

D9.4

Data Management Plan



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. Neither the European Union nor the granting authority can be held responsible for them

D9.4	Work Package No.	WP9	Task/s No.	T9.1
Work Package Title	Project Management			
Linked Task/s Title	Project governance, decision making, Data Management and Gender Action Plans			
Status	Final	(Draft/Draft Final/Final)		
Dissemination level	PU			
Due date deliverable	2023-02-28	Submission date	2023-03-02	
Deliverable version	Data Management Plan V3			

Document Contributors

Deliverable responsible TLX

Contributors	Organization	Reviewers	Organization
Niels Vandezande	TLX	José Pablo Chaves Ávila Michela Cremona	Comillas E.DSO

Document History

Version	Date	Comment
1	2023-02-10	First draft for review
2	2023-02-17	Second draft after review
3	2023-02-28	Final version after review Executive Board

Table of contents

Document Contributors	2
Document History	2
Table of contents	3
List of abbreviations	4
1. Executive Summary	5
2. Introduction	6
3. Data Summary	7
3.1. Research data	7
3.2. Collection purposes	7
3.3. Data sets	8
3.4. Origin of data and re-use of existing data	10
3.5. Expected size of the data	10
3.6. Data utility	11
4. FAIR data	12
4.1. Making data findable, including provisions for metadata	12
4.2. Making data accessible	13
4.3. Making data interoperable	14
4.4. Increase data re-use	15
5. Other research outputs	16
6. Allocation of resources	17
6.1. Roles in data management	17
6.2. Resources	17
7. Data security	18
8. Legal and ethics considerations	19
9. Conclusion	20
10. References	21
11. Annex 1 – Data Processing Table	22

List of abbreviations

BUC	Business Use Case
BM	Business Model
DMP	Data Management Plan
DPO	Data Protection Officer
EDE	E-Distribución Redes Digitales S.L.
FAIR	Findable, accessible, Interoperable, and Reusable
GDPR	General Data Protection Regulation
IP	Intellectual Property
KPI	Key Performance Indicator
PU	Public
SCC	Standard Contractual Clauses

1. Executive Summary

This deliverable provides an initial Data Management Plan (DMP) for the BeFlexible project, taking into account the data to be processed within the project. The DMP will include an evaluation of the suitability of the BeFlexible project for Open Research and potential legal constraints therein, such as data protection laws.

This document should be regarded as a living document, that will require regular updates throughout the project's duration.

The DMP focuses on:

- Identifying categories of research data that will be collected, processed and/or generated during the project.
- Establishing methods and standards to be applied in respect of the Findable, accessible, Interoperable, and Reusable (FAIR) data principles for handling research data during, and after the project.
- Determining whether research data will be shared or made publicly accessible, and if so, which open access model it will be following.
- Establishing how data should be curated and preserved during and after the project.
- Identifying additional safeguards that would be implemented to ensure respect of the FAIR data principles, in terms of allocation of resources, data security, research ethics and intellectual property rights.

2. Introduction

A Data Management Plan (DMP) is considered as a key element to sound data management, especially in EU funded projects. The latter describes the data management life cycle for data collected, generated, or otherwise processed, specifically in projects under the Horizon Europe funding scheme.

The present document constitutes the first version of BeFlexible project's DMP and will be submitted within the first six months of the project. It is based on the DMP template provided by the European Commission (EC) [1] and follows the 'Horizon Europe Programme Guide' [2].

This DMP should be considered as a living document, that will evolve and gain more precision and substance throughout the project duration. The evolution of the architecture and its piloting in practical use cases are key determining factors in increasing the sophistication and detail of the DMP.

Information will be made available on a finer level of granularity through updates of the DMP as the implementation of the BeFlexible project progresses. This will be done when significant changes occur, such as (but not limited to) the inclusion of new data, new possibilities for aggregation and anonymisation, changes in consortium policies (for example new innovation potential), changes in consortium position and external factors (for example new consortium members joining).

