

# Towards climate-smart sustainable management of agricultural soils

# Deliverable 8.7

Resources, Infrastructure and Capabilities Inventory (RICI) online platform for policy stakeholders

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| DISSEMINATION LEVEL:                      | PU   |





#### ABSTRACT

The "Resources, Infrastructure and Capabilities Inventory (RICI)" is a database that presents a catalogue of the capacities and expertise existing within the consortium of the "European Joint Programme for Soil – Towards Climate-smart Sustainable Agricultural Soil Management (EJP SOIL). RICI has been developed in the context of the EJP SOIL, and aims to provide policy makers and other interested stakeholders, with the necessary details and contact point information to connect with specific expertise associated with wider area of sustainable soil management. This Inventory has been made accessible online through the EJP SOIL "Science to Policy" portal of the EJP SOIL website. This inventory includes information such as name, surname and affiliation of each expert, as well as his/her contact details, main research topics of interest and detailed information on particular capacities and skills. This inventory, as part of the EJP SOIL website knowledge sharing platform, serves as an important leverage point for strengthening EU research networks as it facilitates interlinkages among researchers across Europe and beyond. It serves as a tool for accelerating the dialogue on research activities developed in the framework of the EJP SOIL and developing further collaboration and activities beyond the EJP SOIL programme of work. Moreover, the inventory is a source of key information for policy makers who want to consult technical experts while in the process of developing new soil strategies and policies.





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# List of acronyms and abbreviations

| CAP   | Common Agricultural Policy                           |
|-------|--|
| ExCom | Executive Committee of EJP SOIL Programme            |
| RICI  | Resources, Infrastructure and Capabilities Inventory |
| WP    | Work Package   |
| EU    | European Union                                       |





# 1. Introduction

In the context of the EJP SOIL programme of work, WP8 "Science to Policy" focuses on assessing the effectiveness of existing policies and measures, as well as identifying recommendations for the future development of further supportive policy instruments towards climate smart sustainable management of agricultural soils. Activities within WP8 are underpinned by engaging with the expertise of policy stakeholders (e.g. academia, research institutes, and government ministries) through a participatory approach. In this context, Task 8.3 "Support and Translate" aims at providing a scientific base to support the decision making of policy stakeholders and translating the scientific findings of EJP SOIL into recommendations that can be implemented towards climate smart sustainable management of agricultural soils. As part of sub-task 8.3.1, an online available inventory of the expertise within the EJP SOIL Programme has been developed to support policy stakeholders' access to scientific information, this is the "Resources, Infrastructure and Capabilities Inventory (RICI)".

The overall aim of RICI is to provide policy stakeholders, as well as other interested stakeholders, with the necessary details and contact points to connect with experts on a specific topic when required. To achieve its main goal, RICI includes an inventory of the capacities and expertise existing across the academic and research institutes collaborating within the EJP SOIL consortium.

RICI is an open access database, accessible online through the EJP SOIL science to policy webpage (https://ejpsoil.eu/science-to-policy) integrated into the EJP SOIL website. The RICI works as an important leveraging point for strengthening EU research networks, as it facilitates interlinkages between researchers across Europe and beyond. It serves as a tool for accelerating the dialogue on research activities developed in the framework of the EJP SOIL and has the potential to develop further collaboration and activities beyond the EJP SOIL programme of work. Moreover, the RICI is a source of key information for policy makers who want to consult technical experts while in the process of drafting new soil strategies and policies.

RICI users can query the database with regards to specific information required, such as name, surname and affiliation of each expert, as well as his/her contact details, main research topics of interest and detailed information on particular capacities and skills. In this respect, RICI has been designed and implemented in compliance with the relevant national and EU legislation on data protection and ethical standards.

The present deliverable describes the path that led to the development of RICI, through a participatory approach implemented among the experts involved in the EJP SOIL Consortium, as well as the main features and components of RICI.





# 2. What is RICI?

RICI is an online tool developed with the aim of cataloguing the capacities and expertise existing across the academic and research institutes involved in the EJP SOIL Consortium. It contains data related to experts working on soil research and knowledge transfer activities involved in the EJP SOIL consortium and not data related to EJP SOIL stakeholders.

