



Towards climate-smart sustainable management of agricultural soils

Deliverable: D3.2

Call text of the EJP SOIL 1st Internal Call

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These projects have received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement No. 862695.

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Grant Agreement: 862695

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Project title: Towards climate-smart sustainable management of agricultural soils

Project website: www.ejpsoil.eu

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Project duration: 60 months

Name of lead contractor: INRAE

Funding source: H2020-SFS-2018-2020 / H2020-SFS-2019-1

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AUTHOR:	Bartosz Adamczyk, Rosemarie Stangl, Pia Minixhofer, Elena Rodriguez
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Timeline

The Internal Call will follow a 1-step-procedure. There will be a competitive selection. A time schedule is provided below (tentative):

Action	Project calendar	Schedule
Call pre-announcement	M04	18 May 2020
Launch of the call	M05	30 June 2020
Webinar for interested applicants	M06	15 July 2020
Closing date for proposal submission	M08	18 September 2020
Proposal evaluation and selection	M08-09	September - October 2020
Notification letters sent to project coordinators	M10	16 November 2020
Contract ¹ negotiations between consortium beneficiaries and linked third parties of medium and large projects	M11	December 2020
Start of research projects	M11-12	December 2020 - January 2021
End of research projects	-/-	Depends on project size

Partnering tool

For partnering the EJP SOIL WP3 team launched **Slack Channels** (i.e. topic-specific chat rooms at www.slack.com). Access will be granted after sending an e-mail to the Call Office (EJPfirstcall@luke.fi). After access has been granted, applicants express their interest to participate and/or coordinate in one or more topic-specific Slack Channels (i.e. a type of chat room). For each topic listed in Table 1 and Annex 2 the partnering tool offers a “chat room” (i.e. “cm2”, “cm8”, “mt1”, “sr5”, “es7”, “fs2-mt4”, “es1-es2”, “ca1”) and an embedded XLS file used to summarize the information. Applicants should add the following information into the topic-specific chat rooms: Who am I? Where do I work? What is my expertise? What is my interest => participation/coordination? Finally applicants should add their name and interest to participate and/or coordinate into the XLS file.

Call Office contacts

NAME: Nils Borchard

Organisation: Luke

Phone: +358 29 5322 201

E-mail: EJPfirstcall@luke.fi

NAME: Rosemarie Stangl

Organisation: BIOS/BOKU

Phone: +43 1 47854 87401

E-mail: EJPfirstcall@luke.fi

Bartosz Adamczyk

Luke

+358 29 5322 222

EJPfirstcall@luke.fi

Pia Minixhofer

BIOS/BOKU

+43 1 47854 87406

EJPfirstcall@luke.fi

¹ Consortium Agreement; see section 7



1 Background of the Call

1.1 About the EJP SOIL

The EJP SOIL will maximize the contribution of agricultural soil towards achieving sustainability at multiple levels: **i) At the societal level:** raise public awareness and foster understanding of sustainable agricultural soil management and its contribution to food production, climate change adaptation and mitigation; **ii) At the scientific level:** develop new insights on climate-smart soil management, quantify trade-offs and synergies between agricultural production, climate change adaptation and mitigation, maintenance of soil fertility and health and other ecosystem services; gather new knowledge on carbon sequestration in soils under different conditions across Europe and its contribution to climate change mitigation; improve accounting and reporting tools for emission and removals from agricultural activities; **iii) At the operational level:** strengthen the European research community on agricultural soil management; develop harmonized soil information systems and promote their adoption; **iv) At the policy level:** develop evidence-based recommendations for policy makers at EU, national, and regional levels; establish a strategic multi-actor approach and initiate a science-policy-practitioner-society dialogue on agricultural soil health and adequate agricultural practices to support the adoption of the policy recommendations; foster the uptake of climate-smart sustainable soil management practices by practitioners.

1.2 Rationale of this call

As EJP SOIL works on important societal issues in an integrated manner, any innovation developed within the framework of EJP SOIL will meet a societal need and will therefore be relevant for European and global markets. Through its knowledge framework, EJP SOIL improves its innovation capacity using 1) **knowledge development**, 2) knowledge sharing and transfer, 3) knowledge organization and storage for 4) knowledge application in different areas. **Knowledge development** will be supported by the EJP SOIL through a large number of specific research and innovation projects *via* internal (i.e. WP3 “Internal Calls”) and external EJP SOIL calls. The **overall objective of this internal call** is to fund stocktaking activities, syntheses and research projects open to EJP SOIL beneficiaries and linked third parties according to the consortium agreement to fill research and development gaps identified by the EJP SOIL’s WP2 “Roadmap for EU Agricultural Soil Management research”.

1.3 Scope and expected impacts and outputs of EJP SOIL

The present EJP SOIL will contribute to long-term alignment of research strategies in two main ways: **i)** by developing a shared vision, and **ii)** establishing platforms for networks of soil scientist and other soil stakeholders in Europe. The shared vision will be developed among consortium beneficiaries and will address desirable soil futures and ways to attain them. This process was initiated during the preparation of the proposal and will continue with the preparation of a roadmap for soil research, setting objectives, actions and milestones. Internal calls will foster alignment between the EJP SOIL beneficiaries, linked third parties and important players of European research in the areas of agricultural



sciences, ecology, soil and climate sciences. To facilitate relevant knowledge development the EJP SOIL will perform **i) synthesis and stocktaking activities and ii) research and integrative projects:**

Stocktaking activities refer to the preparation of an inventory. This term is used when an inventory of given information is prepared by searching in a systematic way across the EJP SOIL participating countries.

Synthesis is used to gather, review and synthesise information without systematic country scale inventory.

Research projects will answer a research question or a set of research questions. A Research Project must include a description of a defined protocol, clearly articulated goal(s), defined methods and outputs, and a defined start and end date.

Evaluated and selected stocktaking activities, syntheses and research projects of 1st internal EJP SOIL call will get funded after approval by the Board of Project Managers; for more details see section 2 of this document.

2 Call topics

Project consortia should apply to one of 8 EJP SOIL topics:

Table 1: Targeted EJP SOIL topics of the 1st internal call; project size, number of projects that can be granted and available funding are also provided. For detailed description see Appendix 2. Project size is explained in detail in section 4.3.

EJP SOIL topic ID [†]	Title	Number of projects, their size (PM)	Indicative available funding per project
CM2	Quantification of the potential of agricultural soils to sequester more carbon at the regional / national scale in the different partner countries.	1 large sized project (350)	4.03 M€
CM8	Evaluating soil management options for specific objectives: Trade-offs between soil organic carbon sequestration, greenhouse gases and/or N and P losses	2 medium sized projects (2 x 150)	2*1.73 M€
MT1	Good knowledge of the present status of agricultural soils: Innovative techniques for soil mapping and assessing spatial and temporal variation of soil properties	2 medium sized projects (2 x 150)	2*1.73 M€
SR5	Landscape analyses: Erosion processes	1 medium sized project (150)	1.73 M€
ES7	Enabling conditions to implement improved management options and tools to monitor soil	1 small sized project (100)	1.15 M€



These projects have received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement No. 862695.

EJP SOIL topic ID [†]	Title	Number of projects, their size (PM)	Indicative available funding per project
	quality: Analysis on how soil indicators could be used to support CAP measures.		
FS2/MT4	Innovative soil management practices in Europe and their suitability for European farming systems	1 stocktake (40)	460 k€
ES1/ES2	Methodologies and tools to assess the contribution of soils to ecosystem services / for assessing soil quality	1 stocktake (40)	460 k€
CA1	Evaluating soil management options for the specific objective of Climate change adaptation	1 synthesis (20)	230 k€

[†] EJP SOIL topic ID: CM Climate change mitigation; CA Climate change adaptation; FS Food security; MT Multi-topics; ES Ecosystem services; SR Soil restoration

3 Budget, funding modalities and coordinators' role

The EJP SOIL is a 5-year project that runs from February 2020 (M01) to January 2025 (M60). The EJP SOIL falls into the concept of a co-fund action. **For the 1st call of EJP SOIL projects a budget of maximum 15 M€ has been allocated** (see also section 4.6 and Consortium Agreement of the EJP SOIL). General information relevant for consortium building (e.g. project size, number of consortium beneficiaries and linked third parties; geographical coverage) is given in Table 1 and in detail in Annex 2 for each topic.