In accordance with general policy objectives for making research data **Findable, Accessible, Interoperable and Re-usable (FAIR)**, this DMP includes information on the following:

- The categories of research data that will be collected, processed and/or generated by the project.
- The methods and standards to be applied in respect of the FAIR data principles for handling research data during and after the end of the project.
- The sharing of research data or making it publicly accessible and, if so, which open access model it should follow.
- The curation and preservation of data during and after the project.
- The additional safeguards to be implemented to ensure respect of the FAIR data principles in terms of allocation of resources, data security, research ethics and intellectual property rights.

3. Data Summary

This section will provide a preliminary overview of the data collected as part of the BeFlexible project.

3.1. Research data

The notion of ‘research data’ refers to *“information, in particular facts or numbers, collected to be examined and considered as a basis for reasoning, discussion or calculation”* [\[4\]](#).

Research data covers a broad range of types of information, and digital data can be structured and stored in a variety of file formats. Examples of data include statistics, results of experiments, measurements, observations resulting from fieldwork, survey results, interview recordings and images. In the context of the BeFlexible project, much of the research data will relate to experiences gathered from demo activities (both qualitative evaluations and quantitative statistics). Additionally, as with most other EU projects, collected data will also relate to consortium activities, including project communications, events, surveys and questionnaires (both within the consortium and potentially towards external stakeholders).

It should also be noted that properly managing data (and records) does not necessarily equate to sharing or publishing that data. Some kinds of data may not be sharable due to the nature of the records themselves or to ethical and privacy concerns. This concerns, for example:

- Preliminary analyses
- Drafts of scientific papers
- Plans for future research
- Peer reviews
- Communications with colleagues.

Research data which cannot be shared can come in various forms. These include trade secrets, and commercial information, data which is subject to intellectual property rights claims that would impede sharing, material that need to be kept confidential by a researcher until they are published or any similar information which is granted protection under law. Moreover, deliverables and their underlying data marked as sensitive (SEN) can only be shared in restricted form.

3.2. Collection purposes

Research data will be collected and processed during the project for the following purposes and in relation to the following project objectives:

- To design new cross-sectorial business models and value propositions to increase flexibility through the analysis and validation of alternative designs, based on flexibility acquisition mechanisms
- To carry out a cost-benefit analysis of flexibility options to ensure profitable business models and Scalability and Replicability Analysis for different time scales and wide geographical models’ uptake

- To define, assess and understand regulatory alternatives based on existing frameworks and the Clean Energy Package and Fit for 55 Package requirements to make final regulatory proposals based on the remuneration of flexibility, ownership of flexible assets, agent roles and innovation incentives.
- To foster local flexibility platforms in the market domain and integrate DSO-TSO coordination platforms: i) by designing overarching principles for orchestration and coordination digital tools ii) by developing a near realtime Grid Data and Business Network that supports interoperable data exchange between stakeholders, automate pre-qualification processes and regulated energy and non-energy services provided by the DSO, and iii) by integrating ADMS/DERMS solutions and other distributed technology platforms within the Grid Data and Business Network to achieve the necessary interoperability with all the stakeholders.
- To contribute and develop recommendations and solutions from different projects and initiatives.
- To generate a set of consumer-centric and grid-centric services to be designed, deployed and optimised in the different demo sites to ensure the replicability of these services throughout the EU.
- To increase consumer engagement and acceptance of the proposed technologies through the integration of energy services as well as other services (i.e.: mobility, home automation health, safety, and security) and through maximizing flexibility for end-users.

3.3. Data sets

During the first months of the project, all project partners were asked to describe the specific data sets that will be processed throughout the BeFlexible project.