RICI is targeted at key EJP SOIL stakeholders working in the area of agricultural soil management, mainly policy stakeholders at national and regional level. The overarching goal of RICI is, in fact, is to serve as a sort of yellow pages and to provide policy stakeholders with a pool of experts and related contacts, from which they can draw on when specific expertise is required.

RICI has been developed using a participatory approach, through consultations of all the leaders of those EJP SOIL WPs which work in synergy with WP8 - Task 8.3, in particular WP9.

RICI works as an open access tool, available online as part of the knowledge sharing platform already present in the EJP SOIL website. RICI is available on the "Science to Policy" webpage (https://ejpsoil.eu/science-to-policy) of the EJP SOIL website in order to improve its visibility and promote its use among the target audience of policy stakeholders (Figure 1). Links to search the RICI are also located on each of the webpages that present the six research themes of the EJP SOIL Programme, so that stakeholders who access these pages are also directed to the opportunity to search the RICI and find experts on these topics (Figure 2). The ability to search for expertise using the RICI platform enables focused results of experts within different aspects of soil science such as microorganisms, soil structure, carbon capture and storage, amendment and so forth.

Through the inclusion of the RICI on these specific web pages, the RICI does not exist in isolation as a solitary tool, but functions as key compliment to the EJP SOIL website's Knowledge Sharing Platform, which provides stakeholders with access to complementary information such as national libraries, publications, webinar recordings etc. RICI's functions and contents are complimentary to the ones provided in other EJP SOIL datasets, present in the EJP SOIL website, such as the Long-Term Field Experiments & Laboratories (available at this link: <u>https://ejpsoil.eu/long-term-field-experiments-laboratories/</u>).

The RICI dataset has been populated on a voluntary basis, in a collective effort. An online questionnaire (available at this link <u>https://forms.gle/RVikGU89thRSG5bF9</u>, partially presented in Figure 3 and in full in Annex 5.1) was developed and circulated among all experts involved in the EJP SOIL consortium starting from October 2021. The questionnaire will remain open until the end of the EJP SOIL programme in order to allow for a continuous update of the RICI dataset making it a living tool. The questionnaire includes three types of information: personal contact details; type of involvement in EJP SOIL programme; professional skills and competencies. In addition to completing the RICI questionnaire, experts have also been invited to sign an Informed Consent Form (Annex 5.2). Signed informed consent forms have been collected and stored by the leader of sub-task 8.3.1 in compliance with data regulation protocols.





# 3. Promotion and use of the RICI

After its creation, the form to complete the RICI was promoted extensively within the EJP SOIL consortium via email to all National Communication Representatives in the 24 participating countries as well as to work package leaders. The RICI was also promoted at WP8 meetings with the WP3 projects. A brief news article on RICI was published in the EJP SOIL newsletter, after the publication of the inventory on the EJP SOIL website. In this way the RICI has be populated by members of the consortium and promoted among the various experts involved in the EJP SOIL Programme.

Information about RICI will also be shared by EJP SOIL experts in all future communication and dissemination activities involving policy stakeholders planned within WP8 "Science to Policy" under Task 8.4 Disseminate and Promote, to be held from January 2022, as well as to the activities outlined in D9.2 revised EJP SOIL CDE Strategy and Plan. In addition, special promotion of the RICI to the National Hubs as well as the EJP SOIL Ambassadors will ensure their awareness of the platform. This will allow them to promote and disseminate the RICI at a national level to policy stakeholders.

The integration of the RICI into the science to policy webpage on the EJP SOIL website also positions it in such a place as to make it highly accessible to website users seeking information.

**User Case Example 1:** if a policy stakeholder is working on policies regarding carbon capture and storage, the RICI platform will provide specific information on the scientists or the laboratories who do research within this topic. A search will identify a range of scientists in different countries, specialized in this topic, including the experts in the regional and local area. Before RICI, this kind of information was found in centralized research centres and ministries. Now, with the dataset collected in RICI, from within the EJP SOIL consortium, research centres at national, regional and local level are visible across Europe. Capacity and expertise with knowledge of local and regional reality of the context have moved from being a centralised frame of reference to a decentralised easily accessible online information platform.

**User Case Example 2:** If an Italian policymaker makes a search for an expert dealing with soil, they will find the scientists in Rome but also those from other parts of Italy. This is very useful in designing policies at different national and regional levels. Across Italy, there are very different soil structures and geographical conditions. It is important to be able to find scientists who are specialists within an environmental specific context. This facilitates and accelerates the policy process.

