DATA MANAGEMENT PLAN

D1.4 Data Management Plan

WeGenerate

PEOPLE-CENTRIC SUSTAINABLE NEIGHBOURHOODS

Co-funded by
the European Union

DOCUMENT INFORMATION

Report title	DATA MANAGEMENT PLAN (DMP)		
Author(s)	Eliška Glaserová, Tomas Horak		
Responsible Project Partner	CVUT	Contributing Project Partners	

Date of changes to document	Who did the changes
January 8, 2024 (version 1)	Eliska Glaserova, CVUT
February 28, 2025 (version 2)	Eliska Glaserova, CVUT

Document data:	File Name:	WeGenerate_D1.4_Data management plan		
	No. of Pages:	25	No. of Annexes:	-
	Status:	Final	Dissemination Level:	PUBLIC
Project Title:	Co-creating people-centric sustainable neighbourhoods through urban regeneration	Grant Agreement ID/ Project No.:	101123546	
WP Title	WP1	Deliverable No.:	D1.4	
Due Date:	31/01/2024	Submission Date:	30/04/2025	
Keywords: words here				
Reviewed by:	Fraunhofer	Review Date:	13/02/2025	
		Review Date:		

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

TABLE OF CONTENTS

DOCUMENT INFORMATION 2

TABLE OF CONTENTS 3

LIST OF ABBREVIATIONS 4

EXECUTIVE SUMMARY 5

INTRODUCTION 6

DATA SUMMARY 8

Open science approach 9

FAIR DATA 13

Data Security 18

Ethical aspects 19

CONCLUSION 24

PARTNERS LOGOS 25

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

LIST OF ABBREVIATIONS

DMP – Data Management Plan

FAIR – Findability, Accessibility, Interoperability, and Re-use

GDPR – General Data Protection Regulation

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

EXECUTIVE SUMMARY

This deliverable D1.4 represents the Data Management Plan (DMP) for the WeGenerate project. The document describes how data will be collected, processed, stored, and managed holistically from the perspective of findability, accessibility, interoperability, and reusability in alignment with the EC FAIR principles, innovation management and IPR protection procedures, GDPR policies, and Horizon Europe Ethics Guidance. It specifies the strategies and information related to data management taking into account the restrictions established by the Consortium and Grant Agreement about Open Access to research data and peer-reviewed scientific publications. The main goal of the DMP is to provide an analysis of the main elements of the data management policy that should be considered by the WeGenerate consortium with regards to the project data.

All beneficiaries are informed of the applicable regulations around human participation, informed consent, data processing, data security, and the pertinent regulations. During the course of the project, the DMP information will be updated accordingly to include consent forms, compliance, and institutional approval where necessary. Processing of personal data will respect Data Protection Principles.

This deliverable explains what types of data exist, after which the core FAIR principles in data management are highlighted. A further explanation about open access to data and publications, transferability, reuse and licensing, and publication of deliverables is also given.

The DMP will be used by the consortium as a guidance regarding the handling of project data during the entire life cycle of the project. This document will be continuously updated as the project progresses, and the latest version will be stored in a dedicated WeGenerate shared folder. In addition to the project website, the DMP will be published in specialized journals or DMP-specific public repositories (e.g., DMPOnline) in order to achieve best practices.

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

INTRODUCTION

The Project 'WeGenerate' as signified by its name, seeks to infuse the elements of people and co-creation in the urban regeneration processes. It fully embraces the paradigm shift from building for the people to building with the people. We – cities, citizens, communities, businesses, researchers, and practitioners – take ownership of the urban regeneration processes and co-create together sustainable, people- centric, accessible, and beautiful neighborhoods.

