

Call for tenders - JRC/SVQ/2021/OP/2814

DATA COLLECTION FOR A BEHAVIOURAL EXPERIMENT WITH FARMERS

TENDER SPECIFICATIONS

Part 2: Technical specifications

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1 BACKGROUND AND RATIONALE

1.1 The Directorate and the Unit

The Directorate for Sustainable Resources (Directorate D) of the Joint Research Centre (JRC) of the European Commission based in Ispra (Italy) and Seville (Spain) is closely involved in assuring the sustainability of European Policies. The mission of Directorate D is to provide independent scientific evidence to support the development, implementation, evaluation and coherence of EU policies, mainly in the areas of agriculture and rural development, development cooperation, environment and climate change, blue growth and fisheries, the bioeconomy, industry and trade.

In particular Directorate D:

- focuses on land, soil, forests, water, marine resources, raw materials, biodiversity and related ecosystem services, and supports the development of a sustainable bioeconomy;
- monitors and analyses agriculture and food production, consumption and trade, including the macro- and micro-economic aspects, their impact on food security, public goods and the environment;
- highlights the threats to our existing resources and explores alternatives and future perspectives using advanced biophysical and economic analyses, including geospatial technologies, modelling and supply-chain analyses.

The Economics of Agriculture Unit of this Directorate provides scientific support to the EU policy-makers in assessing through macro and micro socio-economic analyses the development of the Agro Food sector and related sectors including rural development, food security, trade and technological innovation in the EU and globally but also with special emphasis on Africa. To focus also on the economic aspects related to the uptake of technologies in agriculture, including climate change mitigation and productivity technologies. This support is to be based on advanced economic modelling tools, statistical methods, and easy data access.

1.2 Policy background

The new green architecture of the proposal for a Common Agricultural Policy post 2020 (CAP 2020+) introduces a new voluntary policy measure to promote environmentally friendly practices, the Eco-Schemes (ECS). Farmers so willing will be able to choose from a portfolio of environmentally friendly management practices offered by countries against a payment. Examples of the type of measures that could be supported by ECS can be found in EC (2021)¹. While voluntary measures have been in the policy toolbox

¹ European Commission (EC), 2021. List of potential agricultural practices that Eco-Schemes could support. January 2021. Available at [here](#).

of the CAP since the 1990's as agro-environmental or agro-environmental and climate measures (AES, AECM), ECS have distinctive characteristics that prevent directly transferring findings from farmer attitudes and up-take of the former to the latter. A summary of the main differences highlighted by the legislators is presented in Table 1.

Table 1. Comparison of key aspects of Eco-Schemes and Agri-environmental and climate measures

	Eco-schemes	Agri-environmental and climate measures
Source of funding	Pillar I – without co-financing by Member States	Pillar II – with co-financing by Member States
Possible beneficiaries	Farmers	Farmers, other land managers (e.g. environmental NGOs)
Payments' link to land	Payment per hectare Land concerned must be eligible for direct payments	Payment per hectare Land concerned need not be eligible for direct payments
Obligatory / Voluntary	Member States must make provision for them Participation voluntary for farmers	Member States must make provision for them Participation voluntary for farmers and other potential beneficiaries
Nature of commitments	Annual (i.e. "one year at a time")	Multi-annual contracts (usually of 5-7 years)
Calculation of premia	Compensation for additional costs / income loss arising from commitments concerned OR Additional payments to basic income support (no particular rules over premium level)	Compensation for additional costs / income loss arising from commitments concerned

Source: EC (2019)² and own elaboration

Moreover, in the CAP 2020+ for the first time farmers will have the option to choose between the two groups of voluntary measures, which has not been the case up to now. Therefore, there is a gap in the evidence available to understand farmer uptake of both voluntary measures in the new programming period.

2 AIM AND OBJECTIVES OF THIS CONTRACT

The present contract aims to collect data from a sample of farmers in at least four countries from the European Union using a computer assisted platform. The data collected will be articulated via a questionnaire with the sections described in section 3.1.