Each project consortium needs to appoint a project coordinator. The project coordinator has the following role and responsibilities:

- Ensure co-funding commitment (see Annex 8) of all involved EJP SOIL beneficiaries and linked third parties to ensure the eligibility of the project,
- Lead the consortium throughout the application procedure and be responsible for the correct submission of the full proposal (i.e. single step approach; see also section 5),
- Be responsible for the overall project coordination and act as the central contact point for the consortium during the full lifespan of the project,
- Inform the Call Office about any event that might affect the implementation of the project,
- Ensure that all work is carried to a high standard and that it meets contractually bound deliverables and milestones presented in the full proposal and approved by the funding bodies,
- Be responsible for the sharing of information, data and results among consortium beneficiaries and linked third parties,
- Ensure timely and complete delivery of milestones, deliverables, and financial reports as described in the approved work program.



These projects have received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement No. 862695.

The project coordinator will not be responsible for the financial management of project funding, which will be handled directly by the consortium members and their corresponding institutes or participating organizations.

4 Submission, eligibility criteria, evaluation and selection

On the 15th July 2020 in M06 a webinar for interested applicants will be organised, which will give an overview about all relevant aspects of the Call (i.e., topics, conditions, requirements, proposal submission, evaluation, etc.) and provide time to answer open questions. More detailed information will be released directly on the submission tool website in due time.

4.1 Submission

Please follow the instructions on the website (www.ejpsoil.org) to submit the proposal (font: Arial, font size: 12, line space: 1.5) prepared in accordance to detailed instructions given in Annexes 3 to 8:

- Annex 3: Application template: Project information; Consortium beneficiaries and linked third parties; Project summary budget; Description of the work; Communication strategy; Data management strategy;
- Annex 4: Project timeline;
- Annex 5: Work plan;
- Annex 6: Budget plan;
- Annex 7: Ethics => Self-assessment
- Annex 8: Certificate of co-funding => to be submitted after selection.

Annexes 6 and 7 should be submitted in form of a XLS file while the main application (based on annexes 3, 4 and 5) should be submitted in form of a PDF file (i.e.; in max. 5 MB) to the Call Office (EJPfirstcall@luke.fi) by the project coordinator on behalf of the project consortium (see below).

4.2 General eligibility check of proposals

After the closing date for submission all proposals will be checked against the mandatory Call eligibility criteria:

- The application must be written in English.
- Applications must be complete and in accordance to the submission procedure.
- Applications must be submitted in time.
- Proposals including beneficiaries and/or third linked parties that are NOT EJP SOIL beneficiaries are not eligible to apply and will be rejected.

EJP SOIL experts who are involved in the internal call preparation (i.e. Nils Borchard, Bartosz Adamczyk, Rosemarie Stangl, Pia Minixhofer, Elena Rodriguez, Pierre Benoit, Philippe Hinsinger, Enrique Barriuso) cannot participate in the preparation of proposals nor get involved in subsequent project implementation.



4.3 Project types

Depending on the topic and type of project, the proposal must meet the following specific call eligibility criteria:

- **Stocktaking activity²**: 2 leaders; duration between 3 to 12 months; 40 PM with in minimum 1 PM per consortium beneficiary and/or linked third parties, distribution of remaining PMs is flexible.
- **Synthesis**: 1 leader plus additional consortium beneficiaries and/or linked third parties (typically 3); duration between 3 and 12 months; 20 PM.
- **Small sized project**: minimum 3 consortium beneficiaries and/or linked third parties; duration between 6 and 12 months; between 50 and 100 PM.
- **Medium sized project**: minimum 5 consortium beneficiaries and/or linked third parties with geographical coverage requested in the topics of this call; inclusiveness is of high importance; duration between 12 and 36 months; about 150 PM.
- **Large sized project**: minimum 10 consortium beneficiaries and/or linked third parties with geographical coverage requested in the topics of this call; inclusiveness is of high importance; duration between 36 and 48 months; about 350 PM.

4.4 Expert evaluation of proposals

The evaluation of eligible proposals will be performed by a peer-review expert panel. This panel is composed of international experts with acknowledged scientific excellence and high expertise of the underlying sectors. The members of the panel are proposed and selected by the Call Board considering the research areas covered by the submitted proposals. Appointed experts will need to strictly respect the Call Boards' standards and rules for impartiality and confidentiality.

Each proposal will be evaluated by at least three independent experts against the following criteria³:

Excellence

Relevant for large, medium and small sized research projects (see section 2 and Annex 2):

- Clarity, pertinence and scientific quality of objectives, ambition in relation to the call scope and topic addressed and innovative progress beyond the state-of-the-art;
- Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge in research and innovation content;
- Soundness of the concept, and credibility of the proposed methodology;

Relevant for large sized projects (see section 2 and Annex 2):

² Stocktakes are inventories or in other words a systematic way to gather information across the EJP SOIL participating countries. Stocktakes will be coordinated by one partner, possibly with a deputy lead and will. The coordinating partner will send a request for information to all EJP SOIL beneficiaries, e.g. questionnaires. Gathered information will be assessed and published in form of a report. All participants will be requested to provide this information for their country and the lead – co-lead will synthesize and analyse the received information and elaborate a report.

³ Evaluation rules of the Horizon 2020 (https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-h-esacrit_en.pdf)



- Level of ambition in the collaboration and commitment of the participants in the proposed large sized projects to pool national resources in terms number of consortium beneficiaries and/or linked third parties and participating countries.

Relevant for stocktaking activities and syntheses (see section 2 of this document and Annex 2):

- Clarity and pertinence of the objectives;
- Soundness of the concept, and credibility of the proposed methodology;

Impact

Relevant for all project types listed in table 1 (see section 2 of this document and Annex 2):

- The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the topic-specific call text, see Annex 2;
- Quality of the proposed measures to exploit and disseminate the project results (including management of IPR), to manage research data where relevant, and to communicate the project activities to different target audiences (see detailed instructions in section 7 under “Communication and dissemination”)

Relevant for large, medium and small sized research projects (see section 2 of this document and Annex 2):

- Any substantial impacts not mentioned in the topic-specific call text (Annex 2), that would enhance innovation capacity, address issues related to sustainable and climate smart soil management, or bring other important benefits for society
- Contribution to establishing and strengthening a durable cooperation between the consortium beneficiaries and/or linked third parties;

Implementation

Relevant for all project types listed in table 1 (see section 2 of this document and Annex 2):

- Complementarity of the participants and extent to which the consortium as 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.

Relevant for large, medium and small sized research projects (see section 2 of this document and Annex 2):

- 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;

The three criteria will be scored independently, using scores from 0-5 for each criterion⁴. A threshold of 3/5 will be applied for each criterion, i.e. proposals with a mean score < 3 in any

⁴ **0: Failure:** The proposal fails to address the criterion in question, or cannot be judged because of missing or incomplete information; **1: Poor:** The proposal shows serious weaknesses in relation to the criterion in question; **2: Fair:** The proposal generally addresses the criterion, but there are significant weaknesses that need corrections; **3: Good:** The proposal



main criterion will not be recommended for funding. The evaluation by the peer-review expert panel will result in a ranking list per topic. The experts will provide a written evaluation report on strengths and weaknesses of each proposal. The evaluation reports will be communicated to the applicants as part of the notification letter. It is emphasized that due to the nature of this Call, the evaluation of proposals will be assessed under the premises of creating added value for EJP SOIL. This means that special attention should be paid to the scope of the Call described in 1.2.

In addition to the above mentioned criteria, also the Ethical issues (see under section 7) will be checked by the experts using the information provided by the applicants. Additional ethical assessment on the national level can be performed by the funding bodies on optional basis.

4.5 Proposal selection

The Board of Program Managers (BPM) will select the consortia based on the expert panel evaluation results (i.e. ranked list and evaluation report; see also section 4.4 of this document).

The criteria for selection are based on overall scores given by the evaluation results (see section 4.4 of this document). Selection does not include weighting of criteria.