At this early stage of the project, the following types of research data have been identified:

- **Energy data:** data including grid data, customer devices data and metering data.
- **Flexibility data:** data concerning flexibility needs, bids, market outcomes, and monitoring data. These will include E-Distribución Redes Digitales S.L. (EDE) flexibility needs to be procured in the flexibility market platform, flexibility bids by TV (independent aggregator) to the flexibility market platform, flexibility market outcomes provided by the flexibility market platform, and real-time monitoring data from flexibility resources. This data is to be shared with the flexibility market platform, TV (independent aggregator), and EDE (DSO).
- **User research data:** data concerning the participants in the user research, including identity information, contact information, information on the household and electric appliances, as well as information gained from the interviews – quotes, recordings, transcripts. This data is gained directly from the participants through personal and/or digital interviews. The data will be used in their research and for the development of the value proposition and consumer engagement strategies. This data is shared with demo partners and used in WP1, WP2 and WP7. Data will be anonymized after use.
- **Business use cases and key performance indicators (KPI):** this data includes
 - a) use cases description from past projects (e.g., H2020 CoordiNet, H2020 SmartNet) and use cases publicly available in the BRIDGE use cases repository;

- b) business use cases (BUC) drafted in this project by academic and industrial partners (including pilot leaders).

A list of KPIs will be identified to measure project goals. The information consists of the textual description of use cases and KPIs (including calculation process and baselines). The data sources are: the project's partners and public information available in public deliverables (from past projects) and the BRIDGE use cases repository, which may be re-used for BUC writing in BeFlexible. BUC may be shared with the BRIDGE project. No confidential or personal data will be shared beyond the project.

- **Market demonstration data:** This data concerns the demonstration activities focused on market functioning. The dataset is expected to be created by collecting all the relevant information from the demo set-up, demo run, and demo post-processing. The dataset contains all the necessary information to comprehensively describe the demonstration activity and assess the performance of the corresponding market design. The used datasets concern quantitative and qualitative information, mainly technical and economic, on assets, resources, networks, geography, energy, service and market volumes, load and generation profiles. Data derived from demonstrations and project partners involved. Additional data from publicly available databases may be used for the assessment. Data will be secured in the Comillas cloud.
- **Business model data:** Data used will stem either from conceptual business models (BM) resulting from T1.3, T1.4 and T2.1 that may be partially be based on the services of T3.1, secondly from KPIs from the pilots for those business models tested, and lastly from stakeholder consultation. Conceptual BM will be a graphical and textual description of a reduced set of selected BMs for analysis. Microsoft Office Word (Word) and Microsoft Office Powerpoint (Powerpoint) files are expected to be used. The KPIs mentioned are aggregated numerical or qualitative indicators that assess specific dimensions of the performance of the pilots. The KPIs considered useful for assessing the selected BM will be used. Since they provide aggregated information, they do not represent personal or sensible data. A reduced number of KPIs is expected to be used per pilot. Text or Word files may be used to collect these values. Stakeholder consultation will result from surveys. The personal answers will be handled probably with Word files, and only aggregated results will a priori be shared and included in the corresponding deliverables. The size is aimed at being a few pages per stakeholder, that will be also a reduced number. Data will be stored in the project sharepoint. The resulting BM may be shared with Bridge Business Model WG.
- **Experimental test of value propositions and pricing:** Task 7.4 demands experimental testing of value propositions and pricing. This testing will be done in two stages: a qualitative stage as reported by Soulsight in WP2, Task 2.1. and quantitatively by means of a survey in this task. Data will be gathered with an online survey tool from demo participants and additional customers. Data will be stored as a csv file and will be analysed using Microsoft Office Excel, SPSS, and Python. The data will be shared with other researchers upon motivated request. Data will be anonymised and secured in a cloud environment owned and operated by Comillas University.
- **Cost-benefit analysis:** T7.4 has the aim of carrying out CBA analyses on the demos. In case DSOs cannot provide all the needed information, RSE will generate network topologies and profiles (load, generation)

using a dedicated tool (“synthetic networks”). Data will be stored as a csv file and analysed using Matlab, and Julia. Network data (topology, profiles) derives from DSOs and from synthetic networks generated by RSE, and will be shared with other partners in T7.4. Data will be stored in RSE’s cloud, with authentication procedure to restrict access to the authorised users.