The RICI online platform is a pathway to finding laboratories with special skills and capacities. The entry point in the RICI is the person, the scientist. The RICI then provides information on the primary topics of interest of the scientist in question, specific areas of expertise, description of the research of the scientist, current position, the role and position she or he has in the EJP SOIL project, affiliations, and finally, it provides relevant links to further information and contacts. Hence, this information identifies and provides accreditation to laboratories and long-term experiment sites engaged in the EJP SOIL programme.

The RICI inventory is a dynamic database to be updated continuously, throughout the lifespan of the EJP SOIL programme. Future perspectives could be to integrate the platform in another distinguished European soil science initiative. At the end of the EJP SOIL programme, we will consider transferring the RICI database to JRC/EUSO which will take RICI over beyond EJP SOIL. To this end, an agreement with JRC/EUSO needs to be established, upon an internal approval released by WP1 and WP8. In this framework, a further GDPR procedure will be needed to ask all experts included in the catalogue to





sign another Informed Consent form in which they agree to transfer the ownership of data to JRC/EUSO. Up to 3<sup>rd</sup> November 2022, 120 experts from 36 Institutions across 21 countries involved in the EJP SOIL Consortium have registered in the RICI. Figure 4 and Figure 5 show a summary the skills and expertise based on data collected through the online questionnaire up to 23/11/2021.





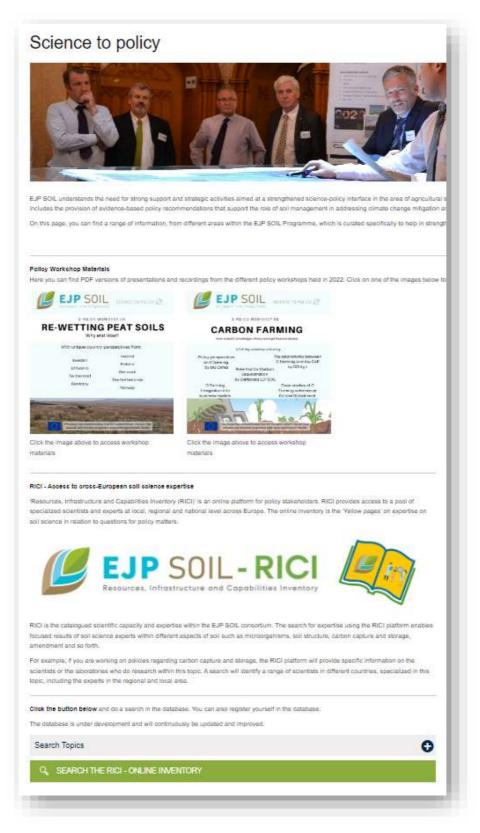


Figure 1 Location of RICI on the science to policy web page of the EJP SOIL website



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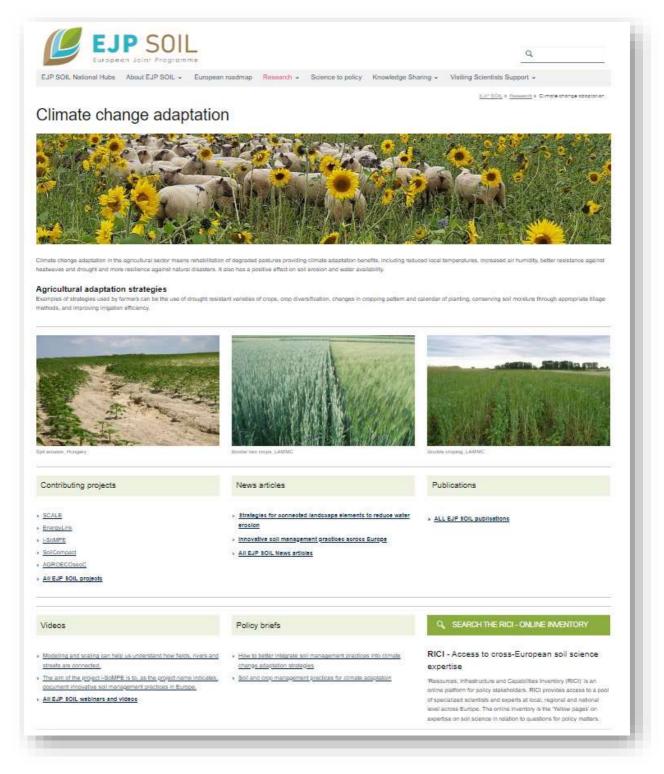


Figure 2 Location of RICI on one of the six research theme web pages on the EJP SOIL website.