And in case of equal overall scoring for proposals applying for same topic the BPM will evaluate against a “relevance” criteria: Contribution to better alignment of European and national activities and policies. If a proposal fails at this stage the reasons will be explained in detail in the decision letter and report.

The “Relevance” criteria will be scored independently; using scores from 0-5 for each criterion (see section 4.4 of this document).

The outcome of the BPM selection procedure will be communicated by the Call Office to the research project coordinators, who are responsible to inform their consortium beneficiaries and/or linked third parties about the result.

In some instances, the BPM might formulate conditions for research project consortia (mandatory) or recommendations (optional) based on expert evaluation and BPM discussion to improve certain aspects of the applications. After the formal communication, all beneficiaries/linked third parties have to sign a Certificate of co-financing (see Annex 8). This certificate aims at ensuring that each participating institute accepts to engage the necessary co-financing in order to implement the project. All this information should be collected by

addresses the criterion in question well but certain improvements are necessary; **4: Very good**: The proposal addresses the criterion very well, but small improvements are possible; **5: Excellent**: The proposal successfully addresses all aspects of the criterion in question.



the project coordinator and sent completely and in time to the Call Office (see also sections “Timeline”, “4.2 Submission” and “7. Obligations for funded proposals”).

4.6. Formal commitment of the participating organisations

As selected research projects are 44% EU funded, each participating organisation of each selected project must fill in Annex 8 certificate of co-financing, in order to ensure that expected amounts to be co-funded will be made available in course of implementation of the project.

5 Ethics assessment

An Ethics assessment is required for submission of proposals addressing the following ethical issues: environment, health and safety, exclusive focus on civil applications, personal data and data protection, misuse of research results and other ethics issues. Work involving the use of animals or humans should be carried out under the appropriate authorization taking into account the European Union and national ethical requirements. Any proposal, which seems to contravene fundamental ethical principles, shall not be selected, and may be excluded from the evaluation and selection procedure. Judgement of the significance of ethical issues will be made by using the criteria published by the Commission in its guidelines for the Horizon 2020 Framework Programme.

The applicant is required to complete the ethics self-assessment (Annex 7) and provide a supporting documentation referred to in the ethics issues checklist. The **ethics self-assessment** (Annex 7) becomes part of proposal preparation and may thus give rise to binding obligations that may later on be checked through ethics checks, reviews or audits. This means the time invested in this self-assessment is not wasted. It will actually improve research results and:

- the proposed research will be in line with applicable international, EU and national law;
- the proposal will be processed more easily during the EJP SOIL proposal selection procedure;
- the results of the research can be published more easily in internationally refereed journals;
- applicants will contribute to the responsible conduct of research, thereby increasing its social acceptance.

Ethics also matter for scholarly publication. Major scientific journals in many areas will increasingly require ethics committee approval before publishing research articles.

First source should always be at the applicant`s institution. We would ask each applicant to seek advice from colleagues with expertise in the ethics of research, such as:

- specialized ethics departments;



- relevant managers in the applicant's university/research organization;
- ethics advisers in the applicant's organization;
- data protection officers.

They will provide information appropriate to the proposed project's specific needs and legal environment. Consider involving/appointing an ethics adviser/Data Protection Officer. From the beginning of the project, an ethics adviser can assist with ethical issues and put in place the procedures to handle them appropriately.

Please consult Horizon 2020 Programme Guidance "How to complete your ethics self-assessment"⁵. In addition, applicants can consult on the EC Website the Guidance Note – Ethics and Food-Related Research on core issues of ethical concern in the field of food-related research including appendix that addresses broader concerns in the field of food ethics.

6 Confidentiality and Conflict of interest

The proposals will be handled confidentially by the Call Office and the mandated experts responsible for the peer-review evaluation of the proposals. Each expert will have to sign a Declaration of Conflict of Interest, Confidentiality Disclosure Agreement and Code of Conduct Agreement.

7 Obligations for funded projects

Terms of participation

The beneficiaries and/or linked third parties of the research consortia are requested to acknowledge the overall coordinating role of EJP SOIL throughout the duration of the funded research projects until the delivery and acceptance of the final project report.

Consortium Agreement

The consortia selected for funding of medium and larger sized projects are obligated to enter into an EJP SOIL Research Project Consortium Agreement, in order to implement and manage the project activities and finances. Although recommended by the EJP SOIL WP3 team Consortium Agreements are not mandatory for small projects, stocktaking activities and synthesis as rights and obligations amongst the EJP SOIL beneficiaries and their linked third parties are set out in the EJP SOIL's Consortium Agreement. It will be the responsibility of the project coordinators to draw up a Research Project Consortium Agreement (based on the DESCA Model; <http://www.desca-agreement.eu>) suitable to the respective consortium. The purpose of this document is to underpin the consortium beneficiaries and/or linked third parties' collaboration and provide the consortium beneficiaries and/or linked third

⁵ https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf



parties with mutual assurance on project management structures and procedures, and their rights and obligations towards one another.

Start date of projects

A project can start after the BPM approves proposal (i.e. Funding Decision) and contracts (i.e. EJP SOIL Research Project Consortium Agreement for medium and larger sized projects) have been concluded; exceptions from this rule must be agreed by the respective institutes/organizations and the Call Office. Once the EJP SOIL Funding Decisions and EJP SOIL Research Project Consortium Agreements come into force, eligible costs may be claimed according to the European and national procedures. Projects should start between December 2020 (M11) and January 2021 (M12).

A list of the funded projects will be published in December 2020 (M11; and submitted to the European Commission as a deliverable [D3.3]). Therefore applicants should be aware that the following information from the proposals may be published by EJP SOIL:

- Project title and project acronym,
- Duration of the project,
- Total funding of the project,
- Name of the project coordinator (including contact information as email and telephone number),
- Country and organisation name of each beneficiary/linked third parties,
- The publishable summary of the project from the application.

Information on each funded research project, including data on each participant and overview on the results will be sent to the European Commission after the end of the project period.

With the submission of the proposal all consortium beneficiaries and/or linked third parties agree that the above-mentioned information can be published. All personal data offered for project applications, reviewers and expert assessments, mailing lists, tracking websites, registration for activities and events will be collected, stored and processed in accordance with the General Data Protection Regulation (GDPR) (Regulation (EU) 2016/679). A data protection officer (DPO) is appointed to ensure compliance GDPR rules in collaboration with WP1, which manages data protection at EJP SOIL level. For more information please consult the privacy policy on the submission website or the Call Office.

National/ regional contracts

The EJP SOIL Internal Call is a collaboration between the EJP SOIL and national institutes/organizations with the aim of establishing transnational research collaboration. However, the contracts with project participants and funding procedures and regulations remain the full responsibility of the national Project Owner and Project Manager according to applicable national/ regional funding rules.



The project coordinators of internally funded EJP SOIL projects are responsible for informing consortium beneficiaries and/or linked third parties about the selection result, for the implementation of possible conditions and recommendation and for synchronising the project start among the consortium beneficiaries and/or linked third parties. After the project has been selected, the consortium beneficiaries and/or linked third parties will be contacted by the EJP SOIL Call Office in order to start the grant negotiation and accomplish the remaining steps until the research project can start.

Financial issues and changes to the work plan or consortium

For the whole duration of the research project contract, it is the responsibility of the project coordinator to inform the Call Office about any changes in his project, i.e. modifications within the work plan, project consortium or contract. The changes will need to be approved by the respective beneficiaries/linked third parties or institutes.

Project monitoring, meetings and reporting

Consortium beneficiaries and/or linked third parties from each funded research project are expected to organise project meetings on a regular basis. The costs for these meetings should be included in the project budget. To enhance dissemination of the project results, additionally or in parallel to the own project meetings, all coordinators of internally funded medium and large EJP SOIL projects should calculate costs for the attendance of three mandatory consortium meetings (kick-off-, mid-term- and final meeting) in their project plan.

In order to promote coherence, project coordinators will be required to submit a mid-term (i.e. medium and large project) and a final report (i.e. all projects, stocktaking activities and syntheses) to the monitoring team (or WP3 team) about the results of their transnational project as a whole (in addition to reporting required at national level). Detailed information on the reporting and monitoring procedures as well as templates will be provided to the coordinators of the proposals selected for funding in due course.