- **Scalability and Replicability Analysis of the proposed solutions:** This data derives from T7.2 with the selected BM to be analysed and from T7.4 with the CBA results on the flexibility options. Data used will be data from 7.2 already described there, and output data will be a qualitative SRA assessment of the selected BM, with no personal or sensible data involved. Input data are expected to come in text, word or Power point files. Output will be the SRA assessment of the selected BM which will be shared in the corresponding deliverable.
- **Economic and IPR information:** data concerning the partners’ background and foreground IP and business potential of expected results. This data is gathered from partners through questionnaires and market studies. Given that this data concerns IP and economic results, this data is not intended to be shared outside of the project.
- **Documents (text, Word) and spreadsheets** generated as part of the project.
- **Documents relating to meetings, pilots, workshops** generated as part of the project.
- **Academic literature and knowledge materials** generated as dissemination of the project.

All partners commit to continuously keep track of the specific data sets processed under the tasks they are leading and to report them internally by completing the table included in Annex 1.

The DMP is intended as a living document and more detail will be added as the project progresses. All partners commit to continuously keep track of the specific data sets processed under the tasks they are involved in and to report them internally by updating the DMP for each task of the project. Partners will be periodically reminded to update their responses.

3.4. Origin of data and re-use of existing data

Most of the research data within the BeFlexible project will consist of original unpublished data, except where clearly indicated otherwise. This original unpublished data will be gathered by the consortium partners during the course of the project. This will include, for instance, data gathered from participant recruitment, user research, participation in the demonstrations, and the recording of energy data. Where participants are already known to demo partners, some of that data may be re-used for the project’s purposes.

The project may also leverage existing knowledge. Such materials will be gathered using applicable scientific methods, using the scientific databases and repositories available to the consortium partners.

3.5. Expected size of the data

The total size of the eventual research data of the BeFlexible project is difficult to estimate at early stage of the project.

Nevertheless, it is clear that the BeFlexible project will gather substantial amounts of data. For instance, video recordings can be made of user interviews and certain project meetings, as well as pictures. Data on energy consumption will be processed as well, which may also result in substantial datasets.

However, most of those larger datasets are not intended for sharing or re-use and are therefore not relevant for this DMP. For instance, data containing personal data must in any case be anonymized or omitted before such data can be shared. Moreover, most of that data constitutes raw data that will only be useful for the initial processing operations they serve within the project. The final output, the processed data, will be much smaller.

3.6. Data utility

The BeFlexible project aims to gather and analyse research data to develop versatile solutions enabling grids to become adaptable to upcoming scenarios, boosting mechanisms that will provide benefits to all actors in the energy market (from market operators to final users), and giving response to all type of consumers' needs. The data generated within the project will therefore directly be utilized in those solutions.

However, a lot of the data within BeFlexible will, of course, be personal data. This kind of data will therefore not be shared for legal reasons, thus making utility beyond the project irrelevant.

All major data repositories generated as a result of the project's research activities and not constituting personal data will be made available for the purpose of making that data reusable by relevant stakeholders.

4. FAIR data

This section describes the FAIR data principles and how they are implemented in the BeFlexible project.

4.1. Making data findable, including provisions for metadata

Making data findable means that the data should be easily discoverable by other potential users. This requires metadata to be made available online as an easily searchable source, and that data is assigned a persistent identifier specified in the metadata. Other means to achieve findability include having rich metadata describing the data and having the metadata online in a searchable resource such as a catalogue or data repository [\[5\]](#).