This project is based on the stories of four neighborhoods (later in document as "Demos") and their communities located in different parts of Europe. The four core cities are Cesena (Italy), Cascais (Portugal), Bucharest (Romania), and Tampere (Finland). Although they are at different stages of development and are facing different urban challenges, but they share the same vision of positive change. WeGenerate will help them to reinvent themselves and in the process find new values and opportunities. WeGenerate sets out a journey to find the right ingredients and recipes for sustainable and inclusive urban regeneration that can create long-lasting positive impacts within the neighborhoods and beyond. The process will be highly participatory with close collaboration with the city administrations as well as the citizens, local communities, and businesses. Advanced digital applications (such as Digital Twins, Metaverse and extended reality) will be implemented and experimented to support decision-making and stimulate citizen engagement. Expertise in Social Science and Humanities is called upon to foster social innovation and participatory actions across the project.

In addition to technological and social interventions, the art and cultural dimensions will be drawn on in the co-creation processes. Four sustainable and people-centric neighborhoods will be realized by the end of the project, the legacy will be upheld through replication by five Fellow Cities and others, who are inspired by the WeGeneration stories.

This document describes overall Data Governance in the project, including the lifecycle of data to be collected, generated, used, or processed within the project and the handling of data, including methodologies, data sharing, privacy and security considerations, legal and regulatory requirements, informed consent, open access, both during and after the project.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

This document is based on the Horizon Europe Open Science strategy1:

> Open science practices include early and open sharing of research (for example through preregistration, registered reports, pre-prints, or crowd-sourcing); research output management; measures to ensure reproducibility of research outputs; providing open access to research outputs (such as publications, data, software, models, algorithms, and workflows); participation in open peer-review; and involving all relevant knowledge actors including citizens, civil society and end users in the co-creation of R&I agendas and contents (such as citizen science).

All public Deliverables and results will be freely published on the project website. This deliverable is disseminated internally within the project's consortium and partners. The intended distribution comprises the members of the WeGenerate consortium and their EC's project officer. This public document describes the status of the DMP at the time of delivery. It will be updated whenever there is new development concerning data management that is deemed crucial for the project. This document is based on the formal project description of the Grant Agreement (101123546) and additional documentation developed in the project up to the time of its writing.

This deliverable follows the DMP template designed by the European Commission (EC) to be applicable to any Horizon Europe project that produces, collects, or processes research data.

Section 1 provides a general introduction to the background of the WeGenerate project and the objectives of this deliverable. Section 2 explains what types of data exist within the project and if any will be re-used and what for. Subsequently, Section 3 presents the core principles FAIR (findable, accessible, interoperable, and reusable) in data management, explaining further about open access to data and publications, and transferability, reuse and licensing, and publication of deliverables. Section 4 gives more details about data security and data storage. Sections 5 presents the crucial ethical aspects in data management and finally, Section 6 concludes the key messages of the entire deliverable.

[1] HE Programme Guide: V2.9 - 11.04.2022, Section: Open Science
https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/program me-guide_horizon_en.pdf

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

DATA SUMMARY

1. Purpose of data management in relation to the project

WeGenerate is funded under the EU Horizon Europe Programme. The main objectives of the project are:

- Create an 'Urban WeGeneration Model' setting out a common methodological approach to guide sustainable and inclusive urban regeneration processes;
- Bolster the implementation of integrated climate-neutral transformation within the urban regeneration process;
- Mainstream participatory planning practice in the urban regeneration process by engaging all relevant stakeholders;
- Catalyse systemic change by scaling up innovations and stimulating structural reform.

WeGenerate will integrate the principles of open science across the project through systematic, open, and transparent sharing of knowledge and tools as early and widely as possible, in accordance with the rules and obligations set out in the Grant Agreement, Consortium Agreement, ethical principles of research and innovation, EU legislation as well as the terms and conditions of publishers in collaboration. The responsible partners will assure that the EU standards regarding ethics and data management are respected and applied.

The purpose of the DMP is to provide an analysis of the main elements of the data management policy that will be used by the Consortium regarding the project research data. The DMP reflects consortium data management policies, systems, and procedures that will be implemented and embedded into research procedures.

