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List of abbreviations	
BORN	BiObased theRmal resistaNt food packaging
CC BY 4.0	Creative Commons Attribution 4.0 International
CC0	Creative Commons Zero
CHADA	Characterization Data
CV	Curriculum Vitae
DMP	Data Management Plan
DOI	Digital Object Identifier
EC	European Commission
EIC	European Innovation Council
ERC	European Research Council
EU	European Union
FAIR	Findable, Accessible, Interoperable, Reusable
GDPR	General Data Protection Regulation
ILCD	International Reference Life Cycle Data System
ISO	International Organization for Standardization
JSON	JavaScript Object Notation
LCA	Life Cycle Assessment
MODA	Modelling Data
OECD	Organisation for Economic Co-operation and Development
PIDs	Persistent Identifiers
PLA	Poly(lactic acid)
SMEs	Small and Medium Enterprises
SPHERE	Sustainability in Packaging Holistic Evaluation for Decision-Making
TB	Terabyte
WP	Work Package
XML	eXtensible Markup Language



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BORN List of participants

No	Participant organisation name	Country	Type
1	Consiglio Nazionale delle Ricerche (CNR)	Italy	RTO
2	Fraunhofer Gesellschaft zur Forderung der Angewandten Forschung EV (FHG)	Germany	RTO
3	Kungliga Tekniska Högskolan (KTH)	Sweden	University
4	Nuevas Tecnologías para el Desarrollo de Packaging y Productos Agroalimentarios con Componente Plástica SL (TECNO)	Spain	SME
5	Politechnika Poznańska (PUT)	Poland	University
6	Università degli Studi di Napoli Federico II (UNINA)	Italy	University
7	Innoexc Hub (IEXC)	Switzerland	SME
8	Quantis (QUANTIS)	Switzerland	SME

1. Introduction

This document presents the Data Management Plan (DMP) for the BiObased theRmal resistaNt food packaging (BORN) Project, which focuses on developing a bio-based low-cost polymer formulation that can be used to fabricate biodegradable thermal-resistant food packaging, as well as a variety of products that require resistance to high temperature. The project spans the whole BORN lifecycle, from conception and birth of sustainable additives to design and formulation of novel sustainable materials, followed by production of lab scale prototypes and testing of their suitability for food packaging, up to their end of life. Throughout this process, the project also evaluates the safety, performance, and overall sustainability of the developed materials and products.

The actions required for the implementation of BORN are organized into strictly interdependent Work Packages (WPs). Each WP contributes to the generation of specific types of data and research outputs, forming a coherent and integrated workflow that supports the project's overall objectives. The packages are:

WP1 [Safe and sustainable design of bio-based polymers]

Conception and birth of “baby-BORN”. This phase focuses on the safe-and-sustainable-by-design synthesis of branched PLA, developed as a nucleating agent to enhance the performance of commercial PLA formulations.

Characterization and analysis of “baby-BORN”. This stage involves a comprehensive evaluation of the newly developed PLA systems, including: 1) crystallization kinetics of PLA formulations, 2) mechanical, and structural characterization, 3) assessment of functional properties, 4) evaluation of thermal resistance, 5) analysis of mechanical, barrier, and optical properties.

WP2 [BORN thermal resistant food packaging]

BORN at work, for a biobased food packaging with high thermal resistance, using BORN formulations set-up in WP1, via 1) scale-up of the formulations to produce high-volume blends, 2) fine-tuning physical and functional properties, 3) assessment for specific use in thermal resistant food packaging, impact on food quality, safety and shelf-life.

WP3 [Widening BORN applications]

BORN social life: the impact of the project results can be further amplified by investigating the broadening of the range of BORN materials and their potential applications. This portfolio expansion includes: 1) extending the use of the BORN nucleating agent beyond PLA-based systems, and 2) exploring new application domains for BORN formulations, such as agriculture, food-related consumer goods, and pharmaceutical packaging.