For this, the contractor is expected to:

² European Commission (EC), 2019. The post-2020 Common Agricultural Policy: environmental benefits and simplification. Available [here](#).

- program the questionnaire and experiment developed by the JRC (including all of its variants to capture the relevant treatments) into an electronic platform;
- translate it to the relevant languages;
- pilot the questionnaire in some of the countries where the fieldwork will be undertaken,
- implement the changes needed as a follow-up of the finding of the pilot,
- implement the revised questionnaire and experiment to a sample of farmers in the selected countries, and
- prepare a database with the data gathered.

3 TASKS

The Contractor must perform the following tasks during the implementation of the contract.

3.1 Translation of the experiment and questionnaire into the relevant languages (T1)

The JRC will send a complete outline of the questionnaire and experiment in English to the contractor as a Word document. The questionnaire and experiment will include the following:

- a. A statement of the purpose of experiment and treatment of data to be accepted by the participant (informed consent).
- b. A series of warm-up questions including questions assuring that participants are eligible for the experiment. Only farmers receiving CAP payments and not having participated in a similar survey in the last two months will be eligible. Moreover, the sample will have to assure representativeness of the farming sector in the respective countries at least with respect to size, age and organic farmers.
- c. The main decision task will include instructions in text and video format and a test decision. It will also include comprehension checks implemented as a quiz for understanding the underlying characteristics of the decision.
- d. A final section of questions consisting of different validated scales measuring psychological, attitudinal, farming (different from those used for representativeness) and socio-demographic characteristics.

The experiment will include a minimum of eight variants to incorporate the experimental design. The differences between treatments will affect a maximum of 25% of the questionnaire. Example of differences between treatments include:

- a. Including an additional piece of text in one of the versions, and/or
- b. Changing wording between versions

The contractor must translate the questionnaire, instructions and experiment into the official languages of the countries where the fieldwork will be carried out. The contractor must also provide the design and creation of the video with voice cover-up (location of a common text) in the different languages.

The experiment shall be delivered in FOUR countries of which three of them must be Spain, Germany and Romania. The contractor shall justify the selection of the fourth country highlighting how this improves the overall representativeness of the total data collection with regards to the diversity of the European farming landscape.

The expected average duration of the interaction of the sample population with the questionnaire and experiment is expected to be in the range of 25-35 minutes.

The translated version of the questionnaire and experiment together with the different version of the video will constitute Deliverable 1 (D1).

3.2 Programming of the experiment (T2)

The contractor will programme the versions (a maximum of 40 different versions taking into account: experimental treatments (8) and languages (4) of the countries where the experiment will be implemented + the master version in English) of the experiment into an online platform that is flexible enough to allow for:

- different presentations of the tasks (automatic calculation of pay-offs, flexibility in presentation of graphics), and
- data gathering (recording of time devoted to specific questions or sections of the experiment, etc.)

Examples of platforms that meet these requirements include Qlumatic^{XM}, Survey Monkey, etc.

The contractor must assure full compatibility with at least the following internet browsers: Chrome, Safari and Firefox covering versions available from January 2020 to the latest one released prior to the finalization of the data gathering. If a participant tries to access using a browser for which compatibility has not been assured, he/she should not be allowed to participate in the survey and experiment but be informed of which browsers can be used.

In addition, the contractor must assure that the web interface in which the experiment and survey are implemented is responsive (adapts gracefully to multiple screen sizes and pixel resolutions) for screens from 9 inches and 150 pixels per inch onwards. It should also be usable in both vertical and landscape modes.

The contractor must foresee the possibility of the JRC team to access the programming platform.

The programmed experiment with all its versions will be shared with the JRC as an ad-hoc link and will constitute Deliverable 2 (D2).

3.3 Pilot experiment (T3)

The contractor will organize face-to-face testing (COVID sanitary situation permitting³) of at least FIVE participants (per country) and an on-line pilot with at least TEN participants (per country) in a total of at least TWO (2) countries.