The BeFlexible project attaches great importance to making its research data findable, discoverable and identifiable. The partners commit to using appropriate naming conventions as defined by the Project Management Handbook as follows:

The numbering scheme for the deliverables, including those that are under development, will have the following notation: **DX.Y- Name of the deliverable_vN.P_revPARTNER**, whereby

- D stands for the word deliverable;
- X.Y is a number representing the Work Package which the deliverable is linked to (X) and the deliverable (Y) within the Work Package it is linked to (as per the GA or latest Amendment);
- The title of the deliverable must follow the one included in the GA or latest Amendment;
- _v stands for the word versión;
- N is the major revision (starting at 0);
- P minor version reflects the progress during the Deliverable preparation phase (e.g. between telcos);
- _revPARTNER will be included indicating which partner revision or contribution it is, on top of the version being revised.

For the integration of the partner inputs, the Word “changes-tracking mode” shall always be used. Furthermore, a revision numbering shall be included within the document. Similar numbering may be used for other documents generated during the project.

All data that the consortium deems important for project participants will be integrated in the internal Microsoft SharePoint project repository, a cloud storage software suite which acts as the metasource for all project generated data. The access rights determined by the original author/publisher of included entries will be respected. This platform will also be used for internal project sharing purposes.

As described in D9.1 – Project Management Handbook, all relevant documentation within BeFlexible will be available in the Teams Sharepoint. The repository will be updated according to the needs of the project, creating new folders or subfolders in accordance with the needs. The idea is having a full repository of working documents, final documents, legal documents, templates, and any ready-to-use documentation generated by the project members. Each WP Leader is responsible for the contents of each WP folder. The main recommendation is creating collaborative documents within each folder to foster the team working.

Public facing data will be disseminated via the project website, which applies standard Search Engine Optimisation (SEO) methodologies as a tool to increase the visibility and discoverability of the data based on selected keywords. SEO considers how search engines work, what users search for, the actual search terms or keywords typed into search engines and which search engines are preferred by their targeted audience. In general, via SEO the platform will appear more frequently in the search results list. SEO may also target different kinds of search, including image search, local search, video search, news search and theme-specific vertical search engines.

The partners agree to provide adequate metadata within the data sets in order to ease the interpretation of the data and to increase the identification, discoverability, re-use and preservation thereof. Metadata is structured information describing the characteristics of the sources. A distinction is made between:

- Descriptive metadata, such as title, abstract, author, and keywords.
- Administrative metadata, which are used to provide information to help manage a source, such as when and how it was created, file type and other technical information, and who can access it.

Having said the above, at this stage of the project, the consortium has yet to define or choose the metadata standard that will be used for the data generated throughout the project. Possible candidates include IEC 62559-2:2015, at least for business case metadata.

In order to increase the findability, the partners will also include keywords or key-phrases describing the subject or content of the data including relevant terms of the field. Since the documents may also include materials in other European languages than English, the search keywords will also be translated to at least the languages of each of the consortium partners.

Other information that the research data could contain include the reference period, project funding information (for example EU logo and information about the Grant Agreement and the action/program that funds the project, official project name and project ID), release policy including dissemination rules, information about the collection of the data such as the data source, geographic coverage of the data, language, and file format.

4.2. Making data accessible

The term 'making data accessible' means that both humans and machines have the possibility to access that said data under specific conditions, and that restrictions are implemented only when appropriate. This does not necessarily require the data to have open access, but in circumstances where data is not available then there should be at least metadata available. Data accessibility can be improved by adding a persistent identifier leading to the data or the associated metadata, a standardized data retrieval protocol, data access procedures including authentication and authorization as needed, and by having metadata accessible at all times [5].

Materials generated under the BeFlexible project will be disseminated in accordance with the Consortium Agreement. The project deliverables that are marked as 'PU' (public) in the Description of Action will be made

openly available via the project website, and can be further shared through related platforms such as Zenodo [\[6\]](#), Arxiv [\[7\]](#), and more, in accordance with the Grant Agreement.