This investigation will be supported by an extensive analytical programme, including: 1) evaluation of crystallization kinetics of bio-based polymers containing BORN, both in quiescent and flow-induced conditions; 2) detailed physico-chemical characterization of the materials proposed for agriculture and pharmaceutical applications.

WP4, WP5 [EIC Challenge Projects portfolio]

Within WP4 and WP5, BORN and the other five projects selected under the same EIC Pathfinder Challenge collaborate with the Programme Manager to jointly pursue a common roadmap for the Challenge. This roadmap, prepared under the guidance of EIC Programme Manager, defines shared activities, objectives, and milestones for the entire portfolio.

The main objectives of this joint effort are to:

1. Provide a portfolio of environmentally friendly materials and use cases informed by availability, efficiency, and end functionality.
2. Develop a robust approach for assessing lifecycle impacts.
3. Discuss and define relevant regulatory aspects.
4. Collaborate on technological developments and partner-generated know-how, including the creation of common benchmarks and standards to support future value chains.
5. Achieve the critical mass needed to ultimately support policy updates and enable the development of the targeted technologies.
6. Strengthen exploitation strategies and foster an entrepreneurial mindset.

WP6 [BORN safe biodegradation and recycling]

Analysis of BORN behaviour from retirement to end of life. The planned activities aim to:

- **Demonstrate the safe biodegradability** of the additives and BORN materials in both controlled and open environments, using relevant standardized test methods and ecotoxicity assessments.
- **Evaluate the release of additives and the formation of transformation products** that may pose environmental risks.
- **Assess the mechanical and biotechnological recycling capabilities** of BORN materials to ensure their compatibility with sustainable end-of-life pathways.

The assessment of biodegradability and the analysis of additive release will follow well-established guidelines, such as those issued by OECD¹, and will rely on standardized test methods, including relevant ISO standards.

¹ OECD Guidelines for the Testing of Chemicals, Available at <https://www.oecd.org/en/topics/sub-issues/testing-of-chemicals/test-guidelines.html>

WP7 [BORN Safety and Sustainability assessment] The objective is to understand and evaluate the life-cycle environmental performance of the innovative BORN biobased plastic technologies

This will be achieved by applying state-of-the-art environmental Life Cycle Assessment (LCA) methodologies, complemented by additional sustainability metrics from the SPHERE framework. Together, these analyses form the project's integrated **sustainability assessment**. The sustainability assessment will be used to:

- **guide the development of BORN solutions** toward more sustainable design choices,
- **benchmark each innovation** against business-as-usual practices, and
- **support future suppliers and customers** in making more informed, sustainability-driven decisions.

The environmental LCA will follow the main guidelines of the ILCD Handbook and the ISO series of norms 14040-44, also following the SPHERE framework focusing on key environmental impact categories: nutrients leaching, greenhouse gas emissions (carbon footprint), non-renewable primary energy use (energy footprint) and water use (water footprint), etc. Impacts on ecosystems and on human health, including selected so-called mid-point ILCD indicators will also be considered when relevant, in accordance with regulatory requirements for Food contact material and in accordance with the current SSbD framework. The likelihood for BORN to be adopted will be tested though at least 10 expert interviews.

WP8, WP9 [Communication, Dissemination and Exploitation]

The key elements of BORN communication and dissemination plan are: 1) dissemination through project website and social media; 2) publication of results in high-impact journals 3) protection of intellectual property (IP); 4) identification of specific funds in the international context; 5) identification of European platforms for the study of data obtained from European projects.

Exploitation measures will allow to translate research results into innovations, with the goal to generate new business opportunities in innovative industries in the EU.

WP10, WP11 [Project Management] BORN Project Management

BORN project management in agreement with the EC rules, via timely and effectively implementation of the project. Management includes coordination of the work between the members of the consortium and monitor project activities, FAIR management of data, assess the quality and submission of deliverables and both internal and official reports.

2. Data Summary

Will you re-use any existing data and what will you re-use it for? State the reasons if re-use of any existing data has been considered but discarded.

At this stage, the project foresees the possible use of pre-existing datasets from the ecoinvent database for the Life Cycle Assessment.