The participants for the face-to-face testing and the on-line pilot must meet the requirements of the target population (see Task 5).

Dates for the face-to-face pilots will be agreed with the JRC to allow presence of Commission staff in these pilots (costs of the presence of JRC staff (travel, lodging, etc.) will be covered by the JRC).

The Contractor must respect the applicable Data Protection rules. The Contracting Authority will provide the Contractor with standard European Commission privacy statement that shall be made visible to interviewees.

The data set of the face-to-face and on-line pilot together with a report on the experience of the pilot and a proposal for changes in the programming will constitute Deliverable 3 (D3).

3.4 Implementation of the lessons learnt from the pilot into the experimental design (T4)

The contractor will implement the relevant changes needed to address the short-comings identified during the pilot phase described in Task 3.

The revised programmed experiment with all its versions will be shared with the JRC as an ad-hoc link and will constitute Deliverable 4 (D4).

In order to ensure ethical guidelines are met, the final experiment must have the explicit approval of an appropriate ethics committee or internal review board before it is conducted. If the tenderer does not have an in-house ethical approval procedure, this requirement could be completed using the procedure of the German Association for Experimental Economic Research e.V. (<https://gfew.de/en-ethik>). The Contractor will deliver a statement to this effect, including the name of the body which gave approval, with a reference number where appropriate. If the experiment is granted an exemption from requiring ethical approval, the Contractor shall also specify this, including the name of the ethics committee that granted the exemption. The ethical approval or its exemption will constitute Deliverable 5 (D5).

Following best practice in experimental methods, the JRC will pre-register the characteristics of the experiment and its main testable hypothesis in one of the available repositories (aspredicted.org, Centre for Open Science (osf.io)). The contractor is not expected to undertake the pre-registration but must provide the necessary details

³ If a face-to-face pilot is not possible due to COVID restrictions, the testing will be done using a collaborative on-line platform.

to allow the JRC to carry out the pre-registration, in particular with regards to the data collection process and quality procedures⁴.

N.B. Task 5 cannot be launched until the contractor receives confirmation that the experiment has been pre-registered.

Before launching the full roll-out of the experiment, the JRC and the contractor will agree on the content and structure of the dataset. A guide with the names of the variables that will be tracked and recorded, together with the related experimental parts/questions shall be provided. The structure of the data set will constitute Deliverable 6 (D6) and will include both responses from the individuals as well as user specific variables such as type of device used to participate, time spent in the questionnaire (or sections thereof), etc.

3.5 Participant recruitment and data collection with the final experimental design (T5)

The Contractor shall be responsible for the recruitment of the participants. If the contractor will use recruitment messages or phone calls, the JRC will approve these messages prior to their dispatch and will passively participate in at least some of the recruitment calls.

The Contractor is requested to conduct an experiment with the following minimum requirements:

- Target population (universe): farmers of a specific broad technical orientation (i.e. arable crops, permanent crops, livestock) in the selected countries, who receive payments from the Common Agricultural Policy and are involved in decision-making for land allocation.
- Recruitment: phone, face-to-face and/or online contacts. A combination of recruitment methods is possible in order to increase the representativeness of the sample.
- Sample size: at least 400 participants per country.
- Geographical coverage: see Task 1.
- Representativeness: in each country, the sample should be representative (quota sampling) of farmers in relation at least to farm size, age and organic farming (see Task 1).
- Duration: average 25-35 of uninterrupted time.
- Administration method: computer or tablet – not smartphone.

The contractor will include in the planning of the fieldwork considerations regarding the availability of farmers due to peaks in agricultural activity (harvest, etc.).

Participants must voluntarily consent to participating in the research and shall be adequately informed about the purpose of research (informed consent). They shall be

⁴ Examples of the type of information requested in pre-registration reports can be found in the webpages of the two platforms mentioned above.

informed that they will remain anonymous and that their data shall remain private and only used for the purpose of this research. The Contractor must respect the applicable data protection rules. The Contracting Authority will provide the Contractor with standard European Commission privacy statement that shall be made visible to interviewees.