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| Section 1 of 10   |  |   |
|   | 7 <b>7</b> 7 7 7 7 7   | ilition X   |
| RICI - <u>Resource</u><br>Inventory   | es, Infrastructure and Capab   | <u>ilities</u>  |
| and be made available to th<br>The main aim of the RICI is<br>important technical and sci | will facilitate the creation of a catalogue, the RICI,<br>he public on the EJP SOIL Website.<br>to connect stakeholders (e.g. policy makers) with<br>ientific knowledge and skills they are looking for,<br>nake any data you share in this survey publicly avai<br>nsent. | persons who possess the   |
| Email *   |  |   |
| Valid email   |  |   |
| This form is collecting ema   | ils. Change settings   |   |
| ter section 1 Continue to ne  | ext section *  |   |
| Disclaimer  |  | × I   |
|   | compilation of this form will be used exclusively in   | accordance with EJP Soil<br>est tasks including the purposes of |

Figure 3 Online questionnaire developed to collect data for RICI





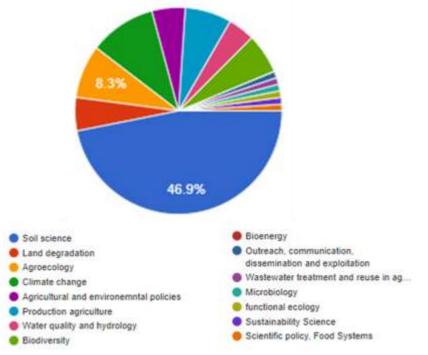


Figure 4 Principal professional skill and expertise of the experts involved in the EJP SOIL consortium. Elaboration of data collected through the online questionnaire up to 23/11/2021.

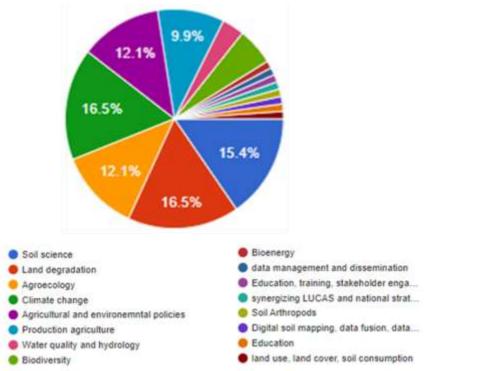


Figure 5 Secondary professional skill and expertise of the experts involved in the EJP SOIL consortium. Elaboration of data collected through the online questionnaire up to 23/11/2021.





### 4. RICI logo

A dedicated logo was created for RICI (Figure 6) with the aim to work as a brand and to make the catalogue easily recognizable.

The logo of RICI is:

- 1. Easy to recognize, to be reduced or enlarged (size flexibility);
- 2. Easy to apply to different media tools (printouts, animation, web-design, etc.);
- 3. Printable both in color and in black and white only.

The logo of RICI will be used in different media tools (e.g. EJP SOIL website, social media) as well as in all internal and external documents created with the aim to disseminate and give visibility to the catalogue and to support its wide use by end-users.

The logo is intended to symbolise the yellow pages containing the list of experts and expertise in the EJP SOIL programme. EJP SOIL logo is echoed in the left side of the catalogue.



Figure 6 RICI Logo





# 5. Improving RICI: A stepwise approach

RICI was initially created in an Excel file format with lookup tables for the relevant fields. With the aim to improve its search functionality, all information included in the initial Excel file has been migrated to a dedicated database. To this end, SQL programmer and database visualization were needed. Thereafter, a web-based service needs to be created that allows querying the database and updating profile information by profile owners. This task implies the creation of a new graphic design (user interface) for RICI, to transform it into an interactive tool embedded in the already existing in the EJP SOIL platform and to facilitate the search of information.