What types and formats of data will the project generate or re-use?

According to the project activities planned across the various WPs, the data produced will include:

- **Characterization data of the developed materials and the fabricated devices (see WP1, WP2, and WP3).**
The data formats are expected to include:

- **Numerical data** (single values or series of values) stored in formats such as *.xls*, *.opj*, *.csv*, or *.txt*.
- **Image data** (individual images or image series) stored in standard formats such as *.jpg*, *.gif*, *.bmp*, and similar.
- BORN safe biodegradation and recycling assessment (**see WP6**). The data formats are expected to include:
 - **Numerical data** (single values or series of values) stored in formats such as *.xls*, *.opj*, *.csv*, or *.txt*.
 - **Image data** (individual images or image series) stored in standard formats such as *.jpg*, *.gif*, *.bmp*, and similar.
- BORN Safety and Sustainability assessment (**see WP7**). The data formats are expected to include:
 - **Numerical data** (single values or series of values) stored in formats such as *.xls*, *.opj*, *.csv*, or *.txt*.
 - **Text Documents** 1) collecting consulting feedback and/or interviews results, 2) describing “*best practice*”, etc. The documents will be published in standard formats such *.DOCX*, *.ODC* and similar.
- BORN Project Management (**see WP4-5, WP8-9, WP10-11**). The data formats are expected to include:
 - **Text Documents** 1) proposal to EIC Challenge Calls descriptions, 2) project deliverables, 3) dissemination contents, etc. The documents will be published in standard formats such *.DOCX*, *.ODC*, *.PDF* and similar.
 - **Multimedia documents** (audio, video, images, etc). The documents will be published in standard formats such *.MPG*, *.AVI*, *.GIF* and similar.
- BORN Market Uptake and Exploitation (**see WP3, WP4-5**) the data formats are expected to include:
 - **Multimedia documents** of interviews recordings to experts of the relevant end-use markets: consumer goods packaging, pharma and agriculture, such as *.MP3* or *.WAV* (audio) and *.MP4* (video, where applicable).
 - **Text Documents** and transcripts of interviews, as *.DOCX* and *.PDF*.

What is the purpose of the data generation or re-use and its relation to the objectives of the project?

The collected data will be useful to:

1. validate the quality of the proposed solutions across all project-relevant contexts,
2. describe the project’s progress, and
3. provide material to support the external dissemination and valorisation of its results.

What is the expected size of the data that you intend to generate or re-use?

The project is expected to generate no more than 1 TB of data. In any case, all necessary measures will be taken to limit storage requirements, prioritizing formats that allow for lossless compression.

What is the origin/provenance of the data, either generated or re-used?

Data will be mainly produced and processed during the research activity developed for the project and more in detail BORN will generate new scientific and technical datasets, linked to technical WPs activities: WP1: experimental data on crystallization kinetics and thermomechanical and structural properties; WP2: data on material processing and performance, as well as on food quality and shelf-life, WP3: data on crystallization kinetics and thermomechanical and structural properties; WP6: experimental data regarding biodegradability and ecotoxicity, WP7: LCA dataset, questionnaires, and economic model.

Other data generated within BORN project may include:

- multimedia documents: published or confidential reports, spread sheets, presentations, website contents, social media posts, etc;

- images, e.g. photo to document the project progress, etc;
- audio files, e.g. interviews recordings;
- videos, e.g. short movies, animations to document the activities, represent and communicate achievements, etc.

To whom might your data be useful ('data utility'), outside your project?

The data generated within the project will be used mainly by the beneficiaries and associated partners for undertaking the activities required to reach the project objectives. The use of the results, to which data are likely to constitute a fundamental part, is regulated by the Consortium Agreement.

Outside the BORN project, researchers, students, SMEs, and, more broadly, all stakeholders operating within the “Green Deal” context could benefit from the data produced by BORN. Researchers and students will have the opportunity to strengthen their skills and enhance their CVs, while researchers will be able to draw on the results published in the datasets as foundational inputs for their research activities.

