SUSTAIN Deliverable

D7.9 Dissemination of informed consent sheets to participants of study 02

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European Innovation Council

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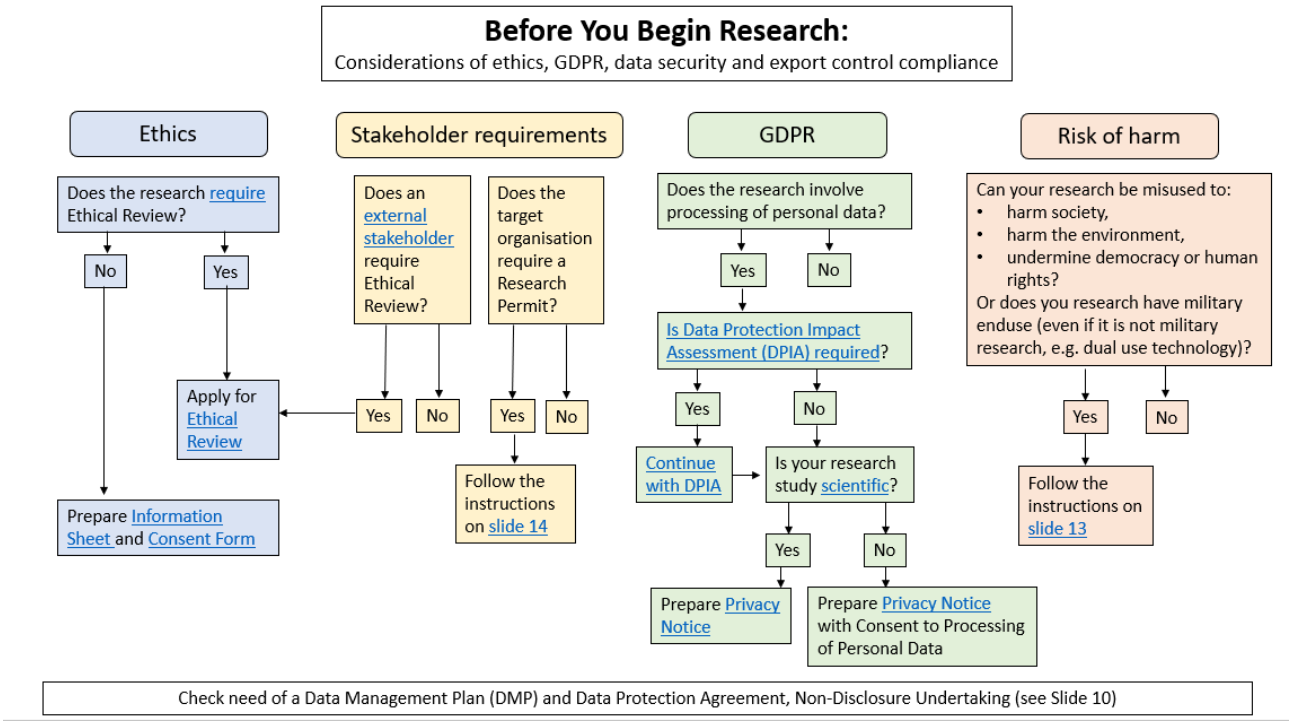
Abstract
Informed consent forms and the detailed information sheets will be provided at least three months prior to the actual case studies. The purpose of D7.9 is to fulfil this task.