As a possible further development, a map can be created including with the various coordinates of Institutions: where they are, who is working there and what are the main skills, infrastructures and capabilities of experts within each research institution. Furthermore, RICI needs to be better interlinked with other information and database (i.e., Long-Term-Experiments) already existing in the official EJP SOIL stakeholder platform. Nevertheless, this activity requires some further web development by experts involved in WP9 and goes beyond the scope of sub-task 8.3.1.

A focus group with the participation of a small number of policy stakeholders has been planned for Year 4 to present both the EJP SOIL Knowledge Sharing Platform and the RICI embedded in it, as useful tools for policy stakeholder. Furthermore, the focus group will serve to collect user feedback on the functionality, content and user-friendliness of the interface of the knowledge sharing platform with the RICI included.





### 6. Annexes

#### 6.1. Questionnaire

#### **RICI - Resources, Infrastructure and Capabilities Inventory**

This short survey aims at collecting information on the wide range of expertise among members of the EJP SOIL Programme consortium. It will facilitate the creation of a catalogue, the RICI, which will contain this information and be made available to the public on the EJP SOIL Website.

The main aim of the RICI is to connect stakeholders (e.g. policy makers) with persons who possess the important technical and scientific knowledge and skills they are looking for. Please be advised that to make any data you share in this survey publicly available, you will be required to fill and sign a form of informed consent.

**Disclaimer** Data provided through the compilation of this form will be used exclusively in accordance with EJP SOIL institutional purposes or, in any case, in relation to the exercise of public interest tasks including the purposes of scientific research and analysis for scientific purposes. The Data Manager is the Council for Agricultural Research and Economics CREA - Research Centre for Agricultural Policies and Bioeconomy, Headquarter in Via Po, 14 - 00198 ROMA.

\* Required answers

- 1. Email \*
- 2. First name \*
- 3. Surname\*
- 4. Title \*

Check all that apply.

Dr Prof Mr Ms/Mrs

#### Current position and affiliation

- 5. Current position/role \*
- 6. Affiliation \*
- 7. Department \*
- 8. Lab
- 9. Lab website



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#### Office address

- 10. Office Postal Address \*
- 11. City \*
- 12. Postal code \*
- 13. Country \*

#### Your involvement in EJP SOIL

14. Your role in the EJP SOIL programme\*

#### Check all that apply.

| Programme general coordinator |
|-------------------------------|
| Programme country coordinator |
| Quality assurance manager     |
| WP leader                     |
| Task leader                   |
| Sub-task leader               |
| Supporting expert             |
| Other                         |

15. In which WP(s) of EJP SOIL are you involved? \*

#### Check all that apply.

| WP1 Coordination                  |  |
|-----------------------------------|--|
| WP2 Roadmap for research          |  |
| WP3 Internal calls                |  |
| WP4 External calls                |  |
| WP5 Education & Capacity building |  |
| WP6 Soil data & Reporting         |  |
| WP7 Synthesis & Knowledge         |  |
| WP8 Science to policy interaction |  |
| WP9 Dissemination & Outreach      |  |
| WP10 Ethics                       |  |

16. In which specific task(s) of EJP SOIL are you involved? Please list it/them. \*





#### Professional skills and expertise

17. Primary expertise (general knowledge) \*

Mark only one oval.

|            | y one ovan:                             |
|------------|---|
|            | Soil science                            |
|            | Land degradation                        |
| $\square$  | Agroecology                             |
| $\bigcirc$ | Climate change                          |
| $\bigcirc$ | Agricultural and environmental policies |
| $\bigcirc$ | Agricultural productivity               |
|            | Water quality and hydrology             |
| $\bigcirc$ | Biodiversity                            |
|            | Bioenergy                               |
|            | Other                                   |

#### 18. Secondary expertise

Mark only one oval.

| /          |   |
|------------|---|
| $\bigcirc$ | Soil science                            |
|            | Land degradation                        |
| $\square$  | Agroecology                             |
| $\bigcirc$ | Climate change                          |
| $\bigcirc$ | Agricultural and environmental policies |
|            | Agricultural productivity               |
|            | Water quality and hydrology             |
| $\bigcirc$ | Biodiversity                            |
| $\bigcirc$ | Bioenergy                               |
| $\bigcirc$ | Other                                   |

- 19. Specific interest in the framework of your expertise \*
- 20. What is your research about? Describe the main objectives of your research (maximum 5 keywords) \*
- 21. What is your research about? Describe the main types of activities characterizing your research (e.g., lab, LTE max 5 keywords) \*
- 22. Include 2 of your most recent publications on your main topics of interest \*

#### Previous engagement in policy processes

- 23. Please indicate in what type(s) of policy process(es) you have contributed so far (e.g. definition of emissions factors, indicators and/or quality thresholds; reviews of policies). If none, please write N.A. \*
- 24. Please indicate the SCALE of your engagement



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| Check all that apply. |                           |
|-----------------------|---------------------------|
|                       | International/Global      |
|                       | EU                        |
| $\square$             | Regional                  |
|                       | National                  |
|                       | Subnational               |
|                       | Local (e.g. Municipality) |
| $\bigcirc$            | Other                     |

#### Education

- 25. Highest degree \*
- 26. Other degree \*

#### **Contact details**

- 27. Office telephone (don't forget the country code at the beginning!)
- 28. Skype contact

#### Other useful link/references

- 29. ORCID code
- 30. LinkedIn account
- 31. Research gate account
- 32. WoS Researcher ID
- 33. Other useful link





### 6.2. Informed Consent Form

You have been invited to take part in the European project "Towards climate-smart sustainable management of agricultural soils" (hereinafter also referred to as "EJP SOIL"). Your participation in this research will contribute to the creation of a sustainable European integrated research community on agricultural soils and to the development and deployment of a roadmap on climate-smart sustainable agricultural soil management. Please find more information at www.ejpsoil.org.

Before taking a decision on whether you wish to participate or not, please read this document carefully. Please feel free to ask all the questions you may have to ensure that you have full understanding of the purpose and proceedings of the research project.

Please contact Dr. Giovanni Dara Guccione (CREA - Italy, <u>giovanni.daraguccione@crea.gov.it</u>) for any questions you may have.

#### Compliance with legal and ethical regulations

At all times, we assure full compliance with relevant national and EU legislation on data protection and ethical standards.

#### Involvement

You are asked to participate in a data collection campaign carried out as part of WP8 "Science to Policy Interface" of EJP SOIL and more specifically within sub-task 8.3.1 "Resources, Infrastructure and Capabilities Inventory (RICI)". The survey you will fill-in was prepared by Dr. Giovanni Dara Guccione and Dr. Tiziana Pirelli, working on WP8 of EJP SOIL from the Council for Agricultural Research and Economics (CREA) in Italy. The survey will take about 10 min and aims to collect data to populate RICI, a catalogue of the capacities and expertise existing within the EJP consortium. The overarching goal of RICI is to provide policy makers with a pool of experts and related contacts, from which they can draw when specific expertise is required in the policy cycle. All data included into RICI will be made available online for everybody as part of the Stakeholder Portal developed within the EJP SOIL website. No use for commercial purpose will be made with your information.

#### Your rights

In accordance with the European Union's regulation on personal data protection (GDPR 2016/679) you have the right to access, modify, object, and erase your information. If you want to exercise this right, or to obtain your information, please contact <u>giovanni.daraguccione@crea.gov.it</u>, CREA-Italy.

You are free to accept or refuse to take part in this data collection campaign. If you accept to take part, you have the right to decline to answer any questions, or to withdraw from the data collection campaign at any moment without providing a reason for it.

#### Consent

By signing this document, you agree to participate in the data collection campaign and to publish your data within the RICI, which will be make available for all on-line as part of the Stakeholder Portal of the





EJP SOIL website. Please make sure that questions you have about the research have been all answered and that you have full understanding of what you are being asked to do.

Due to the current Covid-19 regulations, we kindly ask you to sign the document and send a scanned copy to <u>giovanni.daraguccione@crea.gov.it</u> CREA (Italy). The researcher will keep this copy together with the relevant research records. Please keep the document for your own records.

This informed consent form is made pursuant to the relevant national, European and international data protection laws and regulations as well as personal data treatment obligations. Specifically, this informed consent form complies with the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation).

| Name and surname of stakeholder          | Name and surname of the researcher          |
|--|---|
| Place, date and signature of stakeholder | Place, date and signature of the researcher |