3. FAIR data

Making data findable, including provisions for metadata

Will data be identified by a persistent identifier?

All data and metadata shared by the partners of the BORN Project will be managed to ensure the use of persistent identifiers (PIDs). The project plans to rely primarily on two platforms for this purpose:

1. **Zenodo**, which will be used to publish documents and other multimedia materials, as it offers several useful features to make data FAIR: i) DOI; (ii) DataCite's Metadata Schema; iii) keywords; iv) indexed and searchable (meta)data. A project community will be created, to ensure the long-term availability of data, even after the end of the project.
2. **NOMAD**, a platform specifically designed for the publication of materials-science data. NOMAD automatically generates PIDs (DOIs) for all entities—both data and metadata—produced during the characterization and fabrication of BORN-based products.

Will rich metadata be provided to allow discovery? What metadata will be created? What disciplinary or general standards will be followed? In case metadata standards do not exist in your discipline, please outline what type of metadata will be created and how.

All data shared by the partners of the BORN Project will be accompanied by an appropriate set of metadata. In particular, all data generated during the characterization of the developed BORN materials and the fabrication of BORN products (see WP1, WP2, and WP3) will be described using metadata based on taxonomies and ontologies that are considered standards in Materials Science, such as CHADA/MODA and their subsequent evolutions².

For the data produced in the work packages related to biodegradability and ecotoxicity assessment (WP6) and LCA performance evaluation (WP7), the BORN Project will verify the existence of suitable standards for metadata representation. If no appropriate standards are available, the project will explore how to best represent these

² Friis J., Goldbeck G., Gouttebroze S., Bleken F.L., Ghedini E., *Materials science and ontologies* (2024) in *Digitalization and Sustainable Manufacturing: Twin Transition in Norway*, pp. 117 - 135, DOI: 10.4324/9781032693415-9

metadata, potentially introducing and documenting new taxonomies or ontologies.

Will search keywords be provided in the metadata to optimize the possibility for discovery and then potential re-use?

According to the FAIR principles, the metadata will include meaningful, domain-relevant keywords to ensure that the data can be efficiently discovered and searched.

Will metadata be offered in such a way that it can be harvested and indexed?

The use of established standards for metadata representation—along with the adoption of fully documented new taxonomies or ontologies when needed—and the publication of data enriched with these metadata on suitable digital infrastructures will facilitate efficient harvesting and indexing of both data and metadata.

Making data accessible

Repository:

Will the data be deposited in a trusted repository?

The BORN Project plans to use two main types of repositories to manage the data produced during the project:

1. The first repository, intended for documents and multimedia materials, will likely be the well-known public platform Zenodo.
2. The second repository will be a discipline-specific solution such as the NOMAD infrastructure. NOMAD is a public platform created and maintained by the FAIRmat community at Helmholtz University. It supports data management both through its central installation (NOMAD-EU) and through local instances known as NOMAD-Oasis. These local installations enable partners to manage data in a fully FAIR-compliant manner while retaining control over what is shared publicly and when it is exported to the central NOMAD-EU server.

Have you explored appropriate arrangements with the identified repository where your data will be deposited?

At present, the General Policies of the public platform Zenodo³ do not appear to conflict with the data-publication requirements that may arise within the BORN Project.

Regarding the discipline-specific solution based on the NOMAD architecture, the possibility of starting with a NOMAD-Oasis installation allows partners to carefully decide what to make public and when. This approach makes it possible to build reliable, complete, and FAIR-oriented datasets while retaining full control over their release. Data can then be shared publicly only once a final, validated version is available.

Does the repository ensure that the data is assigned an identifier? Will the repository resolve the identifier to a digital object?

³ Zeondo General Policies, <https://about.zenodo.org/policies/>

Both of the considered repositories — Zenodo and NOMAD — are able of assigning a DOI (Digital Object Identifier) to each published dataset.

Data:

Will all data be made openly available? If certain datasets cannot be shared (or need to be shared under restricted access conditions), explain why, clearly separating legal and contractual reasons from intentional restrictions. Note that in multi-beneficiary projects it is also possible for specific beneficiaries to keep their data closed if opening their data goes against their legitimate interests or other constraints as per the Grant Agreement.