Contents

1 Process for Verifying Research Ethics and Legal Compliance Regarding Human Participants

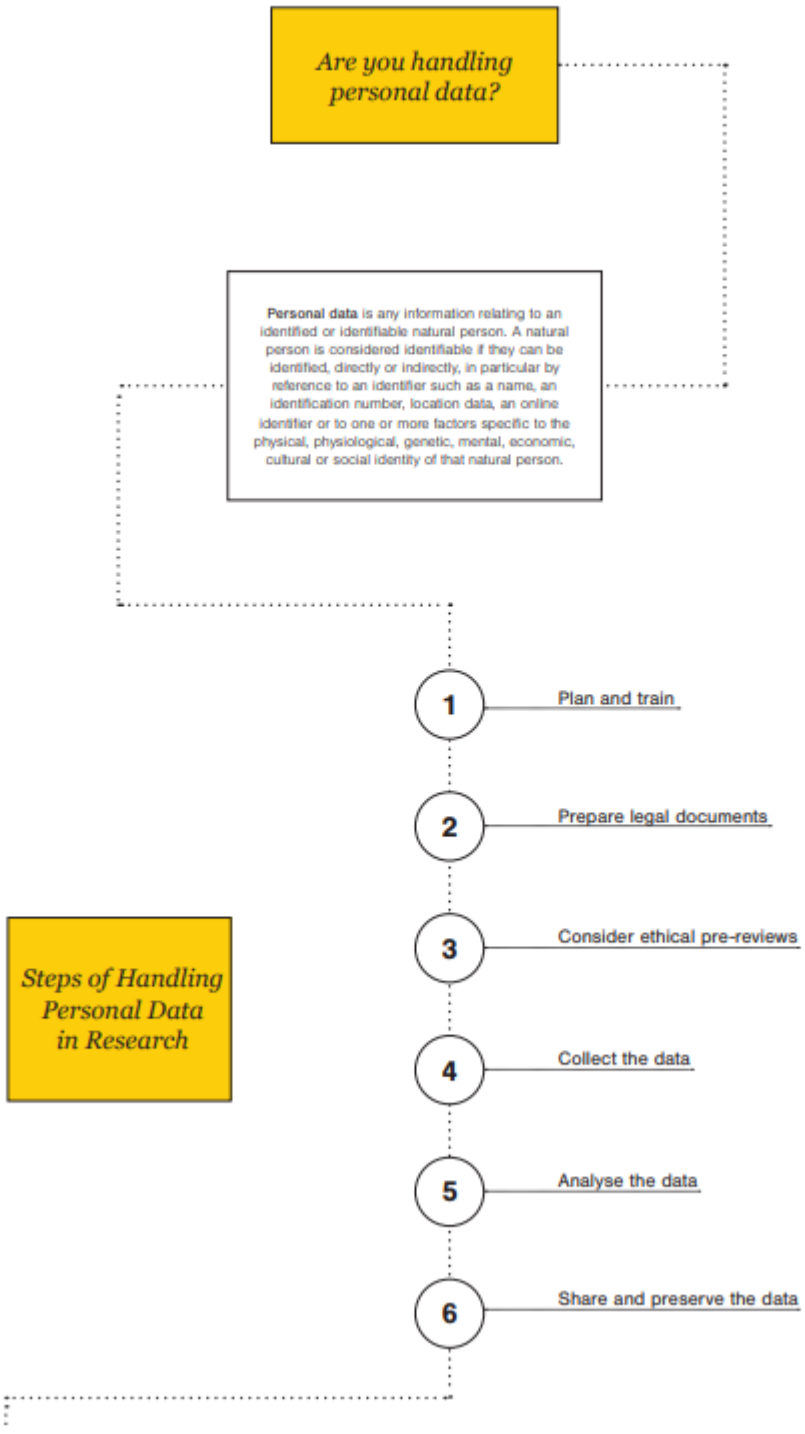
The SUSTAIN Aalto team has carefully assessed the research ethics and legal compliance pertaining to the three main studies. The result of this process has indicated which documents are needed per study, and what is the appropriate form of the documents. E.g. the Information Sheet must be written in a way which is understandable to the lay person.

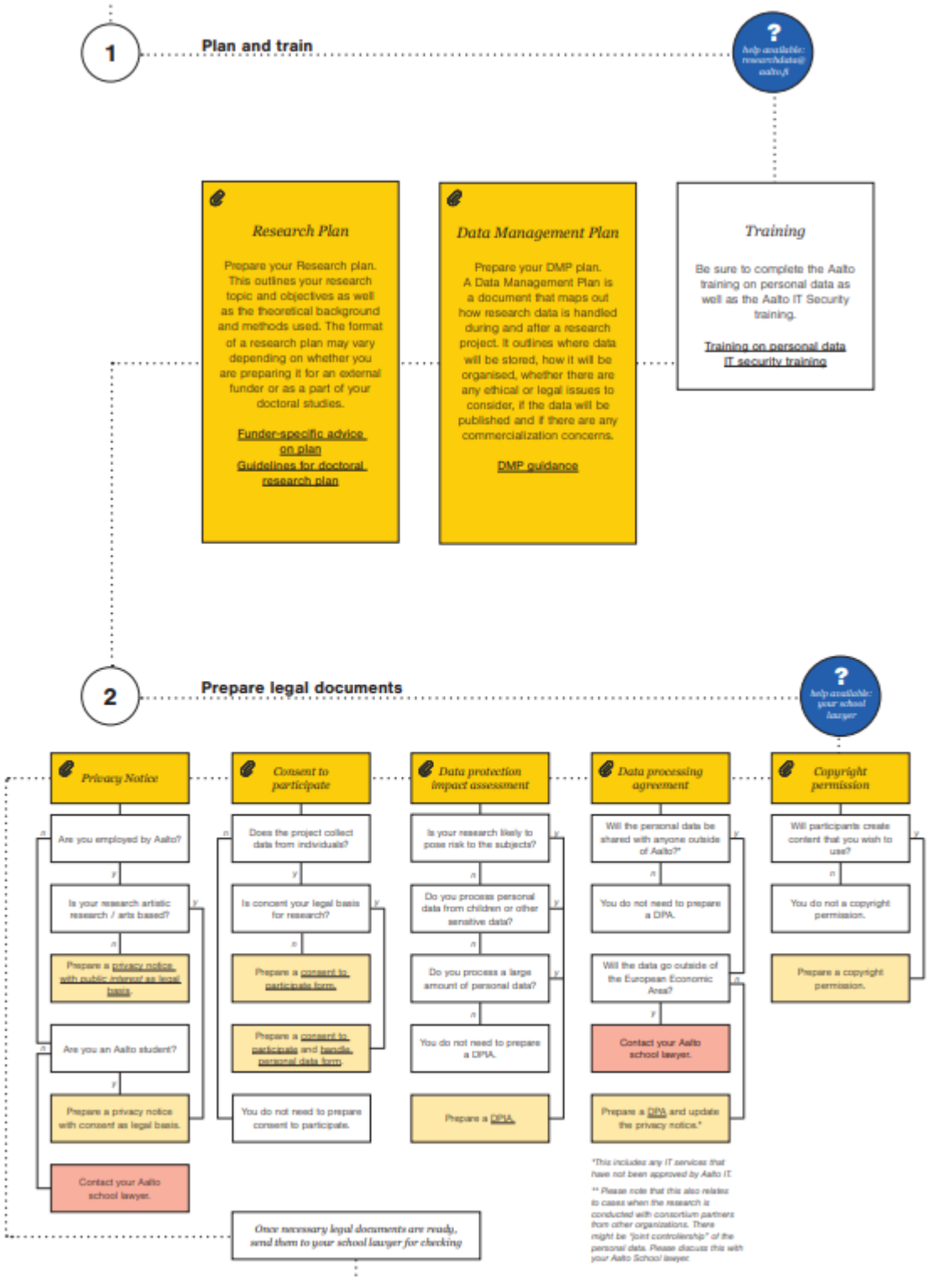


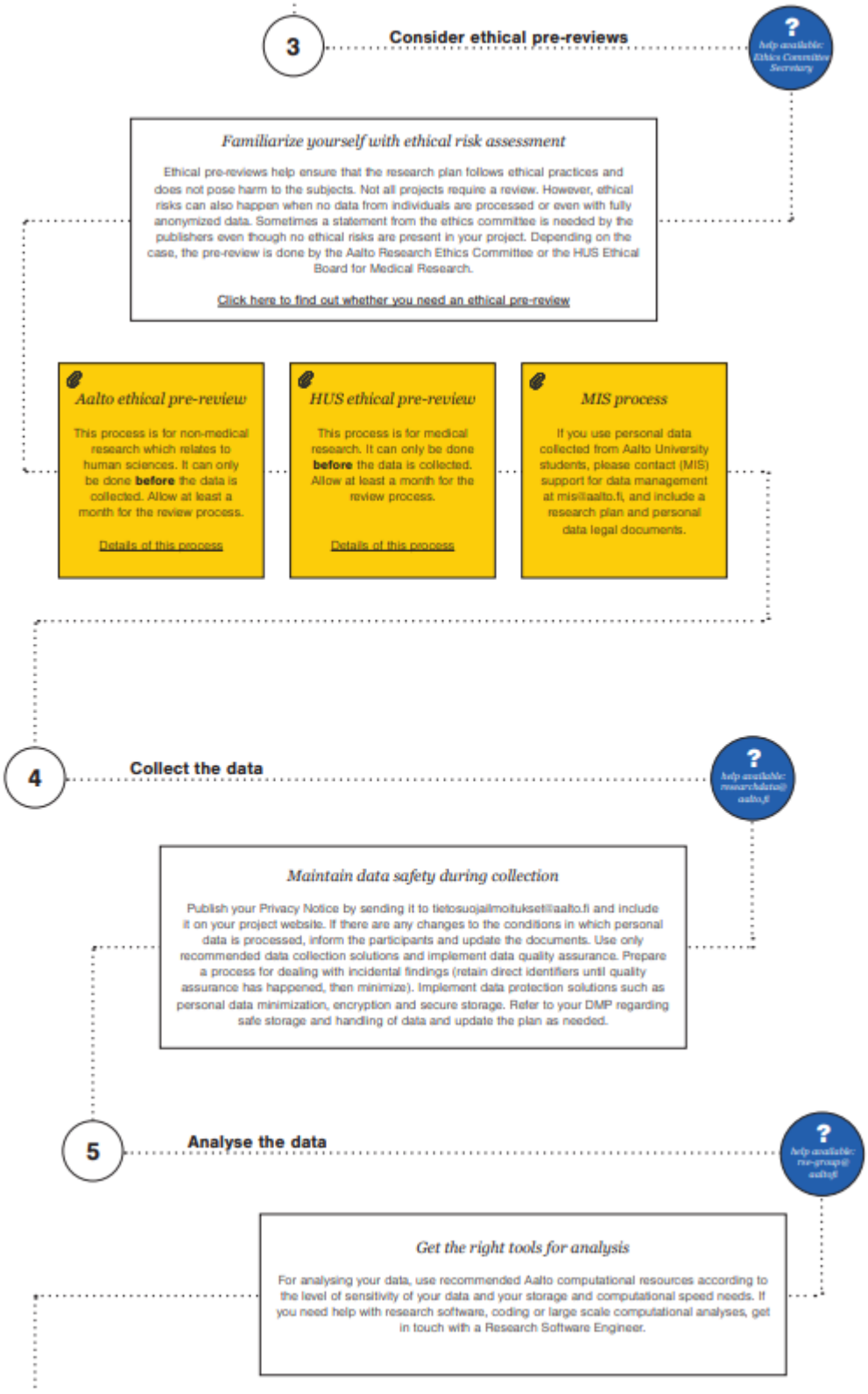
Picture 1. Defining Requirements Before Conducting Research. Source: Training Material of Katariina Malmberg and Tuija Heikura, 2023.