The contractor will provide weekly updates of the recruitment and data collection process if the platform used is not the one of the JRC plus put in place systems for access to partial datasets so potential problems with the data collection process can be detected.

3.6 Data set (T6)

The Contractor will deliver the dataset in a form that shall be immediately usable by the JRC for statistical analysis. The formats of the dataset must allow to seamless import SPSS and STATA (the statistical softwares used by the JRC).

In addition to the answers given by the participants to the experiment and the survey, the dataset shall include for each participant the type of device used to participate in the survey and experiment, the day and time when the experiment was taken, the total duration of the experiment and parts thereof, and whether the participant was recruited online, by telephone or face-to-face.

The dataset will constitute Deliverable 7 (D7).

3.7 Methodological report (T7)

The Contractor shall provide a methodological report of the experiment, describing in detail the sample characteristics, the recruitment method, the representativeness of the sample (including with regard to the selected EU Members States). The methodological report shall be sufficiently detailed for the JRC to defend the robustness of the results achieved in the study. The contractor shall agree with the JRC the structure and contents of the report.

The methodological report will cover at least the following aspects:

- a. Recruitment and field work (target population, sampling frame, quotas, dates of fieldwork, process to recruit farmers, attrition rates)
- b. Sample characteristics and their comparison with relevant population figures

A draft version of this report shall be provided before the final meeting (see below).

The methodological report will constitute Deliverable 8 (D8).

4 DELIVERABLES

The Contractor must provide the following eight (8) deliverables:

- D1: Translated version of the questionnaire and experiment together with the different version of the video instructions (see task 1).
- D2: Programmed experiment with all its versions shared with the JRC as an ad-hoc link (see task 2).
- D3: (see task 3)
 - D3.1: Data set of the face-to-face and on-line pilot
 - D3.2: Report on the experience of the pilot and a proposal for changes in the programming
- D4: Revised programmed experiment with all its versions shared with the JRC as an ad-hoc link (see task 4).
- D5: Ethical approval for the experiment (see task 4).
- D6: Structure of the data set (see task 4).
- D7: Data set from the roll-out of the experiment (see task 5).
- D8: Methodological report of the full process (see task 6).

JRC-Seville-D4 Unit will have 20 calendar days to review the deliverables and send its comments to the Contractor.

The Contractor will then have 20 calendar days for providing the final version of all the deliverables.

5 COORDINATION AND MEETINGS

The Contractor must carry out the service in close co-ordination with the relevant Commission staff (JRC-Seville-D4 Unit).

Telephone calls / videoconferences between the contractor and the JRC-Seville will be scheduled every two-weeks following the kick-off meeting. Unless particular issues have to be discussed at length, the duration of the calls will be short (under 30 minutes). If during these calls issues requiring more in-depth discussion are identified, follow-up meetings will be scheduled. The duration of these ad-hoc follow-up meetings will depend on the nature of the topics which need to be discussed. The contractor will be responsible to send invitations and keep record of the main agreements reached during the follow-up meetings.

Three meetings will be organised in the frame of this contract as follows.

5.1 Kick-off meeting

The contractor must organise a videoconference to present the detailed work plan, including the research questions to be answered. The meeting will aim at refining the scope of the work, agreeing on the research questions, and discussing the overall approach and work plan.

The meeting shall take place within FOUR weeks from the official start date of the contract.

The contractor will prepare minutes of the meeting reflecting the main agreements reached during the meeting. The minutes will be shared with JRC for comments and approval no later than two weeks after the meeting. The JRC will have two weeks to provide comments to the minutes.

5.2 Interim meeting

Following the approval of D3 (report on the experience of the pilot and a proposal for changes in the programming), the contractor will organize a meeting with the JRC and relevant contacts in other Directorates General of the European Commission (to be provided by the JRC) to discuss the finding of the pilot survey (both face-to-face and on-line) and agree on the changes to be implemented in the revised versions of the programmed experiment.