2. Data Types and Formats

WeGenerate will create and collect a rich set of data. The major data types can be distinguished into following categories:

- observational data (notably, sensor data or data from surveys)

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

- simulation data (i.e., data generated by simulation models)
- derived or compiled data (e.g., Digital Twins)
- reference data (e.g., city statistics, spatial data portals)

The data will be created mainly by the Demos and it will come primarily in the form of numerical files, models, software, and multimedia. The high-quality data generated by the project will be of significant value to the following stakeholders. The Consortium will provide Open Data arising from the project where possible to maximise knowledge sharing with these stakeholders.

- city administration, particularly the Demo and Fellow Cities, as they will use the data to inform decisions, monitor the progress and evaluate the results of the regeneration processes;
- communities of research and practice as they can build on relevant project data to improve their work, avoid duplication of effort, and speed up innovation; and
- citizens and their communities as they can benefit from a structured collection of information concerning their neighborhoods.

OPEN SCIENCE APPROACH

Open Science approach is an approach to the scientific process based on open cooperative work, tools and diffusing knowledge. General rules concerning open science practice are stated in the WeGenerate Grant Agreement (Article 17), the main aspects are presented as follow.

The beneficiaries must disseminate their results as soon as feasible, in a publicly available format, subject to any restrictions due to the protection of intellectual property, security rules or legitimate interests.

A beneficiary that intends to disseminate its results must give at least 15 days advance notice to the other beneficiaries (unless agreed otherwise), together with sufficient information on the results it will disseminate.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Any other beneficiary may object within (unless agreed otherwise) 15 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the results may not be disseminated unless appropriate steps are taken to safeguard those interests.

The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- at the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications

- immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND) and

- information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.

Beneficiaries (or authors) must retain sufficient intellectual property rights to comply with the open access requirements.

Metadata of deposited publications must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent, in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: publication (author(s), title, date of publication, publication venue); Horizon Europe or Euratom funding; grant project name, acronym and number; licensing terms; persistent identifiers for the publication, the authors involved in the action and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for any research output or any other tools and instruments needed to validate the conclusions of the publication.

Only publication fees in full open access venues for peer-reviewed scientific publications are eligible for reimbursement.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

3. Open Access to results and publications

For project results that are deemed to be publicly 'sharable' (non-confidential or restricted), suitable 'Open Access' (OA) routes will be adopted following the FAIR Principles.

Three potential OA routes that will be considered in the project include:

- 'Gold' Open Assess through publication on a publisher's platform, which ensures the integrity, findability, and accessibility of the publications through a unique version of record (VOR) with persistent identifier (e.g., DOI) and available online for all to read.
- 'Green' Open Assess involves self-archiving of the publication (or other materials) in an OA repository. There are numerous existing online OA repositories, the most suitable repositories for the project will be identified by consulting platforms such as Open Access Infrastructure for Research in Europe (OpenAIRE) and Directory of Open Access Repositories (OpenDOAR). Repositories that are supported and recognized by a wide scientific community (e.g., European Open Science Cloud and OSF) will be given priority and the following selection criteria will be considered:

  - Ensure long-term persistence and preservation of submitted materials (minimum of 5 years after publication)
  - Provide stable persistent identifiers for submitted materials (e.g., DOIs)
  - Allow public access to data without barriers
  - Support open licenses (CC0 and CC-BY, or their equivalents, are required in most cases)

- Open Research Europe (ORE) represents a new OA route for Horizon Europe beneficiaries. ORE provides a high- quality, reliable OA platform that is in full compliance with Horizon Europe OA mandate. It combines the benefits of pre-printing with the benefits of open peer review, whilst retaining all the essential services to publish, register, certify, disseminate, and preserve content for use and re-use. WeGenerate project partners will be encouraged to use this new OA platform made available by the EC.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

In addition to publication of scientific papers, WeGenerate will offer open access to 29 planned project deliverables through the project website. Key data underlying the project results and scientific publications will be published in subject specific OA repositories trusted by the research community in accordance with the FAIR Principles.

WeGenerate recognize that Open Access is only a part of Open Science practices. WeGenerate will ensure the integration of not only mandatory practices set out in the Horizon Europe Program Guide but also recommended practices, which includes (1) early and open sharing of research (via preregistration, registered reports, preprints, etc.); (2) participation in open peer-review (through the active involvement of research partners in different publication platforms); and (3) involvement of all relevant knowledge actors including citizens, civil society and end users in the co-creation of the contents and RDI agenda through the intensive participatory action implemented in WeGenerate.