Communication and dissemination

Communication⁶, dissemination⁷ and exploitation⁸ of outputs is a key part of the work done in the EJP SOIL and at the level of EJP SOIL funded project responsibilities are shared between internally funded EJP SOIL stocktaking activities, syntheses, projects, and WPs of the EJP SOIL. The project applicants are asked to read and refer to EJP SOIL's definition of *Communication*, *Dissemination* and *Exploitation*, when including considered specifications and budget lines for project communication, dissemination and exploitation activities. **Thus, the communication and dissemination plan is considered in the evaluation procedure of**

⁶ Communication is the act of keeping an ongoing dialogue and information flow with and towards our external stakeholders. Keeping them engaged, updated and in the loop of what is going on in the EJP SOIL programme.

⁷ Dissemination is spreading the news. It is the circulation of news and outcomes. Spreading and diffusing information about progress, outcomes and results from the EJP SOIL programme, reaching far into all relevant stakeholder networks. Making stakeholders EJP SOIL ambassadors.

⁸ Exploitation is, based on the above, fostering actual application, utilization, and employment of EJP SOIL outcomes.



large, medium and small sized projects; see Annex 3. WP9 (Claus Bo Andreasen, clausbo.andreasen@dca.au.dk and Line Carlenius Berggreen, lcb@dca.au.dk) of the EJP SOIL supports communication and dissemination *via* a two-stage approach:

- **Stage 1** (during proposal preparation): Describe in the proposal relevance of proposed research for specific stakeholders, and how the project will engage and interact with these on both national and European level (Annex 3). An EJP SOIL communication and dissemination kit is accessible at www.ejpsoil.org (see for more details below => Stage 2).
- **Stage 2** (during project implementation): WP9 (Claus Bo Andreasen, clausbo.andreasen@dca.au.dk and Line Carlenius Berggreen, lcb@dca.au.dk) will support the funded EJP SOIL projects **with tools and structures** for communication and dissemination of activities and relevant results; including:
 - Project subpages at www.ejpsoil.org, making it possible to publish project results etc.;
 - An EJP SOIL newsletter providing stakeholders with information on research results, events etc.;
 - A communication and dissemination kit providing logos, templates etc.;
 - Access to a network of National Communication Representatives (NCRs)⁹ committed to support interaction with national stakeholders;
 - A quick guide assisting project members in successful communication;
 - EJP SOIL workshops to be held in all participating countries engaging national key stakeholders;
 - Annual science days allowing EJP SOIL consortium beneficiaries and/or linked third parties to meet and present their work;

The consortium beneficiaries and/or linked third parties have to acknowledge the transnational funding of the EJP SOIL co-funds and the individual national institutes/organizations in any document that is published (in written, oral or electronic form) within the research project.

We support the European Commission's recommendation to make research results from public-funds accessible and thereby strengthening the knowledge base for science and the society alike. For more information please refer to the rules in H2020 projects and the EJP SOIL's Consortium Agreement. Publications need to be published in Gold or Green Open Access and both publications and research data need to be deposited in Open Access repositories.

⁹ The Project Communication Representatives (PCRs) is responsible for all project related communication and dissemination activities. Funded projects must specify how they will draw upon relevant professional assistance from WP9 and NCRs together with institutional communication departments to secure stakeholder and end user engagement at national level.



Intellectual property rights, use and access to results

Results and new Intellectual Property Rights (IPR) arising from projects funded through the EJP SOIL Internal Call will be owned by the consortium beneficiaries and/or linked third parties according to the conditions stated in the EJP SOIL Grant Agreement and Consortium Agreement and shall not be in conflict with the respective national regulations. Applicants should consult the respective national institutes/organizations, if any questions arise. Researchers are encouraged to actively exploit the results of the project and make them available for use, whether for commercial gain or not, for public benefit to be obtained from the knowledge created.

8 Definitions

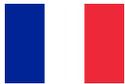
Board of Program Managers: Decision making body of the EJP SOIL consisting of the Program Managers representatives.

Call Office: responsible for administrative support regarding the Call, Call documents and procedures, submission tool and webinar.

Beneficiary/linked third parties: Legal entity eligible to apply for and receive internal EJP SOIL funding. Beneficiaries of the EJPSOIL and their linked third parties listed in the Grant Agreement under Art 14.



Annex 1. EJP SOIL beneficiaries and their linked third parties

Member states	EJP SOIL beneficiaries and their linked third parties	Contact (Name and e-mail)
	Institut National de Recherche pour l’Agriculture, l’Alimentation et l’Environnement - INRAE Linked third parties: AgroParisTech, AgroCampus Ouest, SupAgro Montpellier	Chantal Gascuel chantal.gascuel@inrae.fr
	Stichting Wageningen Research – WR	Saskia Visser saskia.visser@wur.nl
	Verein zur Förderung der Lebenswissenschaften - BIOS Linked third parties: BOKU, AGES, BAW, BFW, Environmental Agency Austria	Sophie Zechmeister-Boltenstern sophie.zechmeister@boku.ac.at
	Flanders Research Institute for Agriculture, Fisheries and Food - EV-ILVO Linked third parties: EV INBO, VPO	Greet Ruysschaert Greet.ruysschaert@ilvo.vlaanderen.be
	Centre Wallon de Recherches Agronomiques – CRAW	Bruno Huyghebaert b.huyghebaert@cra.wallonie.be
	Czech University of Life Sciences - CZU	Luboš Borůvka boruvka@af.czu.cz
	Aarhus University, Danish Centre for Food and Agriculture – AU	Lars Juhl Munkholm lars.munkholm@agro.au.dk
	Estonian University of Life Sciences – EMU Linked third party: ARC	Alar Astover alar.astover@emu.ee
	Luonnonvarakeskus - Natural Resources Institute Finland – LUKE	Nils Borchard Nils nils.borchard@luke.fi
	Johann Heinrich von Thünen-Institut – Thunen	Axel Don axel.don@thuenen.de
	Forschungszentrum Jülich GmbH - Julich	N/A
	Agricultural Research Centre	Zsofia Bakacsi bakacsi.zsofia@agrar.mta.hu
	Agrártudományi Kutatóközpont - MTA ATK	
	Teagasc – The Agriculture and Food Development Authority - Teagasc	David Wall david.wall@teagasc.ie
	Council for Agricultural Research and Economics - CREA Linked third parties: CNR, ISPRA, UNIPA, ENEA, AGRIS, ERSAF Lombardia	Rosario Napoli rosario.napoli@crea.gov.it
	These projects have received funding from the European Union’s Horizon 2020 research and Innovation programme under grant agreement No. 862695.	

Member states	EJP SOIL beneficiaries and their linked third parties	Contact (Name and e-mail)
	University of Latvia – UL	Raimonds Kasparinskis raimonds.kasparinskis@lu.lv
	Lithuanian Research Centre for Agriculture and Forestry – LAMMC	Žydrė Kadžiulienė zydre.kadziuliene@lammc.lt
	Norwegian Institute of Bioeconomy Research – NIBIO	Daniel Rasse daniel.rasse@nibio.no
	Institute of Soil Science and Plant Cultivation – State Research Institute – IUNG	Bożena Smerczak bozenas@iung.pulawy.pl
	National Institute for Agrarian and Veterinarian Research I. P. (INIAV)	Maria da Conceição Gonçalves maria.goncalves@iniav.pt
	National Agricultural and Food Centre – NPPC	Dana Peškovičová dana.peskovicova@npppc.sk
	University of Ljubljana - UL Linked third parties: AIS, UM-FKBV	Helena Grčman Helena.Grcman@bf.uni-lj.si
	National Institute for Agriculture and Food Research and Technology (INIA) Linked third party: CSIC	Elena Rodríguez-Valín rodriguez.elena@inia.es
	Swedish University of Agricultural Sciences – SLU	Anke Herrmann anke.herrmann@slu.se
	Agroscope- AGS	Gina Garland gina.garland@agroscope.admin.ch
	Ministry of Agriculture and Forestry, General Directorate of Agricultural Research and Policies – TAGEM	Sevinç Madenoglu sevinc.madenoglu@tarimorman.gov.tr
	Agri-Food and Biosciences Institute - AFBI	Dario Fornara Dario.fornara@afbini.gov.uk



These projects have received funding from the European Union's Horizon 2020 research and Innovation programme under grant agreement No. 862695.

