Tactile feedback enriched interaction through virtual reality and beyond

WP8 – Dissemination, exploitation & communication

D8.7 Open Research Data Management Plan 1

Dissemination level: Public

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ACRONYMS

AAU: AALBORG UNIVERSITET
AGA: Annotated Model Grant Agreement
CA: Consortium Agreement
DMP: Data Management Plan
DoA: Description of the Action
GA: Grant Agreement
GDPR: General Data Protection Regulation
IMM: IMMERSION
INRIA: INSTITUT NATIONAL DE RECHERCHE ENINFORMATIQUE ET AUTOMATIQUE
MVR: MANUS MACHINAE BV
ORDMP: Open Research Data Management Plan
ORDP: Open Research Data Program
ST: SMARTEX S.R.L.
TEC: FUNDACION TECNALIA RESEARCH & INNOVATION
TECSR: TECNALIA SERBIA DOO BEOGRAD
UNIGE: UNIVERSITA DEGLI STUDI DI GENOVA
UVEG: UNIVERSITAT DE VALENCIA
WP: Work Package

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EXECUTIVE SUMMARY

Background	Aim
This deliverable is meant to describe strategies concerning the collection, correct processing, storage and protection of sensitive, confidential and personal data occurring during the project as well as after the end.	The purpose of this DMP is to facilitate good data handling during and after the end of a project, indicating which data to collect / process / generate, the methodologies and standards followed, which data will be shared/made open access, and how data will be curated and preserved.
Approach Having a DMP is mandatory for projects participating in ORDP and is in the interest of society that is essential to determine the guidelines procedures and measures for data processing and sharing.	
Findings and results WP leaders, in collaboration with the rest of participants, have defined and described the most important datasets generated.	
Impact This deliverable facilitates good data handling during and after the end of a project.	**Planned dissemination and/or exploitation** Dissemination level of this deliverable 8.7 is public.

1 INTRODUCTION

1.1 Purpose of this document

One critical aspect in every research and innovation project is the collection as well as the production of several data sets containing both, non-sensitive public data and sensitive personal data, to cover the entire value chain. In order to ensure effective and correct treatment of the data during the entire course of the project and beyond, it is essential to determine the guidelines, procedures and measures for data processing and sharing in connection with TACTILITY project.

This Open Research Data Management Plan (ORDMP), deliverable 8.7 (D8.7) in the Management Work Package 8 (WP8) aims to determine the type of data produced within the project, how the data will be used and collected, and how they will be processed and stored, not only during the course of the project, but after its end.

This is not a fixed document but a document that will be evolving and updated during the project execution. On this first version, as data sets have not been acquired yet in these first 6 months, tables and some sections are empty but will be filled-in as project progresses.

1.2 Structure

Details about datasets will be presented in sections 3 to 8 of this document in independent tables with the following information for each one.

1.2.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

1.2.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository)
Will be archived for (duration)

1.3 Related documents

This is not a fixed document, but a living one, in which information is refined in subsequent updates as the project progresses. The following updates to the ORDMP are foreseen:

- D8.8 Open Research Data Management Plan 2, M19
- D8.9 Open Research Data Management Plan 3, M36

The Guidelines on FAIR Data Management in Horizon 2020 as well as European law and national law will serve as the framework for the activities performed within TACTILITY.

The deliverable is subject to the conditions given in the GA number 856718, as well as the CA signed by all partners, where different aspects related to access rights are particularly governed.

2 DATASET SUMMARY

The following summary table should be filled in by each dataset owner as tables are inserted in next sections. In TACTILITY project, the following tasks/activities will generate data that need to be handled:

WP	Task(s)	Title	Partner(s)
3	3.3	…	…
3	…	…	…
3			
4			
4			
4			
5			
5			
5			
6			
6			
7			
7			

3 WORK PACKAGE 2 DATASETS

3.1 Dataset: [*Title*]

3.1.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

3.1.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository?)
Will be archived for (duration?)

4 WORK PACKAGE 3 DATASETS

4.1 Dataset: [*Title*]

4.1.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

4.1.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository?)
Will be archived for (duration?)

5 WORK PACKAGE 4 DATASETS

5.1 Dataset: [*Title*]

5.1.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

5.1.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository?)
Will be archived for (duration?)

6 WORK PACKAGE 5 DATASETS

6.1 Dataset: [*Title*]

6.1.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

6.1.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository?)
Will be archived for (duration?)

7 WORK PACKAGE 6 DATASETS

7.1 Dataset: [*Title*]

7.1.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

7.1.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository?)
Will be archived for (duration?)

8 WORK PACKAGE 7 DATASETS

8.1 Dataset: [*Title*]

8.1.1 Dataset summary

Dataset name:	Type of access:	Format:
Creator:	Partner:	
Description		
Restrictions on sharing:		
Ethical issue management: (if any)		
Copyright: (if any)		

8.1.2 Additional information

Collecting/processing based on
Quality assurance based on
Not openly accessible because (if applicable)
Archived on (repository?)
Will be archived for (duration?)