All data produced will be made public, except for those generated in the following cases:

1. In the event that, during the implementation of the project activities, the partners realize that such data may support the creation of a patent.
2. In the event that the project partners, provided they are non-public entities, deem it appropriate to protect the level of detail of the information collected—for example through questionnaires—by releasing only aggregated data.

If an embargo is applied to give time to publish or seek protection of the intellectual property (e.g. patents), specify why and how long this will apply, bearing in mind that research data should be made available as soon as possible.

The embargo periods related to data supporting potential patents will be examined during the project and will comply with the relevant legislation.

Regarding data for which the embargo may apply only to the detailed information and not to the aggregated data, the BORN Project manages personal data in accordance with the provisions of the “Grant Agreement”.

Will the data be accessible through a free and standardized access protocol?

If not subject to an embargo, the data will be made accessible on platforms that are free and open to the public possibly subject to an authentication mechanism.

If there are restrictions on use, how will access be provided to the data, both during and after the end of the project?

If not subject to an embargo, the data will be made accessible on platforms that are free and open to the public possibly subject to an authentication mechanism.

How will the identity of the person accessing the data be ascertained?

The identity of the person accessing the data must be verified through standard mechanisms, such as those based on two-factor authentication, as provided for by the applicable legislation, including NIS2⁴.

⁴ NIS2 Directive: securing network and information systems. Available at: <https://digital-strategy.ec.europa.eu/en/policies/nis2-directive>

Is there a need for a data access committee (e.g. to evaluate/approve access requests to personal/sensitive data)?

At the moment, the project does not foresee the establishment of a committee for data access.

Metadata:

Will metadata be made openly available and licenced under a public domain dedication CC0, as per the Grant Agreement? If not, please clarify why. Will metadata contain information to enable the user to access the data?

Metadata should be made openly available and licensed under a CC0 public domain dedication. Exceptions may be evaluated and managed, if necessary.

How long will the data remain available and findable? Will metadata be guaranteed to remain available after data is no longer available?

Since the preservation of data and metadata is expected to rely on platforms such as Zenodo, which are currently recognized as solutions capable of ensuring a data lifespan exceeding a decade (see the 'Retention period' section of Zenodo's policies), the BORN Project expects to guarantee the availability of both data and metadata for at least 10 years.

Will documentation or reference about any software be needed to access or read the data be included? Will it be possible to include the relevant software (e.g. in open source code)?

Where possible, all data will be made available in standard formats. If this is not feasible, the BORN Project will provide all the necessary information regarding the software (identifying the most suitable open-source solution) required to access or read the data.

Making data interoperable

What data and metadata vocabularies, standards, formats or methodologies will you follow to make your data interoperable to allow data exchange and re-use within and across disciplines? Will you follow community-endorsed interoperability best practices? Which ones?

All data shared by the partners of the BORN Project will be accompanied by an appropriate set of metadata. In particular, all data generated during the characterization of the developed BORN materials and the fabrication of BORN devices (see WP1, WP2, and WP3) will be described using metadata based on taxonomies and ontologies that are considered standards in Materials Science, such as CHADA/MODA and their subsequent evolutions⁵.

For the data produced in the work packages related to biodegradability and ecotoxicity assessment (WP6) and LCA performance evaluation (WP7), the BORN Project will verify the existence of suitable standards for metadata representation. If no appropriate standards are available, the project will explore how to best represent these metadata, potentially introducing and documenting new taxonomies or ontologies.

In this context, well-known standards such as JSON and XML will be used to model data and metadata, while

⁵ Friis J., Goldbeck G., Gouttebroze S., Bleken F.L., Ghedini E., *Materials science and ontologies* (2024) in *Digitalization and Sustainable Manufacturing: Twin Transition in Norway*, pp. 117 - 135, DOI: 10.4324/9781032693415-9

data exchange will be ensured through standard formats such as TXT or CSV.