Annex 2. EJP SOIL call topics

CM2 - Quantification of the potential of agricultural soils to sequester more carbon at the regional / national scale in the different partner countries.

Rationale: To design adequate policies that promote climate mitigation options in agriculture, countries need to know the potential of C sequestration in their conditions, at the national or regional scale, and in particular for agricultural soils. This potential depends on the pedo-climatic conditions, on the current soil organic carbon stocks and on the management practices promoting SOC accumulation that can be implemented.

Scope: The project will aim to evaluate the technical potential to store additional carbon in agricultural soils by implementing appropriate agricultural practices in cropland and grassland. Meanwhile, these practices should also ensure the reduction of GHGs emission. Depending on the information available in countries on current SOC stocks, agricultural practices and soil properties, appropriate methodologies should be used by involved EJP SOIL beneficiaries and/or linked third parties. Either Tier 2 or Tier 3 approaches should be used, including modelling approaches, to estimate SOC stocks and their evolutions over a given time period, e.g. 20 or 30 years. Areas where soil carbon stocks are already substantial in the EU should also be identified in order to define protection measures to prevent C losses. The estimate could be performed for a constant agricultural surface area or accounting for possible land use changes. Also, recent land use changes (e.g. cultivation of grasslands) are known to affect SOC stocks evolution and hence the baseline. In addition to a technical estimate, the feasibility of implementing the different management options should be estimated, in order to evaluate the cost of the quantified SOC additional storage potential in agricultural soils.

Output/Expected impact: Improved spatially explicit quantification of the potential of agricultural soils to sequester more carbon under different cropping, soil management systems and land use change scenarios (e.g. grassland-cropland), in different pedo-climatic conditions, at the regional and national scale, associated with an estimate of the incurred costs. Analysis of the consequences of these options on GHG emissions. Identification of SOC sequestration potentials of the European agro-pedoclimatic regions.

Project type: A single project is expected to be funded (large, 3 to 4 years, 350 PM), gathering beneficiaries and/or linked third parties from at least 20 participating member states (Annex 1). A synergistic effort of the different beneficiaries and/or linked third parties is called for. Core activities of this consortium would concern the methodology that can be used, defining a set of reference methodologies to be used. Each involved beneficiary and/or linked third parties would then perform the evaluation for its own country, using the selected methodology.

Relation to EJP SOIL objectives and tasks: This project should consider outputs of EJP SOIL stocktake T2.4.3¹⁰ assessing carbon accounting systems and methods currently used in EJP SOIL countries to estimate SOC storage and storage potentials.

¹⁰ The goal of T2.4.3 is stocktaking and synthesis on available knowledge of achievable carbon sequestration in mineral soils, including pasture/grassland across Europe, under different farming systems, soil types and pedo-climatic conditions as



CM8 - Evaluating soil management options for specific objectives: Trade-offs between soil organic carbon sequestration, greenhouse gas emissions and/or N and P losses

Rationale: Storing more C in soils may lead to adverse effects on the climate and on the environment, by increasing other GHG emissions (N₂O, CH₄) and by affecting water quality (nitrate leaching, eutrophication *via* P losses). Related to the type of farming systems (cropping and livestock systems), soil management strategies for C sequestration focus on increased input of organic matter (e.g. crop residues, cover crops, perennial crops, agroforestry, green manure, biochar, organic amendments), changes in the nature of organic inputs to soil (e.g. legume crops, organic amendments of different origins and quality such as compost, manures, etc.) or decreased turnover of soil organic matter via either increased stabilization of SOC in mineral soils (manipulation of soil microbiome and soil fauna to increase formation of stabilized SOC, quality and CNP stoichiometry of organic matter inputs, spatio-temporal distribution of inputs) or by reducing the conditions prone to SOC turnover (e.g. increased level of groundwater table in previously cultivated and drained peatlands and organic soils). Many of these strategies have significant implications: e.g. rewetting of peatlands may greatly enhance methane emissions, while adding livestock manures may enhance nitrous oxide emissions, nitrate leaching and P losses.

Scope: The objective is to analyse the potential trade-offs for major pedoclimatic zones and farming systems in Europe. The project will gather knowledge from past and current EU activities on quantifying the trade-offs and synergies, initiate and perform targeted measurements and/or modelling activities to fill in significant knowledge gaps, and synthesize knowledge into proposed robust indicators to predict trade-offs and synergies, as well as to propose measures to mitigate trade-offs. Indicator robustness should be assessed in terms of applicability to a large diversity of soil management practices, soil types and pedoclimatic regions considering the different environmental and agro-climatic zones in Europe. Robustness could also rely on their possible validation through the comparison of predictions with available measured or estimated data on C storage and GHG emission.

Output/Expected impact: Robust indicators to predict trade-offs and synergies, as well as measures to mitigate trade-offs.

Project type: One to two medium size projects (150 PM), considering the specificities of organic versus mineral soils or contrasted climate conditions in Europe.

MT1 - Good knowledge of the present status of agricultural soils: Innovative techniques for soil mapping and assessing spatial and temporal variation of soil properties

Rationale: Soil is a complex mixture of organic and inorganic constituents with different physical, chemical and biological properties, that shows large variability from site to site or even within the same field. Space-borne and airborne remote (hereafter as “remote”) sensing has several benefits such as obtaining soil surface and topsoil information from large areas, providing information for inaccessible areas, providing additional data (e.g. status of

well as on GHG mitigation measures for managed organic soils. Here we specifically refer to the achievable carbon sequestration under a specific land management, and not to carbon storage. C-sequestration as defined by Olson et al. (2014), “the process of transferring CO₂ from the atmosphere into the soil of a land unit, through plants, plant residues and other organic solids which are stored or retained in the unit as part of the soil organic matter (humus).”



These projects have received funding from the European Union’s Horizon 2020 research and Innovation programme under grant agreement No. 862695.

vegetation), consistent temporal resolution for the creation of time series, short revisit time and providing freely available data. Remote surveys have the advantage to get a more exhaustive evaluation of spatial variation than with on-site sampling methods. To map larger areas for accurate estimation of SOC and other soil characteristics these methods still require improvements aiming to enhance their resolution and to reduce impacts of artefacts induced by soil roughness, moisture and vegetation litter. Although several attempts to improve the accuracy of remotely mapped soil properties were undertaken, none of these approaches is capable to assess soil properties in the desired resolution and accuracy. Combining these technologies into an EU observation network could also interestingly rely on participatory science approaches providing field observations for calibration and testing or for increasing mapping resolution.

Scope: This project will focus on developing and testing these innovative approaches (novel technologies and sensors but also low cost and low-tech approaches used in participatory science) for measuring soil characteristics (e.g. soil moisture, soil salinity, SOC, soil biodiversity) and soil evaluation, in the different environmental zones and soil types in Europe.

Output/Expected impact: Novel technologies and approaches available for measuring soil characteristics and evaluating soils

Project type: Two medium size research projects (per project 150PM).

SR5 - Landscape analyses: Erosion processes

Rationale: The 7th Environmental Action Plan of the European Union¹¹ stated that by 2020: "land is managed sustainably in the Union, soil is adequately protected". Achieving these goals requires efforts in reducing soil erosion and increasing soil organic matter content. Land use aspects are to be integrated and coordinated with decision-making, all relevant government levels need to be involved. Soil and land need to be acknowledged as a resource, and targets for land planning and sustainable land and soil use and management should be defined addressing soil quality issues within a binding legal framework. Erosion processes (detachment, transport, and deposition) result in the loss of soil and SOM due to water and wind erosion in agricultural fields. Where does it occur? How can it be assessed? What is the impact and how can it be prevented?

Scope: Viewing erosion at the landscape scale is essential to answering these questions and can aid the development of climate-smart sustainable management strategies and interventions that will increase carbon storage within the landscape without incurring degradation elsewhere. The project should consider the 'connectivity' principles to identify key linkages between soil loss and associated impacts on carbon cycling, biodiversity and water resources. Introduction of agroecology principles in order to conceive landscapes more resilient to climate change and soil degradation could be considered. Field observatories with long term records on soil erosion and related soil properties (soil aggregation, wettability) in relation with the implementation of soil management practices and agroecological infrastructures as well as modelling approaches at the landscape scale to

¹¹ <https://ec.europa.eu/environment/action-programme/>



test different land use scenario will be particularly useful. Projects should focus on multiple European environmental zones and soil types.