9 FAIR DATA

The scientific research data generated in Tactility project should be findable, accessible, interoperable and re-usable (FAIR[1]):

9.1 Making data findable, including provisions for metadata

Making data findable involves that the (meta)data generated in the project are identifiable and locatable. TACTILITY project will make its data produced available on Zenodo repository (https://zenodo.org). The project will follow the platform's guideline to optimize the possibilities for findability[2], as using a Digital Object Identifier. Additionally, all data will follow a clear version number structure, if needed. For all quantitative and qualitative research in the project, non-identifiable metadata will be produced and made available on the aforementioned platform. Metadata will describe instruments used, methodologies employed and goals and target groups of the research. Metadata will be collected and appropriately stored by the researchers. All data will be anonymized.

Data concerning project progress and documentation as well as the deliverables defined in the GA will be made available to the European Commission via Funding & Tenders portal.

Within the Consortium, a SharePoint space has been associated to the Tactility Team, to have the centralized and always accessible repository of information where all partners will have access granted. Here all the relevant files needed to be shared and all the relevant information should be stored. Files are stored safely so that confidential information (at consortium level) could be stored.

9.2 Making data openly accessible

Open accessibility is related to the (meta)data and software generated in the project, and how to make them accessible and what kind of accessibility is given (licensing). TACTILITY will publish all its scientific publications by means of TECNALIA Publications, a tool based on RECOLECTA "Recolector de Ciencia Abierta" (Open Science Harvester) which is a platform that gathers all the Spanish scientific repositories together in one place and provides services to repository managers, researchers and decision-makers, and contributes to the creation of a nationwide infrastructure of Open Access scientific repositories. The RECOLECTA project follows the 'green' open access model.

TECNALIA has developed their own repository following RECOLECTA and OpenAire directions and facilities in order to fulfil international interoperability standards and protocols and gain long-term

[1] M.D. Wilkinson, et al (2016), The FAIR Guiding Principles for scientific data management and stewardship, Sci. Data 3:160018

[2] To be Findable, section in https://about.zenodo.org/principles/. Last accessed 28/11/2019.

sustainability. Moreover, the OpenAire repository will be also used by the consortium, by means of the OpenAire platform Zenodo, which is an open dependable home for the long-tail of science, enabling researchers to share and preserve any research outputs in any size, any format and from any science. The consortium will follow the repository's principles for accessibility[3]. The TACTILITY consortium will decide, based on the nature of the generated data (and the level of confidentiality), the access permissions and licensing.

TACTILITY project has its own public website, available at https://tactility-h2020.eu based on WordPress, TLS, and hosted in Germany that informs about the project in general, its objectives, the consortium and that will link to public deliverables and other outcomes.

9.3 Making data interoperable

To allow (meta)data exchange and re-use between researcher, institutions, organisations, countries, etc. TACTILITY will assure the use of standard and interoperable formats. Moreover, standard vocabularies for all data types will be used to allow inter-disciplinary interoperability. When using Zenodo repository, the consortium will follow the repository's principles for interoperability[4], such as using JSON schema for data representation.

9.4 Increase data re-use (through clarifying licences)

According to the Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020, intention of TACTILITY partners is enabling maximum possible re-use of research data by third parties, whenever possible due to complying ethics restrictions of studies with volunteers and always re-using only anonymized data. The decision to allow the re-use of data will be taken by the person(s) responsible for the data, and might be dependent on different scenarios, i.e. if there is a journal's embargo period associated to a publication.

When using Zenodo repository to make data being reusable, the consortium will follow the repository's principles for reusability[5]. Duration of dataset storage (in particular after the end of the project) will be variable, highly dependent of the type of data stored and it will be decided by the person(s) responsible for the data.

[3] To be Accessible, section in https://about.zenodo.org/principles/. Last accessed 28/11/2019.
[4] To be Interoperable, section in https://about.zenodo.org/principles/. Last accessed 28/11/2019.
[5] To be Reusable, section in https://about.zenodo.org/principles/. Last accessed 28/11/2019.

10 ALLOCATION OF RESOURCES

According to the guidelines provided by EU Commission (AGA), costs related to open access to research data in Horizon 2020 programme are eligible for reimbursement during the project lifetime if the requirements in article 6 and article 6 D.3 as well as other articles relevant for the cost category chosen are met.

The planned budget dedicated to data management which is already foreseen in the GA as well as additional information provided by each partner have been gathered together in table below. This information might be completed or evolved in future versions of the ORDMP (D8.8, due M19; D8.9, due M36) depending on the results collected from the consortium partners.