The contractor will prepare minutes of the meeting reflecting the main agreements reached during the meeting. The minutes will be shared with JRC for comments and approval no later than two weeks after the meeting. The JRC will have two weeks to provide comments to the minutes.

5.3 Final meeting

After the submission of the data set of the experiment, the contractor will organize a meeting with the JRC and relevant contacts in other Directorates General of the European Commission (to be provided by the JRC) to discuss the process of data gathering and the draft methodological report (D8).

The working language at all of these meetings will be English. Depending on the restrictions related to COVID-19 the meetings will be held in person or via an on-line platform. In case of the former, travel and accommodation costs for attending the meetings is deemed to be included in the final price of the contract.

The contractor will prepare minutes of the meeting reflecting the main agreements reached during the meeting. The minutes will be shared with JRC for comments and approval no later than two weeks after the meeting. The JRC will have two weeks to provide comments to the minutes.

6 CALENDAR OF DELIVERABLES AND MEETINGS

The activities shall be carried over a duration of maximum 15 months since the signature of the contract. The following summary table reports the tentative time schedule for the different activities and deliverables.

Deliverable	Title	Months
M1	Kick-off meeting	$T_0 + 1$
	Minutes from the Kick-off meeting	$T_0 + 1.5$
<i>Milestone</i>	<i>Questionnaire and video script provided by JRC</i>	$T_0 + 2$
D1	Translated version of the questionnaire and experiment together with the different version of the video instructions	$T_0 + 3$
D2	Programmed experiment with all its versions shared with the JRC as an ad-hoc link	$T_0 + 5$
D3	Data set of the face-to-face and on-line pilot Report on the experience of the pilot and proposal for changes in the programming	$T_0 + 6$
M2	Interim meeting	$T_0 + 7$
	Minutes from the interim meeting	$T_0 + 7.5$
D4	Revised programmed experiment with all its versions shared with the JRC as an ad-hoc link	$T_0 + 8$
D5	Ethical approval for the experiment	$T_0 + 8$
<i>Milestone</i>	<i>JRC pre-registration of the experiment by the JRC</i>	$T + 8$
<i>Milestone</i>	<i>Launch of the field work</i>	$T + 8.5$
D6	Structure of the data set	$T_0 + 9$
D7	Data set from the roll-out of the experiment	$T_0 + 10$
<i>Milestone</i>	<i>Draft methodological report</i>	$T_0 + 11$
M3	Final meeting	$T_0 + 12$
	Minutes from the final meeting	$T_0 + 12.5$
D8	Methodological report of the full process	$T_0 + 13$

T_0 corresponds to the date on which the last party signs the contract.

7 QUALITY ASSURANCE

The contractor must establish robust means to ensure the reliability, validity and comparability of the information collected as well as the quality of its analysis and of its reporting, including a full and standard referencing of the sources used.

The work delivered by the contractor must be of such quality that it can be used to support policy-making. Thus, the contractor should establish robust means of ensuring the validity and comparability of information collected and the quality of its analysis and reporting.

In particular, a Senior Researcher nominated by the Contractor in his offer will be in charge of the scientific quality assurance tasks.

Before final acceptance, all reports will be completed, adapted and corrected by the Contractor who will fully take into account the comments, suggestions and additional written comments provided by the JRC-Sevilla.

8 DURATION

The performance of the tasks cannot start before the date on which the last party signs the contract, and should be finalised in a **maximum of 13 months**, including the time for the JRC-Sevilla to comment the interim deliverables and the Contractor to implement the suggested amendments.

The time needed for possible comments and amendments to the final deliverable (D8) would be added to the total duration of the contract.

9 LANGUAGE

The language of all deliverables meetings, presentations, and exchanges will be English.

The master version of the user interface of all software should be English, and this is the language in which all documentation, including that inserted in source code, will be written.

It is expected that the written text in the deliverables is of high standard scientific language, ideas are expressed in a clear and logically structured way. The text of all deliverables will be strictly assessed according to these criteria in the review process.