Output/Expected impact: An analysis of erosion processes and associated impacts at the landscape scale. Proposals for landscape designs and management options aiming at erosion control.

Project type: Medium size research project (150 PM).

Relation to EJP SOIL objectives and tasks: A recent COST Action (ES1306: Connecting European Connectivity Research; 2014-2018) focused on the topic of water and sediment connectivity from plot to catchment scale. Attention was given to theory development, measuring and modelling approaches, indices and how the concept of connectivity can be useful for society.

ES7 - Enabling conditions to implement improved management options and tools to monitor soil quality: Analysis on how soil indicators could be used to support CAP measures

Rationale: Results-based farmer payment may be introduced in the post 2020 CAP regarding soils, as they already have been introduced for biodiversity. At this stage, two soil related indicators have been identified: soil organic carbon stocks, and an indicator of soil improvement, which is not yet defined. Results-based payment schemes represent a radical shift in approach for farmers as well as for managing authorities and payment agencies. Operationalizing for soil result-based payments raises a number of questions. Even if soil indicators have not yet been identified for this purpose, this pre-figurative study could explore different scenarios.

Scope: The study will analyse how a European results-based agricultural payment schemes may be developed. It will consider different issues regarding criteria for indicators selection, the baseline, the additionality, the reversibility and the long-term trends, the control and verification of results, the training and expertise required, the accounting of previous work of pioneers, the design of the reward, the costs incurred with implementing such a scheme and cost-effectiveness of the scheme.

Output/Expected impact: An analysis of the strengths and weaknesses of a results-based payment approach for soils, proposals for appropriate schemes and identification of research needs.

Project type: Small research project (100PM).

Relation to EJP SOIL objectives and tasks: This project relates to topic ES1/ES2.

FS2/MT4 - Innovative soil management practices in Europe and their suitability for European farming systems

Rationale: Innovative farming practices are being developed, often by farmers themselves (e.g. highly diverse cover crops, mixed annual perennial crops, crops with deep rooting systems, intercropping, organic farming, agroforestry, integrated crop-livestock production, farm scale biogas production), and a high variability of the soil management practices developed and implemented is expected across Europe. An evaluation of the ability of such management practices to succeed in achieving multiple goals is necessary. This should help



to identify management practices or interactions between management practices, pedoclimatic context and/or agro-climatic zones that need knowledge development via EJP SOIL future internal calls for research projects.

Scope: This stocktake will first identify innovative¹² soil management practices and technologies, cropping and livestock agricultural systems in Europe developed by farmers, industry and research. Second, the study will evaluate the applicability and suitability of these and more well-known soil management practices and technologies for climate smart sustainable soil management for different pedoclimatic zones and farming systems in Europe. The practices and technologies described needs to address the EJP SOIL target “good agricultural soil management for: climate change mitigation and adaptation, sustainable production, ecosystem services and less soil degradation” and – whenever possible - have the potential to achieve multiple goals (e.g. pest and disease control). The practices/technologies may include cropping system technologies such as cover cropping, intercropping, green manuring, diverse rotations, systems with deep rooted crops, agroforestry systems, residue handling/mulching), tillage and traffic technologies (no-tillage, conservation agriculture, light machinery, low pressure tires/inflation pressure regulation), fertilization/manuring, amendment and biochar technologies, irrigation technologies. Novel technologies for improved spatio-temporal management of soils in terms of digital farming and precision agriculture would also be relevant to address. Further, the activity should deal with barriers to the implementation of such technologies, including economic incentives, regulations and lock-in situations, knowledge systems, and cultural barriers. This analysis will have to consider explicitly all European agro-climatic regions.

Output/Expected impact: Identified innovative soil management practices developed by farmers, industry and research that are of interest for countries participating in the EJP SOIL. Identified and assessed effects innovative soil management practices on EJP SOIL targets (i.e. climate change mitigation, climate change adaptation, sustainable agricultural production, ecosystem services, soil rehabilitation). Adoption trends of identified innovative soil management practices and their potentials to enhance suitability of European farming systems under given specific climatic constraints, barriers or enablers, and knowledge gaps.

Project type: Combined stocktake (40 PM) collecting information from multiple countries.

ES1/ES2 - Methodologies and tools to assess the contribution of soils to ecosystem services / for assessing soil quality

Rationale: Soil is the upper layer of the earth's crust, which fulfils multiple soil functions that are essential for human life. The soil's natural functions are multi-fold as they i) ensure life through sustaining primary productivity and a large part of the overall biodiversity, ii) play a key role in the carbon, nutrient and water cycles and iii) control multiple natural processes (e.g. buffering, filtering). Evidently soil is useful to humans as i) a source of raw materials, ii) land for settlement, economic and public uses, and iii) agricultural and

¹² “Innovation activities are all of the scientific, technological, organizational, financial and commercial steps, including investments in new knowledge, which actually, or are intended to, lead to the implementation of technologically new or improved products and processes.” (Frascati Manual 2002, OECD)



silvicultural land use. However, the soil's capacity to sustain functions can be altered by a number of degradation processes, thus decreasing their capacities to provide ecosystem services.

Scope: Evaluate the ability of agricultural soils to sustain functions and ecosystem services and thereby evaluate their quality requires to have: i) an explicit framework and chain from soil properties to soil functions and to soil ecosystem services, ii) indicators of soil state and functions, and iii) a set of reference values for these indicators, in the different pedo-climatic conditions for the main agricultural productions. Therefore, the study will review the main approaches developed and published in the literature, in EU wide programs (MAES) and in EU projects (e.g. LandMark) and whether they use indicators of soil properties (soil state), soil functions or of soil ecosystem services. Integrated approaches developed to assess trade-offs and synergies between soil ecosystem services will be targeted. The study will stocktake what is used in countries participating in the EJP SOIL and whether assessments on the links between soil properties, functions and ecosystem services have been translated into policy implementation/land management options in the participating member states. Transferability and actual transfer of methods to farmers and citizens through participatory science approaches should also be examined. The study will also stocktake the sustainable values of SOC, soil fertility, soil biodiversity and degradation risk and associated target values of indicators, available in the literature, or already used at regional or national scale. The definition and use of references for these indicators will be analyzed. This analysis will have to consider explicitly all European agro-climatic regions.

Output/Expected impact: Inventory of i) evaluation frameworks for ecosystem services / soil quality in use in Europe and of the associated knowledge and development needs, and ii) desirable values of SOC, soil quality, soil biodiversity and degradation risk and associated target values of indicators and identification of the knowledge needs for given pedoclimatic and agricultural system contexts.

Project type: A combined stocktake (40 PM).

Relation to EJP SOIL objectives and tasks: This stocktake should consider outputs of a WP2 stocktake T2.4.2¹³.

CA1 - Evaluating soil management options for the specific objective of climate change adaptation

Rationale: Although the role of sustainably managed soils and of organic matter rich soils is often put forward as a way to help agroecosystems to adapt to climate change, not much quantitative and context-specific information is available and synthesised.

¹³ The goal of stocktake 2.4.2 is to gather information on soil quality indicators and associated decision-making tools. The term soil quality encompasses a broad spectrum of features and considers functional ability together with the response properties of the soil. Soil quality therefore provides complex information on the sum of different soil characteristics, with regards to the level of ecosystem services a soil can provide. The partners collect the information for this stocktake and deliver it by filling a questionnaire in excel relating to soil quality indicators in terms of ecosystem services providing. It is a simply structured excel database for stocktake of all indicators commonly used in countries and/or specially used for decision support tools, i.e. ICT tools.



Scope: In Europe, climate change affects soils through changes in the water regime (droughts, intense rains causing erosion), increases in temperature and increased pCO₂. The objective is to synthesize (i) the available knowledge linking soil management, plant rooting patterns, soil structure and soil organic matter to crop water supply through effects on soil water (water harvesting, infiltration, retention, evaporation) and (ii) available knowledge linking soil management, soil biology and plant nutrient uptake under elevated pCO₂ and temperature. The benefits of soil carbon for adaptation to climate change will be reviewed as well as the effects of soil organic matter on soil structure and water-related properties that bring better resistance and resilience to modified climate. A large diversity of crops (annual and perennial crops, grasslands) and cropping systems (integrated crop-livestock farming systems, organic farming, and conservation agriculture) should be considered. Contrasting options e.g. conventional vs reduced or no-tillage, cover crops, mulching, intercropping, agroforestry, etc. would provide useful information on their potential for climate change adaptation through modifying soil structure, soil biology and soil water budgets. Important questions concern the dynamics (speed, duration, amplitude) of the observed changes in soil properties. Another key question is to assess impact of crops on SOC dynamics, soil structure/aggregation and soil hydraulic properties. A special emphasis should be given to identify available knowledge about the interactions between the soil organic C inputs (aboveground and belowground), the activity of soil biota (microorganisms, micro, meso and macrofauna) and roots, the soil structure and related soil water retention properties in different soil types. This analysis will have to consider explicitly all European agro-climatic regions.

Output/Expected impact: Quantitative, context-specific information on how soil management options help agroecosystems to adapt to climate change and identified research needs.

Project type: A synthesis (20PM).



Short narrative explanation for each budget item (max 800 characters incl. spaces)

4. Description of Work (max 18.000 characters with spaces; per section about 6000 characters with spaces)

Relevance of the research proposal:

Objectives and main hypotheses

Relevance to the topic

Research approach:

General approach and methodology

Brief description of the work plan (including provisional project structure, **work packages (Annex 4), work plan (Annex 5)** and collaboration among beneficiaries and/or linked third parties)

Impact:

Expected impact (considering cross-cutting issues: multi-actor/ multi-disciplinary and system approach)

Innovation potential (ambition and novelty in relation to the state of the art)

Added value of the transnational collaboration and geographical relevance

5. Ethical issues

Indication that the research project is carried out in accordance with the European Union, the respective national (Chapter 5 and Annex 7 “Self-assessment”), and the EJP SOIL’s requirements. Proposals that do not include all the compulsory information or do not meet the formal requirements of the Call announcement will not be considered for funding.

Ethical issue (in max 6000 characters with spaces):

Address any of the ethical issues listed in Annex 7 that are expected to arise during the proposed project.



6. Communication strategy

On this basis of an internal EJP SOIL communication and dissemination services and tools (see section “Communication and dissemination”) the applicants should consider following communication and dissemination option during communication plan preparation:

Communication strategy (in max 6000 characters with spaces):

- Describe how the funded research is relevant for particular stakeholders;
- Specify how the project will engage and interact with these on both national and European level;
- Specify communication, dissemination and knowledge exchange activities such scientific papers, articles, posters, course or training material, web-based tools, as workshops or field days;
- Specify activities including (co)organizing national workshops in member states funding the project;
- Specify how they will draw upon relevant professional assistance from WP9 and National Communication Representatives to secure communication, dissemination and exploitation activities;
- Appoint a Project Communication Representative who will be responsible for communication, dissemination and exploitation activities in the project;
- Include budget lines for communication, dissemination and exploitation activities filled by project coordinator).

7. Data management strategy

Describe how the research data in this project will be findable, accessible, interoperable and re-usable (FAIR):

Data management strategy (in max 6000 characters with spaces):

- Describe the handling of research data during and after the end of the project;
- Specify what data will be collected, processed and/or generated and/or reused;
- Specify which methodology and standards will be applied;
- Specify whether data will be shared/made open access;
- Specify how data will be curated and preserved (including after the end of the project);

The closing date for complete and timely submission of proposals is 18th September 2020 in M08 – 12 am CET. Applications should be submitted to EJPfirstcall@luke.fi



Annex 4: Project timeline for small, medium and large projects (an example); see also Annex 3, section 4

Table A4.1: An example of a work plan based on a Gantt chart

	1 st Annual period first work plan											
Months	1	2	3	4	5	6	7	8	9	10	11	12
WP1												
T1.1												
D				X								
M				X								
T1.2												
T1.3												

WP: Work package; T: Task; D: Deliverable; M: Milestone

The EJP SOIL annual work plans are based on a **monthly resolution**, which also applies to EJP SOIL internal call funded research project.

In the “description of work” section (Annex 5) of the work plan for the first year of the project, you can for example indicate:

- “WP1 takes place over the first, second and third year of the project”
- T1.1 takes place over the first year of the project
- T1.2 takes place over the first and second year of the project

Same procedure should be used for second and third year of the project.



Annex 5: Work packages (a template; in max. 5 pages per work package)

Priority Topic reference ⁱ										
Project title										
Project acronym										
Coordinator institute (number and acronym) ⁱⁱ					Deputy Leader institute (number and acronym)					
Project Coordinator person name					Project Deputy Leader person name					
Indicate for which annual period of the EJP SOIL the project description applies ⁱⁱⁱ :										
Project Start month							Project End month ^{iv}			
	1	2	3	4	5	6	7	8	9	10
	INRAE	WR	BIOS	EV-ILVO	CRAW	CULS	AU	EMU	LUKE	vTI
PM										
LTP										
PM										
	11	12	13	14	15	16	17	18	19	20
	Julich	MTA-ATK	Teagasc	CREA	UL	LAMMC	NIBIO	IUNG	INIAV	NPPC
PM										
LTP										
PM										
	21	22	23	24	25	26				
	ULBF	INIA	SLU	AGS	TAGEM	AFBI				
PM										
LTP										
PM										
Objectives										
<ul style="list-style-type: none"> • • 										



<p>Description of work^v WP^{vi}: WP start month WP end month WP Leader Deputy WP Leader WP participants Description of the WP^{vii}:</p> <p>Task^{viii}: Task start month Task end month Task Leader: Deputy Task Leader^{ix}: Task Participants: Description of the task^x:</p> <p>Sub-Task^{xi} Sub-Task start month Sub-Task end month</p>
--

Sub-Task Leader: Deputy Sub-Task Leader ^{xii} : Sub-Task Participants:		
Deliverables ^{xiii}		
Ref ^{xiv}	Title	Due month ^{xv}
Milestones ^{xvi}		
Ref ^{xvii}	Title	Due month ^{xviii}

GUIDANCE NOTES:

- ⁱ Indicate here the reference of the call topic the projects responds to.
- ⁱⁱ Use the same institute number and acronym as indicated in this form.
- ⁱⁱⁱ Annual periods of the EJP SOIL differ from annual periods of the project proposal. Year 1 of the project proposal corresponds to Year 2 of the EJP SOIL. The three annual work plans will be encoded Y2, Y3 and Y4
- ^{iv} The EJP SOIL lasts from 1st February 2020 to 31st January 2025 (5 years – 60 months). The 60 months duration will be coded from M1 to M60 (M1 being February 2020 and M60 January 2025).



These projects have received funding from the European Union’s Horizon 2020 research and Innovation programme under grant agreement No. 862695.

^v The work is organized into work packages (WP) in which tasks (T) and possibly sub-tasks (sT) are implemented. Add as many WPs, tasks and sub-tasks as necessary. The organization of the work to be carried out as described in this annual work plan must also be reflected in the Gantt chart.

^{vi} Number the WP as WP1, WP2, WP3, etc. and entitle them

^{vii} Explain the objectives of the WP and how it fits into the overall project and how it is linked with the other WPs. Indicate the role of each WP participant.

^{viii} Number tasks as follows: WP#-T# e.g. task number 2 of WP3 will be indicated as WP3-T2. Similarly sub-tasks should be numbered as follows: JRP#-WP#-T#-ST# e.g. subtask 4 of task 2 of WP5 will be indicated as WP5-T2-ST4

^{ix} Ideally in order to ensure a good follow-up and management of implementation of the tasks, Deputy Task Leaders may be appointed but this is not compulsory.

^x Explain the objectives of the task and how it fits into the overall WP and is linked with the other tasks. Explain how the task will be implemented and indicate the role of each task participant.

^{xi} If any. It may be useful to describe several subtasks if the task they refer to must be divided into several ones

^{xii} Ideally in order to ensure a good follow-up and management of implementation of the subtasks, Deputy subtask Leaders may be appointed, but this is not compulsory.