4. Acknowledgements

Authors will ensure appropriate bibliographic metadata is published as well, where possible. It will be in a standard format and include the terms "European Union (EU)" & "Horizon Europe"; the name of the action, acronym & grant number as below; publication date, length of the embargo period, if applicable; and a persistent identifier.

Authors will aim to retain copyright and usage rights through open licenses, such as Creative Commons Attribution License (CC-BY4.023/CC-BY-SA) or otherwise publisher agreements to similar effect will be pursued. Project participants will ensure that all publications acknowledge the EU funding and the name and grant number of the project, including the standard disclaimer as also found on the title page of this document. Each paper should contain an acknowledgement text:

> *This work has been [partially] performed within the project WeGenerate that has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No. 101123546.*

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

The parties must handle classified information in accordance with the applicable EU, international or national law on classified information (in particular, Decision 2015/444 and its implementing rules).

Deliverables which contain classified information must be submitted according to special procedures agreed with the granting authority. Action tasks involving classified information may be subcontracted only after explicit approval (in writing) from the granting authority.

Classified information may not be disclosed to any third party (including participants involved in the action implementation) without prior explicit written approval from the granting authority.

Specific security rules (if any) are set out in Annex 5 in the Grant Agreement.

Beneficiaries which have received funding under the grant must adequately protect their results — for an appropriate period and with appropriate territorial coverage — if protection is possible and justified, taking into account all relevant considerations, including the prospects for commercial exploitation, the legitimate interests of the other beneficiaries and any other legitimate interests.

FAIR DATA

The 'FAIR Guiding Principles for scientific data management and stewardship' were established to provide guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets2. It is a research data management standard that describes four key principles. These apply to all the data generated, processed, and saved within the project's lifecycle and state that data should be:

[2] FAIR Principles – GO FAIR, https://www.go-fair.org/fair-principles/

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Findable

The first step in (re)using data is to find them. Metadata and data should be easy to find for both humans and computers. Machine-readable metadata are essential for automatic discovery of datasets and services, so this is an essential component of the FAIRification process.

- F1. (Meta)data are assigned a globally unique and persistent identifier
- F2. Data are described with rich metadata (defined by R1 below)
- F3. Metadata clearly and explicitly include the identifier of the data they describe
- F4. (Meta)data are registered or indexed in a searchable resource

Accessible

Once the user finds the required data, she/he/they need to know how they can be accessed, possibly including authentication and authorization.

- A1. (Meta)data are retrievable by their identifier using a standardized communications protocol
- A1.1 The protocol is open, free, and universally implementable
- A1.2 The protocol allows for an authentication and authorization procedure, where necessary
- A2. Metadata are accessible, even when the data are no longer available

Interoperable

The data usually need to be integrated with other data. In addition, the data need to interoperate with applications or workflows for analysis, storage, and processing.

- I1. (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
- I2. (Meta)data use vocabularies that follow FAIR principles
- I3. (Meta)data include qualified references to other (meta)data

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Reusable

The ultimate goal of FAIR is to optimise the reuse of data. To achieve this, metadata and data should be well-described so that they can be replicated and/or combined in different settings.

- R1. (Meta)data are richly described with a plurality of accurate and relevant attributes
- R1.1. (Meta)data are released with a clear and accessible data usage license
- R1.2. (Meta)data are associated with detailed provenance
- R1.3. (Meta)data meet domain-relevant community standards

5. FAIR Principles within WeGenerate

WeGenerate will follow the FAIR Principles and in accordance with the requirements of the General Data Protection Regulation (GDPR) to ensure the project data be provided 'as open as possible and as closed as necessary', where 'open' in order to foster the reusability and to accelerate research, but at the same time 'closed' to safeguard the privacy of the subjects whenever relevant. This is particularly relevant to survey data collected as part of the citizen engagement processes. Anonymization or pseudonymization methods will be applied to strip key elements in the survey data that can directly or indirectly identify an individual in order to uphold privacy. That said, there is a trade-off to be considered as removing more identifiers will degrade the useability of the data, which affects the quality of analysis and consequently the results. The WP Leaders will examine relevant survey datasets case by case and try their outmost to strike the right balance between the two ends.

The following is a brief description of the measures in place in WeGenerate to fulfil the FAIR data requirements.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Making data **findable**, including provisions for metadata

The project data will be hosted by trusted repositories and assigned a globally unique persistent identifier (PID, such as a DOI). The hosts are preferably repositories specifically designed for research data management and preservation (e.g., B2Share, Dryad and Zenodo). The list of Open Research Europe-approved repositories will be consulted in the selection process. Through using such a repository and identifier ensures that the project dataset continues to be available to both humans and machines in a useable form in the future. To aid discoverability, the project data will be described to its fullness using appropriate metadata format guided by the specific repository. The metadata will be made open under a Creative Commons Public Domain Dedication (CC0) or equivalent to safeguard the extent legitimate interests and constraints and fulfil the Horizon Europe requirements.

Making data **accessible**

The project data will be made assessable following the best open access practices. The accessibility of the data will be defined by dedicated user license and to facilitate data reuse, most project data will be likely published under the most recent Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC0 license). For software and source code, open-source licenses approved by the Open-Source Initiative (OSI) will be explored.

Making data **interoperable**

Interoperable data can be compared and combined with data from different sources by both humans and machines – promoting integrative analyses. To ensure interoperability, the project data will be stored in a non-proprietary open file format and described using a standard vocabulary guided by specific repository.

Increase data re-use

The reusability of the project data will be assured as long as it is findable, accessible, and interoperable. For data, which is not of a widely known nature or format, supporting documentation will be provided alongside to ensure it is understandable and thus reusable.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

The beneficiaries must manage the digital research data generated in the action ('data') responsibly, in line with the FAIR principles and by taking all of the following actions:

- establish a data management plan ('DMP') (and regularly update it)
- as soon as possible, deposit the data in a trusted repository; if required in the call conditions, this repository must be federated in the EOSC in compliance with EOSC requirements
- as soon as possible, ensure open access — via the repository — to the deposited data, under the latest available version of the Creative Commons Attribution International Public License (CC BY) or Creative Commons Public Domain Dedication (CC 0) or a licence with equivalent rights, following the principle 'as open as possible as closed as necessary', unless providing open access would in particular:
- be against the beneficiary's legitimate interests, including regarding commercial exploitation, or
- be contrary to any other constraints, in particular the EU competitive interests or the beneficiary's obligations under this Agreement; if open access is not provided (to some or all data), this must be justified
- provide information via the repository about any research output or any other tools and instruments needed to re-use or validate the data.

Metadata of deposited data must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent (to the extent legitimate interests or constraints are safeguarded), in line with the FAIR principles (in particular machine-actionable) and provide information at least about the following: datasets (description, date of deposit, author(s), venue and embargo); Horizon Europe funding; grant project name, acronym and number; licensing terms; persistent identifiers for the dataset, the authors involved in the action, and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for related publications and other research outputs.

The following table shows the data handling summary template we intend to use within the DMP and within Tasks for documentation. Fields can be optional, depending on cases:

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Data Type	Level of accessibility	Type of availability and required software tools	Information on metadata and additional data information
Public security services collection	Public	Filterable and searchable database; can be accessed with a state-of- the-art web browser	No metadata needed; additional information will be provided on the platform
Digital security solutions collection	Validated professionals	Filterable and searchable database; can be accessed with a state-of- the-art web browser	No metadata needed; additional information will be provided on the platform
Quantitative survey data	Public	Cleaned primary data; can be accessed with SPSS, PowerBI, Excel or any similar data analysis tool	No metadata needed; additional information will be provided on the platform

DATA SECURITY

Data security follows the policies and procedures of each project beneficiary, particularly those who create or own the data. In principle, it is assumed that data security corresponding to the state of the art is given. For open data, the consortium relies on the host repository's data security safeguards. Open data, if any, will be stored in a trusted repository (probably zenodo.org). The project repositories will ensure secure and safe storage of both public and non-public data.

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

ETHICAL ASPECTS

To ensure that all ethical aspects are considered and that the WeGenerate project is compliant with all legal requirements and ethical issues, a general strategy has been designed. This is a risk approach to privacy and data protection issues in line with the new General Regulation for Data Protection (GDPR). Some of the activities in WeGenerate project may require evaluation involving human research subjects and the collection of personal data, as part of community engagement activities.

The project will process personal data of human participants through activities such as events, workshops, interviews, surveys, and co-creation activities. These are standard activities of social and humanities research. CVUT and other universities have extensive experience with this type of work and the needed methodology as well as ethics approval requirements and processes, including informed consent, treatment of personal data, and safeguarding personal interests, anonymisation, and publication of results in compliant ways.

No negative impacts of the activities are foreseen. Details will be developed within the WPs with the relevant partners.

6. Compliance with ethical principles and relevant legislations

All planned activities are foreseen to be well within all applicable legal and ethical guidelines and regulations.

Partners will adhere to strict ethical principles in all work that they do. Compliance with applicable national and EU regulations and legislation, as well as ethical requirements will be ensured before any activities are taking place. This is the responsibility of the leading partner and participating partners. For cross-country activities, partners will ensure that the activity is legal in all participating jurisdictions.

GDPR compliance will be ensured, and all partners are aware of the respective regulations, including their own responsibility for any GDPR-governed activities. Partners will comply with

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

data storage, retention, access rights, anonymisation, and deletion policies of their institutes for personal data.

All activities within WeGenerate will be conducted in compliance with fundamental ethical principles and will be underpinned by the principle and practice of Responsible Research and Innovation (RRI)[3]. RRI is important in the city context where projects work to transform processes around cities and citizens. Through the WeGenerate approaches, societal actors and stakeholders will work together to better align the project outcomes with the general values, needs and expectations of society. The project uses open data and for stakeholder participation through measures such as open data, open licences, public deliverables, outreach, living labs, etc.

The consortium confirms that the ethical standards and guidelines of Horizon Europe will be rigorously applied, regardless of the country in which the research will be carried out, and that all data transfers will be permissible under all necessary legal and regulatory requirements.

All proposed tasks are expected to be permissible under the applicable laws and regulations, given proper observance of requirements. Where appropriate information and consent of all stakeholders and citizens is mandated, the consortium will ensure that all necessary procedures are followed, particularly regarding the signing, collation, and storing of all necessary Informed Consent Forms prior to the collection of any data. All involved stakeholders and citizens will be informed in detail about measures and the consortium will obtain free and fully informed consent.

All necessary actions will be taken within the project management and by all beneficiaries to ensure compliance with applicable European and national regulations and professional codes of conduct relating to personal data protection. This will include in particular Directive 95/46/EC regarding data collection and processing, the General Data Protection Regulation (GDPR, 2016/679), and respective national requirements, ensuring legal and regulatory compliance. Ethics considerations will feed into research and data collection protocols used

[3] See HE Work Programme for reference:
https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

in the project. This will include the collecting and processing of personal data as well as surveys and interviews. For all identified issues, in line with the above standards, ethical approvals will be obtained from the relevant national data protection authorities and/or institutional boards.

In addition to relevant national data protection authorities, the university partners have separate institutional ethics boards or respective national research boards, which will ensure the correct implementation of all human participation and data protection procedures and protocols around social science research.

For the Czech Technical University in Prague (CVUT) it is the Office for personal data protection on national level and at the university level it is the institute of Data Protection Officer[4]. The universities have internal processes and forms to be adapted to ensure full information and informed consent for data collection from human participants.

Further details will be developed within the respective tasks, and input into ongoing versions of the DMP.

7. Data Protection

The Regulation (EU) 2016/679[5] of the European Parliament and of the Council of April 27, 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, as well as any applicable national data protection law applicable to said Party, require the Consortium to work together when necessary to enable one another to fulfil legal obligations arising under applicable data protection laws.

Any personal information collected under the Grant Agreement will be handled by the awarding authority's data controller in compliance with and for the objectives specified in the

[4] Established by the Order of the Rector No. 04/2018 on the Protection and Processing of Personal Data at Czech Technical University in Praguehttps://www.cvut.cz/sites/default/files/content/a28c8f76-aca0-400d-a8c4-cfd2c76489e4/en/202203 04-order-of-the-rector-042018-on-the-protection-and-processing-of-personal-data-at-czech.pdf.

[5] JUSTICE AND CONSUMERS ARTICLE 29 - Guidelines on Data Protection Impact Assessment (DPIA) (wp248rev.01) (europa.eu)

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Portal Privacy Statement. Regulation 2018/17252[6] will apply to grant processing whether the awarding authority is the EC, an EU executive or regulatory agency, a joint undertaking, or another EU body.

Article 32 of the GDPR mandates that all data controllers and processors implement the necessary organizational and technical safeguards to ensure a level of data security commensurate with the risks that data subjects face in the event that their data is accessed, disclosed, inadvertently erased, or destroyed without authorization.

Furthermore, it is imperative to implement suitable technological and organizational protocols to avert data breaches, prevent data compromise, and provide the necessary availability. To prevent unauthorized access to any information gathered, the research team working on the WeGenerate project will be the only ones processing personal data (organization, department, and contact information (e-mail, phone number).

Per the project's specified auditing, archiving, or retention guidelines, collected personal data may only be kept for the duration necessary to satisfy the purposes for which it was obtained. Data, including private information, will be safely stored, password-protected, and retained in our files for a maximum of five years after the project is over.

As mandated by their information security and data protection policies, all members of the WeGenerate consortium must take all reasonable steps to protect the rights and privacy of research participants and data subjects. Policies and procedures to ensure the confidentiality, integrity, availability, and resilience of the processing systems may also be included in such measures. Personal data may be anonymised and encrypted.

8. Data Protection Officer

A Data Protection Officer (DPO) is someone designated by an organization to oversee data protection and ensure compliance with data protection policies and guidelines. The responsibilities of the DPO frequently include advising on data protection protocols,

[6] Regulation (EU) 2018/1725 | European Data Protection Supervisor (europa.eu)

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

monitoring compliance, counseling staff, working with regulatory agencies, and acting as a point of contact for data subjects. When there is a need for special handling of sensitive data within the project, the DPO of the partner who hosts the sensitive data will be consulted.

9. Data Controller

A Data Controller refers to an individual, organization, or entity responsible for determining the purposes and methods of processing personal data. It is the Data Controller's responsibility to ensure that the processing of personal data complies with relevant data protection laws. All in all, the Data Controller decides the reasons and way personal data is processed, including the types of data collected, the purposes of processing, and the duration for which the data will be retained.

10. Data Processor

A Data Processor is an individual, business, or organization entrusted with managing personal data on behalf of a Data Controller. The Data Controller retains ultimate authority over how the Data Processor handles personal data, and the Data Processor is obligated to adhere to these directives. Examples of Data Processors include payroll service providers, marketing agencies, and cloud service providers. Data Processors are responsible for safeguarding sensitive personal data and maintaining the confidentiality of the information they process.

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

CONCLUSION

This deliverable presents the analysis of the main elements of the data management policy that will be used by the WeGenerate project. The document collects the guidelines and information related to WeGenerate data in terms of data security, data management, FAIR data principles, and ethical aspects. The main goal is to set the guidelines and recommendations to be followed in order to make the project research data Findable, Accessible, Interoperable, and Reusable (FAIR), and therefore contribute to knowledge discovery and innovation.

More detailed procedures, descriptions, processes etc. will be provided as they become available through the ongoing work in the respective WP. The DMP will be updated regularly.

Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

PARTNERS LOGOS

Co-funded by the European Union
Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.