In case it is unavoidable that you use uncommon or generate project specific ontologies or vocabularies, will you provide mappings to more commonly used ontologies? Will you openly publish the generated ontologies or vocabularies to allow reusing, refining or extending them?

If no “standard” ontologies or vocabularies exist for some generated data, the project BORN will explore how to best represent these metadata, potentially introducing and documenting new taxonomies or ontologies.

Will your data include qualified references to other data (e.g. other data from your project, or datasets from previous research)?

If necessary or useful during the course of the project, the data will include references to datasets produced both internally and externally to the BORN project.

Increase data re-use

How will you provide documentation needed to validate data analysis and facilitate data re-use (e.g. readme files with information on methodology, codebooks, data cleaning, analyses, variable definitions, units of measurement, etc.)?

All the relevant information about the generation process will be partly included in the associated metadata thanks to standard ontologies (e.g., the type and model of instruments used to acquire the data, the model used to compute the data, etc.) and partly provided as a description in the published manuscripts.

Will your data be made freely available in the public domain to permit the widest re-use possible? Will your data be licensed using standard reuse licenses, in line with the obligations set out in the Grant Agreement?

Will the data produced in the project be useable by third parties, in particular after the end of the project?

The common strategy adopted for data management follows the FAIR principles. At present, the BORN Project plans to use the CC BY 4.0 license as the reference license; however, different solutions may be evaluated on a case-by-case basis, with appropriate justification provided for each choice.

Will the provenance of the data be thoroughly documented using the appropriate standards?

The BORN Project plans to generate data that are self-explanatory thanks to the use of standard ontologies representing metadata. More generally, the shared data will be thoroughly documented in order to clarify their origin, ownership, and the reference scientific community.

Describe all relevant data quality assurance processes.

Before being used, all generated data will be reviewed with respect to issues such as missing values that may affect the study results. The quality of the generated data will also be ensured through mandatory screening and cleaning procedures aimed at identifying outliers and errors.

4. Other research outputs

In addition to the management of data, beneficiaries should also consider and plan for the management of other research outputs that may be generated or re-used throughout their projects. Such outputs can be either digital (e.g. software, workflows, protocols, models, etc.) or physical (e.g. new materials, antibodies, reagents, samples, etc.).

At the current stage, the BORN Project foresees two types of research outputs that are not directly related to data management. These are:

1. Published manuscripts describing the scientific work carried out within the BORN Project. For this type of output, the BORN Project plans to publish both on preprint platforms (such as Zenodo) and through Open Access publication in scientific journals and/or books;
2. New materials, process technologies and products for food packaging, for which the possibility of obtaining patents will be evaluated.

Beneficiaries should consider which of the questions pertaining to FAIR data above, can apply to the management of other research outputs, and should strive to provide sufficient detail on how their research outputs will be managed and shared, or made available for re-use, in line with the FAIR principles.

Regarding publications, these will be made available in Open Access and indexed and searchable using meaningful keywords relevant to the corresponding research field (e.g., those identified by ERC Panels and keywords).

Regarding potentially patentable outputs, they will be managed in accordance with the relevant legislation in the field.

5. Allocation of resources

What will the costs be for making data or other research outputs FAIR in your project (e.g. direct and indirect costs related to storage, archiving, re-use, security, etc.)?

How will these be covered? Note that costs related to research data/output management are eligible as part of the Horizon Europe grant (if compliant with the Grant Agreement conditions)

The costs related to storage, archiving, re-use, security, etc., are not anticipated in the BORN project, as the services and offerings of repositories are typically free of charge.

The costs for scientific open access publications with the research results of the project and for the project website will be covered by the available project budgets of the partners.

Who will be responsible for data management in your project?

Overall data management and curation will be managed by CNR team; each WP Leader will be responsible for the supervision, quality and management of data within their WP. Dr. Luisa Carracciolo of CNR-IPCB has been appointed as Data Manager.

How will long term preservation be ensured? Discuss the necessary resources to accomplish this (costs and

potential value, who decides and how, what data will be kept and for how long)?