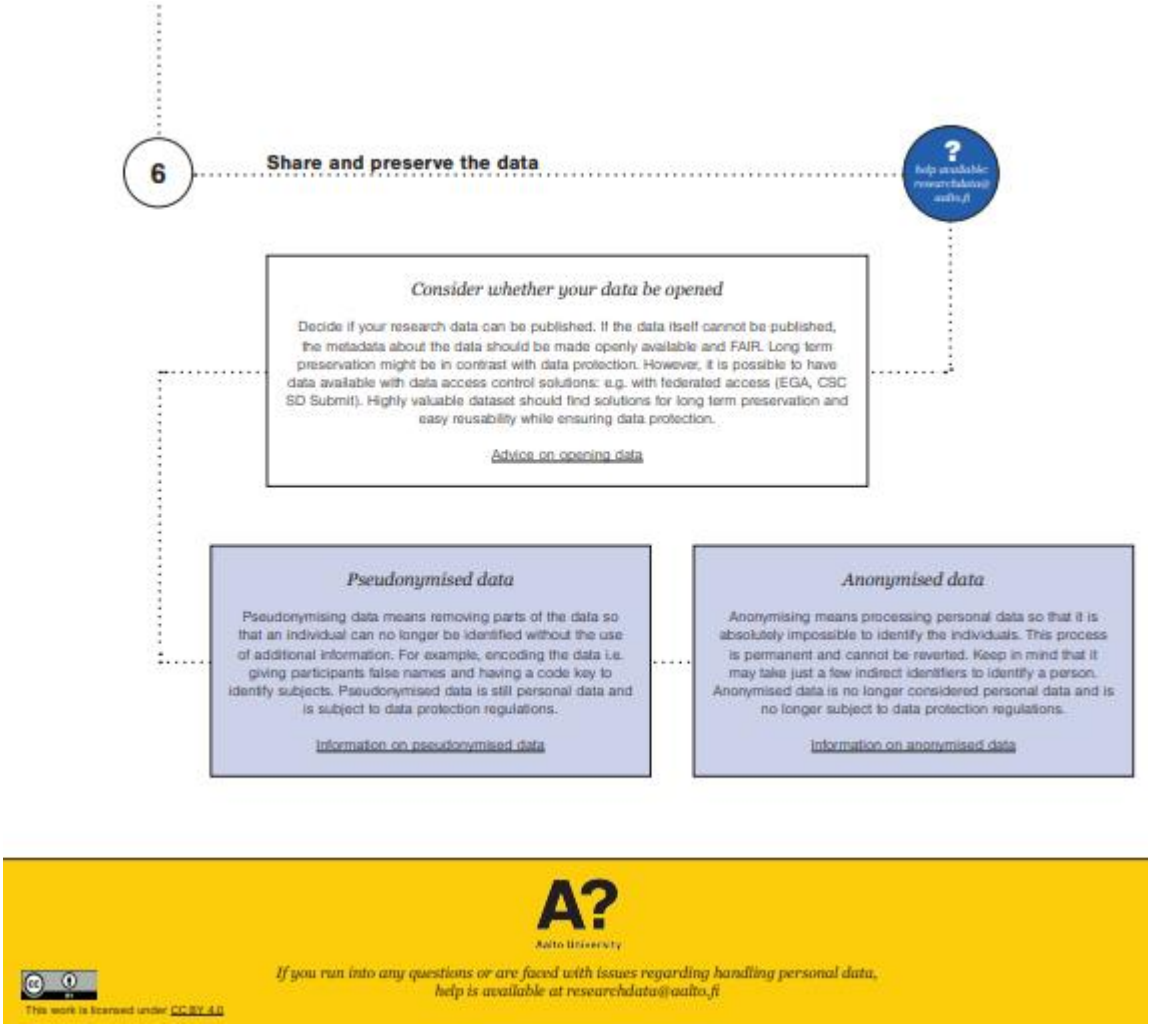
In addition, the below Aalto process flow chart was utilized.

There is also a Privacy Notice drawn up, but it is outside the description of this deliverable.


Are you handling personal data?
Personal data is any information relating to an identified or identifiable natural person. A natural person is considered identifiable if they can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.
Steps of Handling Personal Data in Research
1 Plan and train
2 Prepare legal documents
3 Consider ethical pre-reviews
4 Collect the data
5 Analyse the data
6 Share and preserve the data


1
Plan and train
? help available: researchdata@aalto.fi
Research Plan
Prepare your Research plan. This outlines your research topic and objectives as well as the theoretical background and methods used. The format of a research plan may vary depending on whether you are preparing it for an external funder or as a part of your doctoral studies.
Funder-specific advice on plan
Guidelines for doctoral research plan
Data Management Plan
Prepare your DMP plan. A Data Management Plan is a document that maps out how research data is handled during and after a research project. It outlines where data will be stored, how it will be organised, whether there are any ethical or legal issues to consider, if the data will be published and if there are any commercialization concerns.
DMP guidance
Training
Be sure to complete the Aalto training on personal data as well as the Aalto IT Security training.
Training on personal data
IT security training
2
Prepare legal documents
? help available: your school lawyer
Privacy Notice
Are you employed by Aalto?
Is your research artistic research / arts based?
Prepare a privacy notice with public interest as legal basis.
Are you an Aalto student?
Prepare a privacy notice with consent as legal basis.
Contact your Aalto school lawyer.
Consent to participate
Does the project collect data from individuals?
Is consent your legal basis for research?
Prepare a consent to participate form.
Prepare a consent to participate and handle personal data form.
You do not need to prepare consent to participate.
Data protection impact assessment
Is your research likely to pose risk to the subjects?
Do you process personal data from children or other sensitive data?
Do you process a large amount of personal data?
You do not need to prepare a DPIA.
Prepare a DPIA.
Data processing agreement
Will the personal data be shared with anyone outside of Aalto?*
You do not need to prepare a DPA.
Will the data go outside of the European Economic Area?
Contact your Aalto school lawyer.
Prepare a DPA and update the privacy notice.*
*This includes any IT services that have not been approved by Aalto IT.
** Please note that this also relates to cases when the research is conducted with consortium partners from other organizations. There might be "joint controllership" of the personal data. Please discuss this with your Aalto School lawyer.
Copyright permission
Will participants create content that you wish to use?
You do not a copyright permission.
Prepare a copyright permission.
Once necessary legal documents are ready, send them to your school lawyer for checking


3
Consider ethical pre-reviews
?
help available: Ethics Committee Secretary
Familiarize yourself with ethical risk assessment
Ethical pre-reviews help ensure that the research plan follows ethical practices and does not pose harm to the subjects. Not all projects require a review. However, ethical risks can also happen when no data from individuals are processed or even with fully anonymized data. Sometimes a statement from the ethics committee is needed by the publishers even though no ethical risks are present in your project. Depending on the case, the pre-review is done by the Aalto Research Ethics Committee or the HUS Ethical Board for Medical Research.
Click here to find out whether you need an ethical pre-review
Aalto ethical pre-review
This process is for non-medical research which relates to human sciences. It can only be done before the data is collected. Allow at least a month for the review process.
Details of this process
HUS ethical pre-review
This process is for medical research. It can only be done before the data is collected. Allow at least a month for the review process.
Details of this process
MIS process
If you use personal data collected from Aalto University students, please contact (MIS) support for data management at mis@aalto.fi, and include a research plan and personal data legal documents.
4
Collect the data
?
help available: researchdata@aalto.fi
Maintain data safety during collection
Publish your Privacy Notice by sending it to tietosuojailmoitukset@aalto.fi and include it on your project website. If there are any changes to the conditions in which personal data is processed, inform the participants and update the documents. Use only recommended data collection solutions and implement data quality assurance. Prepare a process for dealing with incidental findings (retain direct identifiers until quality assurance has happened, then minimize). Implement data protection solutions such as personal data minimization, encryption and secure storage. Refer to your DMP regarding safe storage and handling of data and update the plan as needed.
5
Analyse the data
?
help available: rse-group@aalto.fi
Get the right tools for analysis
For analysing your data, use recommended Aalto computational resources according to the level of sensitivity of your data and your storage and computational speed needs. If you need help with research software, coding or large scale computational analyses, get in touch with a Research Software Engineer.


6
Share and preserve the data
?
help available: researchdata@aalto.fi
Consider whether your data be opened
Decide if your research data can be published. If the data itself cannot be published, the metadata about the data should be made openly available and FAIR. Long term preservation might be in contrast with data protection. However, it is possible to have data available with data access control solutions: e.g. with federated access (EGA, CSC SD Submit). Highly valuable dataset should find solutions for long term preservation and easy reusability while ensuring data protection.
Advice on opening data
Pseudonymised data
Pseudonymising data means removing parts of the data so that an individual can no longer be identified without the use of additional information. For example, encoding the data i.e. giving participants false names and having a code key to identify subjects. Pseudonymised data is still personal data and is subject to data protection regulations.
Information on pseudonymised data
Anonymised data
Anonymising means processing personal data so that it is absolutely impossible to identify the individuals. This process is permanent and cannot be reverted. Keep in mind that it may take just a few indirect identifiers to identify a person. Anonymised data is no longer considered personal data and is no longer subject to data protection regulations.
Information on anonymised data
A?
Aalto University
If you run into any questions or are faced with issues regarding handling personal data, help is available at researchdata@aalto.fi
This work is licensed under CC BY 4.0

2 Consent Form for Study 2

Below is the Consent Form for participating in Study 2. The document has been reviewed by the Aalto University Research Ethics Committee. The review was initiated in the meeting held in June, 2022, and the Research Ethics Committee accepted the statement on the 28th of April, 2023 when some requested revisions were verified to be in line with the statement.

Participation confirmation Smart Building Sensitive to Daily Sentiment,

SUSTAIN Project

I have understood that participation is voluntary and at any point during the research study, I am at liberty to notify that I no longer wish to participate, and all information gathered up until that point will be deleted. Participation in the study means that the data gathered will be used as described in the Privacy Notice of the research study.

I have received sufficient information about the research study, I have had the possibility to have my questions answered, I have understood the information and I wish to participate in the research study.

Signature _____

Name of research participant _____

Contact details:

Principal Investigator: Stephan Sigg
Phone: 050 4666941
Email: stephan.sigg@aalto.fi
Aalto-University

3 Information Sheet for Study 2

Below is the Information Sheet for participating in Study 2. The document has been reviewed by the Aalto University Research Ethics Committee. The review was initiated in the meeting held in June, 2022 and the Research Ethics Committee accepted the statement on the 28th of April, 2023 when some requested revisions were verified to be in line with the statement.

Case Study 2: Smart Building Sensitive to Daily Sentiment

Horizon Europe,
EIC Pathfinder Challenge project
SUSTAIN (101071179)

May 2, 2023

Contact: Stephan Sigg
Phone: 0504666941
Email: stephan.sigg@aalto.fi

General description of the study method

Thank you for your participation in the case study. The purpose of the study is the detection of gestures of human subjects in an indoor environment. The study will be conducted in the Aalto Collider building, Otakaari 2 (cf. Figure 1a).

For the purpose of this study, sensing devices will be installed in the area where the case study is conducted. Together with other participants, you will be instructed to perform specific gesture patterns in the area. The exact movement details will be discussed with you at the measurement site.
The sensors utilized in the study are standard WiFi routers as well as purpose-build RFID devices, similar to the ones depicted in figure 1b. Particularly, the signal strength, phase and Frequency patterns observed from electromagnetic waves (2.4GHz and 5GHz standard WiFi transmission, 433 MHz RFID, as well as 863 to 870 MHz LoRa) measured in the measurement area are analyzed to estimate the location and movement of human subjects within the area. The signals utilized in the study are according to international standards and are harmless.
Video footage will also be gathered during the study. In a matter of days, the video will be transformed in a way that makes people unrecognizable. The real-life-like video will be permanently deleted immediately after the transformation has been done. The video will not be processed outside Aalto. Only the transformed video will be shared to other researchers in the project.

(a) The Otakaari 2 building (b) Backscatter prototypes

Figure 1: Location of the case study and prototype sensor devices

1

The research group conducting the study has been conducting similar research studies utilizing electromagnetic signals for the detection of environmental infromation since 2009.

Purpose and nature of the research

The study shall investigate RF-sensing based gesture recognition for short (up to 3m) and long (up to 20m) distances in the smart building facility (Aalto Collider building). In particular, for the short-range gesture recognition, we will investigate WiFi-based solutions and further demonstrate the benefit of integrating RISs into the environment on the recognition accuracy, distribution and count of RF interfaces required. We will consider an intelligent-display interaction scenario in which the subjects will perform free-space gestures to interact with the display. For long-range gesture recognition, we will utilize LoRa gateways. The scenario will concern free-space gesture interaction with the building.

The data generated during the study will comprise CSI (binary I/Q samples, as well as in form of x-y-z-time point cloud format after processing (e.g. range and angle Doppler)) data from radio channel measurements. Data will be mostly stored and processed in ascii dat/txt or python pkl files and might contain labels, raw-data and feature values. Data will not contain any real names, gender, or age information. The video footage, which will be transformed into a form where people cannot be recognized, is necessary to support the analysis of the data gathered.

Compensation

Participation in the study is rewarded with a gift card to Aalto Shop with a value of 30 EUR. Some coffee, tea and light refreshments will be made available to support the participation.

Voluntary nature of the study

Participation in the study is voluntary. All participants may at all time during the experiment withdraw from the case study and/or request that their data be deleted without obligation to disclose any specific reasons for discontinuing. Participation is conditioned on the signing of an informed Consent Form. These signed forms will not be digitalised or published and are kept separate from the recorded data and statistical information.

Communication with the research staff

At all time during the case study, research staff will be present to help and assist. Please feel free to reach out to the research staff at any time and with any question you might have.

Study duration

Please be aware that your study session may last for up to three hours.