^{xiii} A deliverable is the concrete result of all or part of the work implemented. Deliverables will be submitted to the EJP SOIL Call Office as a proof of the work achieved and will be a basis to evaluate the EJP SOIL progress and efficiency. Add as many deliverables as appropriate.

^{xiv} Please number the deliverables as follows: D#-WP#.D#, e.g. the second deliverable of WP3 will be numbered D#-WP3.2

^{xv} The same month numbering applies as for the Project start/end months (see endnote iii). Indicating M35 means that the deliverable should be submitted to the EJP SOIL WP3/WP4 Leaders before the end of M35.

^{xvi} A milestone is a stage of achievement of the project. It can be reached at the same time as when a deliverable is available (a concrete result that constitutes a stage of achievement), but it can also reflect a crucial time point in the project without leading to the release of a deliverable (e.g. samples are ready and assays can start).

^{xvii} Please number the milestones as follows: M#-M# e.g. the sixth milestone of a project will be numbered M#-06. Milestones are numbered CHRONOLOGICALLY.

^{xviii} As for the deliverables the same month numbering applies as for the Project start/end months (see endnote iii). Indicating M35 means that the corresponding stage of achievement of the project must be verifiable by the EJP SOIL WP3/WP4 Leaders at the end of M35.



Annex 6: Template for proposal budget

Please, see on the EJP Website (www.ejpsoil.org) to retrieve the budget sheet template in Excel format. **Please submit Annex 6 as an Excel document, NOT as a PDF.**

Important notices regarding budget plan

- The template file is composed of several spreadsheets, one summary budget spreadsheet and as many other spreadsheets as cost items.
- Where necessary complete the yellow cells in each relevant spreadsheet
- For each cost budgeted, describe it and refer to the corresponding task(s) of the project
- Complete one file consisting of annual budget plans to be summarized in an overall data sheet.
- Name each file as:
 - Project acronym
 - Institute name
 - Project year (Y)
 - E.g.: xxxxx_Y1
- Contact the Call Office for any further clarification needed (EJPfirstcall@luke.fi)



Annex 7. Ethics self-assessment

Please see the EJP SOIL Website ([www. EJPSOIL.eu](http://www.EJPSOIL.eu)), to retrieve the excel sheet for Ethics Self-Assessment.

EJPSOIL Ethics Self-Assessment			
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;"> <p>Instructions: Each candidate EJP SOIL leader must complete this questionnaire For guidance, please use the guidance document Send the completed form to EJPfirstcall@luke.fi together with your full proposal</p> </div>			
1	HUMAN EMBRYOS/FOETUSES		
	Does your research involve Human Embryonic Stem Cells (hESCs)?	Yes	No
	Will they be directly derived from embryos within this project?	Yes	No
	Are they previously established cells lines?	Yes	No
	Does your research involve the use of human embryos?	Yes	No
	Can you confirm that your research will not destroy those embryos?	Yes	No
	Does your research involve the use of human foetal tissues / cells?	Yes	No
2	HUMANS		
	Does your research involve human participants?	Yes	No
	Are they providing sensitive or personal information?	Yes	No
	Are they volunteers for social or human sciences research?	Yes	No
	Are they persons unable to give informed consent?	Yes	No
	Are they vulnerable individuals or groups?	Yes	No
	Are they children/minors?	Yes	No
	Are they patients?	Yes	No
	Are they healthy volunteers for medical studies?	Yes	No
	Are they residents in a non-EU country?	Yes	No
	Does your research involve physical interventions on the study participants?	Yes	No
	Does it involve invasive techniques?	Yes	No
	Does it involve collection of biological samples?	Yes	No
<i>If your research involves processing of genetic information or collecting personal data, see also section 4</i>			
3	HUMAN CELLS / TISSUES		
	Does your research involve human cells or tissues (other than from Human Embryos/Foetuses, i.e. section 1)?	Yes	No
	Are they available commercially?	Yes	No
	Are they obtained within this project?	Yes	No
	Are they obtained from another project, laboratory or institution?	Yes	No
	Are they obtained from biobank?	Yes	No
4.	PERSONAL DATA		
	Does your research involve personal data collection and/or processing?	Yes	No
	Does it involve the collection and/or processing of sensitive personal data (e.g.: health, sexual lifestyle, ethnicity, political opinion, religious or philosophical)	Yes	No
	Does it involve processing of genetic information ?	Yes	No
	Does it involve tracking or observation of participants?	Yes	No
	Does your research involve further processing of previously collected personal data (secondary use)?	Yes	No
5	ANIMALS		



	Does your research involve animals ?	Yes	No
	Are they legally protected animals?	Yes	No
	Are they vertebrates?	Yes	No
	Are they non-human primates?	Yes	No
	Are they genetically modified?	Yes	No
	Are they cloned farm animals?	Yes	No
	Are they endangered?	Yes	No
<i>Please indicate the species involved (Maximum number of characters allowed: 1000)</i>			
6 THIRD COUNTRIES			
	In case non-EU countries are involved, do the research related activities undertaken in these countries	Yes	No
	Specify the countries involved:(Maximum number of characters allowed: 1000)		
	Do you plan to use local resources (e.g. animal and/or human tissue samples, genetic material, live animals, human remains, materials of historical value, endangered fauna or flora samples, etc.)?	Yes	No
	Do you plan to import any material - including personal data - from non-EU countries into the EU?	Yes	No
	Specify material, countries and legal permissions involved: (Maximum number of characters allowed: 1000)		
	Do you plan to export any material - including personal data - from the EU to non-EU countries?	Yes	No
	Specify material, countries and legal permissions involved: (Maximum number of characters allowed: 1000)		
	If your research involves low and/or lower middle income countries, are benefits-sharing actions planned?	Yes	No
	Do you plan to use biological resources that are subject to Access and Benefit Sharing (Nagoya Protocol) Regulations (Regulation (EU) No.511/2014; Implementing Regulation (EU) 2015/1866)	Yes	No
	Specify material and countries: (Maximum number of characters allowed: 1000)		
	Could the situation in the country put the individuals taking part in the research at risk?	Yes	No
7 ENVIRONMENT & HEALTH and SAFETY			
	Does your research involve the use of elements that may cause harm to the environment, to animals or plants?	Yes	No
	Does your research deal with endangered fauna and/or flora and/or protected areas?	Yes	No
	Does your research involve the use of elements that may cause harm to humans, including research stuff?	Yes	No
8 DUAL USE			
	Does your research involve dual-use items in the sense of Regulations 428/2009, or other items for which an authorization is required?	Yes	No
9 EXCLUSIVE FOCUS ON CIVIL APPLICATIONS			



		Could your research raise concerns regarding the exclusive focus on civil applications?	Yes	No
10	MISUSE			
		Does your research have the potential for misuse of research results?	Yes	No
11	OTHER ETHICS ISSUES			
		Are there any other ethics issues that should be taken into consideration?	Yes	No
	Please specify (maximum number of characters allowed: 1000)			
	I confirm that I have taken into account all ethics issues described above and that I will comply with the regulation as set out in the Grant Agreement (i.e. Art 34) before the start of any activity in which ethics issues apply		I confirm: yes or no	
	Document completed by			
	Date			
	Signature			



Annex 8. Certificate of co-financing

To be submitted after selection.

This template may be used for participants of selected research projects in order to provide evidence of their commitment. Grey-marked fields must be duly completed. This document must be signed by an authorized representative of the organisation. A template for each participant organization is required.

In case of failure in proving such commitment, a participant could be regarded as ineligible, jeopardizing the whole research consortium.

EJP SOIL Call Office	Address of organisation
Organisation	Name of contact person
Name	
Street	
Town	
Country	
EJP SOIL – 1st Internal Call for research proposals 2020 Letter of commitment Project title: ...	
	Place, date
We hereby confirm that organisation has sufficient resources and is committed to participate to the project title , in accordance to the proposal which is submitted by coordinator in the frame of the EJP SOIL – 1 st Internal Call 2020 and in case the proposal is selected for funding by the joint Call Group.	
<i>In addition, in case of separate source of funding:</i> Please find attached to this letter a commitment from funding organisation for our contribution to this project.	
Signature of Name and affiliation	