Since the services and repositories identified for storing data generated by the BORN Project are free of charge and their policies ensure a data lifespan exceeding a decade, it is reasonable to assume that the data may be preserved for at least 10 years.

At the moment, no further assumptions are made regarding long-term data preservation, but this aspect should be discussed in future versions of this document in light of emerging needs.

6. Data security

What provisions are or will be in place for data security (including data recovery as well as secure storage/archiving and transfer of sensitive data)?

As long as datasets are not deposited in a trusted repository, each partner is responsible for storage and recoverability of their generated data on partners' protected servers and workstations (backup plans have to be established in accordance with the respective institution's practice). During the research process, access to data is only provided to project members. Standard security measures, such as authentication, are applied.

Processing of personal data, primarily collected through interviews, surveys, focus groups and events, is subject to EU and national laws on data protection. The collected data will be limited, in line with the 'data minimization principle', to only those necessary for research and communication with the participants. In general, unnecessary collection and use of personal data will be avoided. In all cases, consent will be sought from the persons involved and information about the data processing will be provided. If online surveys are conducted, they must offer a white-label solution that adheres to the strict requirements of data protection laws (the data are deleted from the provider's server after 90 days), and data processing agreements will be concluded.

All names of the persons participating in surveys, interviews, focus groups and events will be anonymized, and all related data will be published in aggregated form only. Sensitive data will be encrypted and password-protected. This will be assured through monitoring by the respective WP leader, and screening of the dataset after completion of the transcription. Access to this kind of data will be restricted to selected staff members of the partners responsible for the relevant research or event organization. Furthermore, such data will be stored on password protected computers. The files containing the keys for re-identification of the persons and the recordings of the interviews will be destroyed after transcription to safeguard the privacy of individuals concerned.

Each partner remains responsible for setting up internal processes to comply with the General Data Protection Regulation (GDPR). Personal data protection will be assessed with the support of the Data Protection Officer of the respective partner.

Will the data be safely stored in trusted repositories for long term preservation and curation?

All data will be preserved for the long term by using well know trusted repositories such as Zenodo. Moreover, research data will be stored and processed on partners' protected servers and workstations. Sensitive data will be encrypted and password-protected.

7. Ethics

Are there, or could there be, any ethics or legal issues that can have an impact on data sharing? These can also be discussed in the context of the ethics review. If relevant, include references to ethics deliverables and ethics chapter in the Description of the Action (DoA).

Will informed consent for data sharing and long-term preservation be included in questionnaires dealing with personal data?

All matters related to the ethical issues of data management of *personal data* are fully described in the Grant Agreement, which states:

- *Particular methodological tools (e.g. surveys, questionnaires, interviews, direct observation, recordings, video, workshops, incentives) will be carried out using volunteers. For each participant we will provide a clearly document informed consent in advance. This document will be written in a language and in terms they can fully understand, describe the aims, methods and implications of the project activity, the nature of the participation, explicitly state that participation is voluntary and that anyone has the right to refuse to participate and to withdraw their participation, samples or data at any time — without any consequences, state how personal data will be protected during and after the project. We will ensure that potential participants have fully understood the information and do not feel pressured or coerced into giving consent. Participants will give their consent in writing (e.g. by signing the informed consent form and information sheets)*⁶.
- *All particular methodological tools involving human subjects will be reviewed for ethics and legality by the partners organizations.*
- *To protect personal data of participant, we will used pseudo-anonymised data, either anonymised when possible, to insure identifying a particular individual is impossible.*
- *All personal data collected within the project will conform to EU General Data Protection Regulation (GDPR) and processing of personal data will follow its 7 principles (lawfulness, fairness and transparency, purpose limitation, data minimization, accuracy, storage limitation, integrity and confidentiality and accountability).*

8. Other issues

Do you, or will you, make use of other national/funder/sectorial/departmental procedures for data management? If yes, which ones (please list and briefly describe them)?

No procedures other than those described in this document will be used for data management.

⁶ The project coordinator will provide consent forms with appropriate guidelines.