Partner	Descriptions
TEC	➢ Open access publishing, Dissemination costs (12K€)
AAU	➢ Publication costs (12,5K€)
UVEG	➢ Open access publications (12k€)

11 DATA PROTECTION AND SECURITY

As already stated in section 5.1 of the DoA and in deliverable D9.3, confidentiality of participants in the TACTILITY experiments will be ensured and the according measures will be taken, as described in the overall approach (Section 1.3.1 of DoA). In particular, Regulation 2016/697 on the protection, management and processing of personal data will be complied. Unless required by other laws, only the researchers involved in the experiments, including the principal investigator, the members of the corresponding ethics committee and/or the competent authorities (if needed) will have access to participant personal data.

The beneficiary involved in the field of study (experiments participants) that include any collection and processing of personal data, including health data, will check if special derogations pertaining to the rights of data subjects have been established under the national legislation of the country where the research takes place.

For beneficiaries not required to appoint a Data Protection Officer (DPO) under the General Data Protection Regulation (GDPR 2016/679), a detailed data protection policy for the project is provided as part of D9.3. The beneficiary will explain how the data they intend to process is relevant and limited according to the purposes of this project (in accordance with the "data minimisation" principle). Other beneficiaries will appoint a DPO whom his/her contact details will be available to the participants involved in the experiments (and be a part of D9.3).

Deliverable D9.3 also includes the following items:

• description of the technical and organisational measures that will be implemented to safeguard the rights and freedoms of the data subjects/research participants;

• description of the security measures that will be implemented to prevent unauthorised access to personal data or the equipment used for processing;

• in case personal data are transferred from the EU to a non- EU country or international organisation, confirmation that such transfers are in accordance with Chapter V of the GDPR;

• in case that the personal data are transferred from a non-EU country to the EU (or another third country), confirmation that such transfers comply with the GDPR and the laws of the country in which the data were collected;

• detailed information on the informed consent procedures regarding data processing;

• an explicit confirmation that the beneficiary has lawful basis for the data processing and that the appropriate technical and organisational measures are in place to safeguard the rights of the data subjects, in case of further processing of previously collected personal data.

Results of this field trial may be used for teaching, research, publications, or presentations at scientific meetings. If participants' individual results will need to be discussed, their identity will be protected by using a study code number or similar pseudo-anonymization. This will be explained to potential participants during the informed consent process. However, due to the nature of the experiments planned, it is not foreseen that any critical personal data will be required (e.g. detailed health records).

If necessary, participants will be asked to give their explicit consent to take photographs and/or make audio or video recordings, which may be used in scientific publications and presentations. This digital material will be anonymized (e.g. not recording or takin video of faces, using blur, etc.) No personal information about individual participants will be included in any presentations. All video records will be destroyed at the end of the analysis, unless an explicit consent has been obtained by the participant to use them for dissemination or training purposes. Research data will be retained for 5 years after the end of the project in line with national research data preservation requirements, and participants will be informed about the proposed period.

The procedure used for protecting the confidentiality of such personal data, including the security measures for storage and handling, will agree to Good Clinical Practice guidelines, in general, and to national legislation in each case. Participants' personal data will never be used for commercial purposes.

All the procedures and templates will be described in D9.3 and D9.1 and submitted to the Commission and the corresponding Ethical Committees and competent authorities when apply. Before any personal data recording and treatment, D9.3 must be accepted.

12 ETHICAL CONSIDERATIONS IN DATA MANAGEMENT

The project includes an experimental component, which consists of different tests with human beings' participation with the aim of analysing the benefits of technological developments.

The subjects recruited for the experiments will be healthy people able of giving their own consent. Protected collectives as children, pregnant women, or people with cognitive impairments will be out of the scope. Data collected from participants will be treated according to the EU current standards, including GDPR.

Experiments will be conducted guaranteeing high-level ethical standards and clinical good practices, including the Declaration of Helsinki as reference, and, in particular, the following requirements will be met:

1. The participants must be adequately informed of:
    I. the research's goals, including potential and direct benefits and risks;
    II. the nature, extent and duration of the procedures;
    III. arrangements to ensure respect for private life and confidentiality of the individual data;
    IV. arrangements for access to participant-relevant information produced by the study;
    V. the participants rights including that he/she is voluntary and can refuse or withdraw from the trial at any time without having to provide a reason for their decision.

2. The study protocol must be accepted by the corresponding ethical committee before enrolment.

3. The ethical questions potentially arising during the project will be addressed with transparency.

4. Anonymised data will be collected, unless personal data is required. In case that personal data is needed for the research, the minimum data will be collected (minimization principle of GDPR).

5. All data are processed fairly, confidentially and lawfully.

6. All European and international ethical/legal requirements are met.

Participants that fulfil the selection criteria and accept to participate in the experiments will be asked to give informed consent before their participation.

More details can be found in deliverables D9.1 to D9.6.

13 SUPPORTING DOCUMENTS

AGA – Annotated Model Grant Agreement H2020, 2019, version 2019
https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/amga/h2020-amga_en.pdf

General Data Protection Regulation, 2016
https://gdpr-info.eu/

Guidelines on FAIR Data Management in Horizon 2020, 2016, version 3.0
https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020, 2017, version 3.2
https://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf