminar (end term meeting) presenting the final reports including research results and assessment of possible impact on sustainable crop production and future actions required.

The three seminars will be organised by SusCrop. The costs for attending the status seminars should be covered by the allocated project budget. The objective of the status seminars is the monitoring of the projects funded through SusCrop as well as providing networking and future collaboration opportunities. Please note that the mid-term seminars are confidential and the final seminars non-confidential – presentations from final seminars will be disseminated and shared outside SusCrop.

SusCrop Call Office

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SusCrop Coordination and technical helpdesk for the submission system

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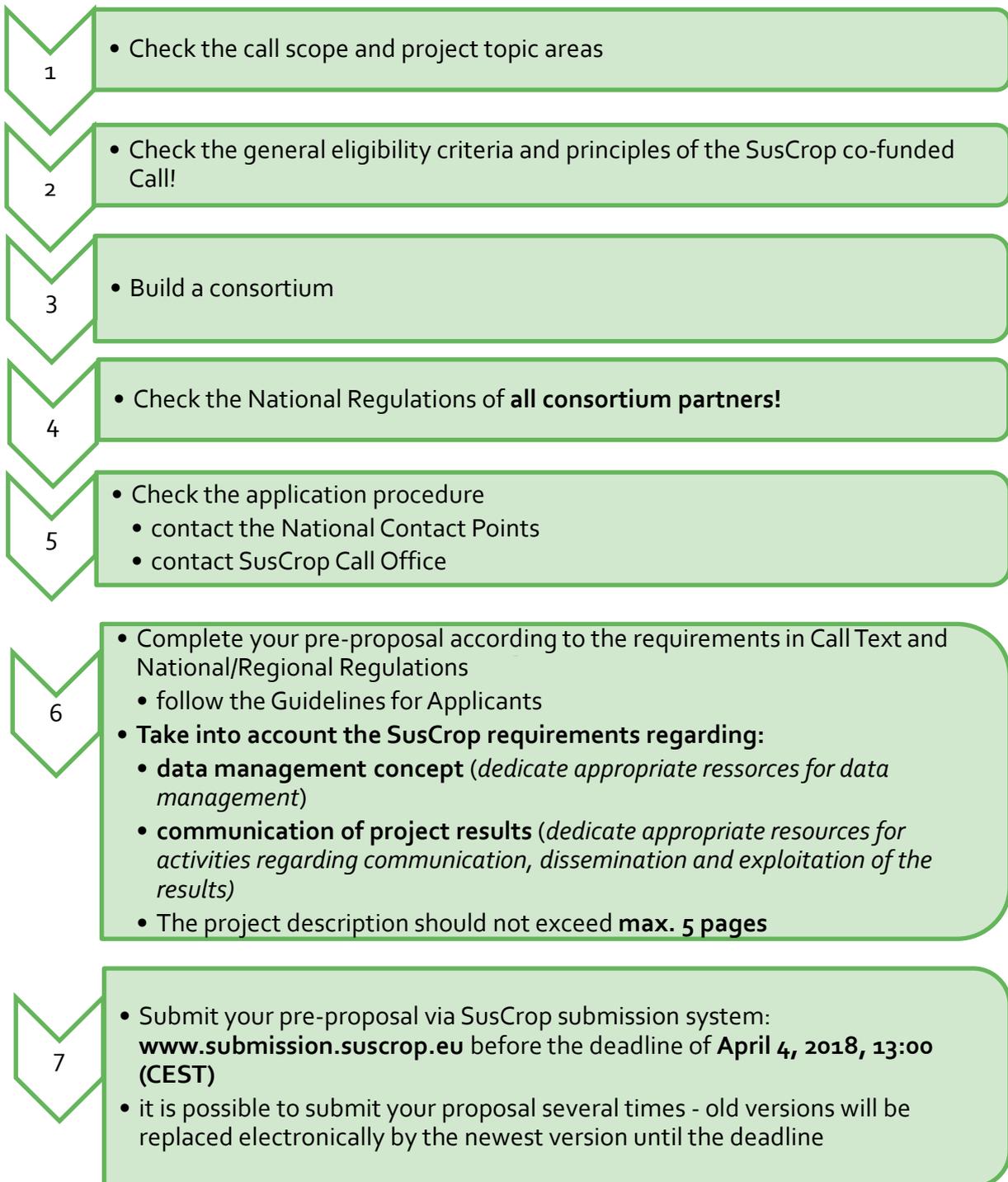
ptj-suscrop@fz-juelich.de

SusCrop Submission Webpage: <https://www.submission.suscrop.eu/>

SusCrop webpage: <https://www.suscrop.eu/>

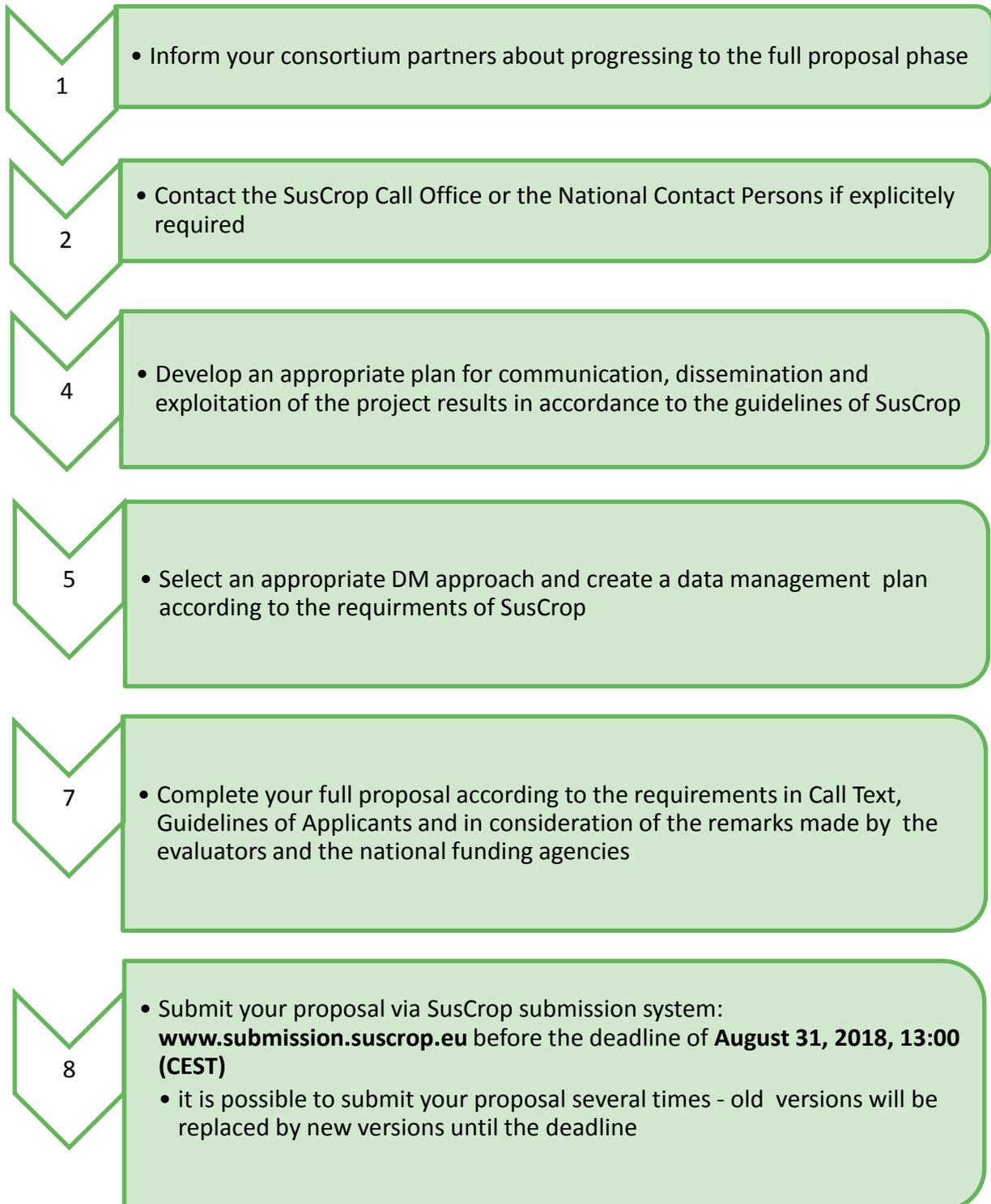
15. Quick guide “How to apply to the SusCrop Call”

Pre-proposal phase



Full-proposal phase

(Only relevant for consortia explicitly invited by the SusCrop Call Office to submit full proposals)



ANNEX 1 Data Management Plan

Data management is an essential component to the success of projects using systems/synthetic biology approaches and/or tools in bioinformatics. Representatives from academia, industry, funding agencies, and scholarly publishers designed and jointly endorsed a concise and measurable set of principles referred to as FAIR Data Principles⁴ with the intention to provide a guideline for reusability of data holdings. Four foundational principles – Findability, Accessibility, Interoperability and Reusability– are a necessity of data management. The EC recently published Guidelines on [FAIR Data Management in Horizon 2020](#).

Fulfilling the FAIR principles needs the use of software platforms that enable capturing, cataloguing, and annotating data, associated with well documented SOPs, and supports interlinking data from specialized, as well as local collections. Moreover, in a systems approach, well annotated models (including parameters) must be catalogued and interlinked with relevant data. Each project should have one single starting point starting at which one can find out everything about the project.

Participation in this call requires fulfilling the FAIR principles, including the use of a cataloguing platform as described above. Therefore research data and non-data assets like algorithms, tools and workflows or metadata produced in the projects funded under this call must be: (i) machine-readable (ii) citable and (iii) must be published in a registered repository and (iv) interlinked with other project outcomes in a cataloguing platform. Privacy sensitive data that cannot be published needs to be catalogued, such that the creator of the data can be easily found for possible questions and collaboration. Data that is subject to Intellectual Property for Patents needs to be recorded and published in due course.

The repository must be registered in as a “trustworthy repository” in (i) BioSharing or (ii) re3data (Registry for Research Data Repositories). For this, resources of existing community knowledge and data management platforms in Europe shall be preferably used.

No section for data management is foreseen in the pre-proposal template.

However, the projects must consider already the cost of data management in their proposals. The help given to the applicants should enable them to (i) properly estimate what cost will be incurred by performing FAIR data management, and (ii) provide a section in the template for full proposals.

Building the data management plan should be based on existing check lists, such as the [FAIRDOM checklist document](#).

The checklist addresses: (i) responsibilities; (ii) types of study, data and models; (iii) volume and life cycle of the data; (iv) data and model processing and access policies; and finally (v) documentation and metadata.

Answering the questions in the checklist, applicants will identify and resolve key questions about their data, models, SOPs and associated metadata. The data management plan will outline how data flows and the requirements on data, metadata, storage and data transfer throughout the project and beyond the project.

⁴ <http://www.nature.com/articles/sdata201618>

The costs associated to the data management plan (*e.g.* travel expenditures of staff to data management training; salary costs of staff curators; costs of servers, storage, archiving and backup) must be derived from this and clearly presented.

Guiding questions include the following:

Generate and Store

Who will generate the data/model/SOP?

Who will receive the data/model/SOP?

What does the user need from the generator?

Where will you store data/model/SOP?

How much storage capacity will you need short term?

How will you transfer it?

How much will you keep for longer? Who is responsible for this step?

How will the data be made available for processing?

Curate

Who will curate the data/model/SOP?

How will the data/model/SOP be interlinked?

How is data tracked through processes?

How are versions of models and SOPs tracked?

Access

Are you allowed to share data?

Where, when and how will you make the data/model/SOP available?

Which public archives will you deposit your data/model/SOPs in?

How will you make the project's data/model/SOPs available in a unified way through a one-stop single starting point starting at which one can find out everything about the project?

In the pre-proposal phase, these questions can be answered in a preliminary fashion.

While developing answers for the proposal, it will also become clear who is **responsible as a contact person**, for which parts of the data management of the project.

ANNEX 2 Plan for Communication, Dissemination and Exploitation of the results

Communication and dissemination of project results is requested through **various communication routes** including scientific papers, presentations at scientific conferences, workshops, poster sessions, etc. Proper **reference** must be given to SusCrop and FACCE-JPI in all related publications, exhibitions, lectures and press information. Additionally, each project proposal should go beyond dissemination and envision how it will **communicate and reach out to a more general public**.

Each project has to submit a one A4 page plan for communication, dissemination and exploitation of results in the full proposal stage, specifying how the planned activities, including dissemination, communication and stakeholder interaction, will contribute to the impact of the project.

To fulfill the plan for communication, dissemination and exploitation of results, **projects must dedicate appropriate resources for those activities already during the pre-proposal stage**.

For a well-elaborated communication and dissemination strategy, applicants also are advised to take into consideration the EC guidelines on "[Communicating EU research and innovation guidance for project participants](#)" and read the guidelines below on communication with a wider public.

Communication and Dissemination – why is this important in planning, developing, delivering and evaluating a successful research project?

Communication is here defined as the work you do and the effort you put into informing and engaging with the wider public so they are aware of the issue your research is addressing, the question you are posing, the methods you are using to answer that question and the anticipated outcomes. Communication is in addition to '**dissemination**', the latter being focused on the production of scientific papers, posters and presentations at closed scientific congresses, and work with specialist stakeholder groups. Please include both communication and dissemination activities in your plan.

Communication activities may include activities, such as development of a website and/or app, media communications programme, social media programme, videos/podcasts, infographics/project literature, creative artwork/exhibition stands, quizzes / games / serious gaming, science fairs/open houses intended for wider audiences, meetings of targeted stakeholders, training for Consortium on aspects of communication. Please consult the national annexes of your respected funding agency for potential limitations to funding certain communication activities.

There are four clear reasons **why effective communication** is an essential element of any SusCrop funded research project:

-  European tax-payers are providing the funding for your research and are interested in knowing where their money goes and that they are receiving 'value for money'.

-  Communicating about the relevance of your research work and its potential outcomes to society and the everyday life of citizens will help ensure that your innovations – products, knowledge and thinking – are accepted and utilised by society – not ignored, nor opposed.
-  Everyone is a citizen whether President, MEP, policy-player, teacher, student, entrepreneur or industrialist who watches TV, reads the news, accesses online sources and has interests beyond their immediate network. Effective communication raises awareness of your research project and of the professionals working on it to mutual advantage, potentially laying the ground for more funding or support.
-  SusCrop wishes to ensure that the projects it selects to fund make the best use they can of the ‘results’ each of them generate – that means ensuring that as many groups in society know about the excellent work that is being conducted and their potential results so they will be taken up by decision-makers in policy, industry or science itself creating impact.

What is a Plan for Communication, Dissemination and Exploitation of the results?

It is a document that demonstrates that a Consortium has clearly thought through the rationale, target stakeholders, activities, timescales, budgets and measures incl. their key performance indicators of success behind the dissemination / communications activities it will implement as an integral part of its project plan.

The elements of a Communication Plan that will demonstrate clarity of thought and planning are likely to be:

-  Evidence that the whole Consortium are ‘on board’ with the plan and that all partners will support the actions
-  Focus on purpose/objective of each selected dissemination/communication action – Who is it for? What do we want to happen as a result?
-  Clarity on the messages that the project wishes to communicate overall and to specific groups
-  Clear understanding of what success looks like for each action
-  Description of the method to be used for delivery
-  Utilisation of resources and talents within the consortium
-  Realistic assessment of the potential impact of each action
-  Built-in time points for review and adjustment
-  Appropriate focus on internal communications within the Consortium
-  Appropriate utilisation of the services and channels provided by the EC

The Plan should be able to answer the following questions clearly:

-  What are the objectives of our Communication Plan?
-  Who are our priority audiences and why?
-  When is the most appropriate time to engage with each audience and why?
-  How does our Communication Plan create synergy with the rest of the project plan?
-  How do we justify the budget allocated to each of our proposed communications actions?
-  How are we splitting responsibility for the resources and actions across the Consortium?



Exploitation of the project results can aim at different target groups, support policymakers, and be used in industry and/or education etc., as appropriate, particularly from applied research proposals.