Certain data fall outside the scope of the Open Access strategy. These include different types of data that can be used to identify individuals or that are of a commercially sensitive nature. As a consequence, the following data fall outside of the scope of the Open Access strategy:

- Personal data of research participants, project partners or other stakeholders
- Raw qualitative research data , for instance from questionnaires
- Draft reports
- Unfinished work
- Personal notes
- Plans for future research
- Preliminary analyses
- Peer reviews
- Communication outside of a test setting

Therefore, any data in PU deliverables will be anonymised. Furthermore, a process can be adopted to remove confidential data, after which the document or information initially containing such confidential data could become public. This process includes checking for the purpose of the publication, data cleaning, and validation.

All other types of data intended to be fed into the online hub, such as the knowledge library (links to the sources, or the sources themselves if these are freely accessible), list of similar projects and initiatives, lists of training and solution providers, list of stakeholders on organisational level, etc. will also be made openly accessible by default, as far as not restricted by IP or other rights.

The open research data will be made available with the lowest technical threshold possible, i.e. without any prior requirement of identification or authentication. Nonetheless, in order to protect the identity of research participants and in order to encourage participants to speak freely and truthfully, all reporting and communication relating to research participants will be shared only in a pseudonymised or anonymised manner. Original (non-anonymised or non-pseudonymised data) will be stored in order to allow identification and traceability for research validations and follow-up, but such storage will be organised separately from the research data and in adherence to state-of-the-art confidentiality and security standards, including encryption, access logs and seals. If the document itself cannot be made secure with a password, they will be stored in an encrypted container with password protection (7zip, and more).

4.3. Making data interoperable

The (meta)data that will be made open and re-usable will be in line with most widely used terminologies, standards and methodologies in the field of energy, in order to facilitate interoperability and interdisciplinary interoperability. Existing standards and methodologies proposed in projects such as Bridge will be levied

wherever possible. From a practical perspective, standard and commonly used file formats will be used wherever available.

4.4. Increase data re-use

Specific details on future use of the data will be provided as part of WP8's exploitation planning activities. In general, the project consortium will aim to apply open licensing through common, standardised and widely known license models, such as e.g. a 'CC-BY-SA 3.0' license, as a general rule to all research data in order to facilitate the widest re-use as possible.

All the open research data will be made available for re-use without any data embargo, meaning that all data will be made openly available and free to re-use upon their publication. There will be no restriction on the use of data by third parties after the end of the project.

The data will remain reusable so labelled accordingly with the applicable licenses.

5. Other research outputs

Other research outputs generated as part of the BeFlexible project will mostly concern software code. Wherever possible, the consortium strives to apply the same standards and principles as outlined in the previous section to the software code outputs of the project. As noted before, Github [\[8\]](#) or SourceForge [\[9\]](#) will serve as the main repository for models and algorithm generated within the BeFlexible project.

6. Allocation of resources

This section describes the different roles concerning data management and how expenditures for data management and open research have been allocated in the BeFlexible project.

6.1. Roles in data management

The main coordinating roles in data management are provided for in the Consortium Agreement and Grant Agreement as follows:

- Legal expert (TLX): is responsible to ensure that an appropriate data management plan is developed and used to protect the privacy of data and address all other data management aspects.
- Project Coordinator (i-DE): is responsible for overall Project management.
- Dissemination, communication and exploitation manager (ZAB): is responsible to raise public awareness and ensure wide communication of the project results and will also be responsible for the IP management and exploitation of the project's outcomes.
- RWTH, supported by INESC, will act as Open Access Coordinator to implement Open Science during the project.

Furthermore, the WP/Task leaders will be expected to provide first level of data management within the scope of their role and ensure that the data of their WP/Task are treated according to the agreed project principles and processes.

6.2. Resources

BeFlexible will provide open access (OA) to research outputs (e.g., publications, data, models, algorithms, and workflows) through deposition in trusted repositories. All partners will provide OA to peer-reviewed scientific publications relating to their results. The authors of all peer-reviewed scientific publications will choose the most appropriate way of publishing their results, and these publications will be stored in an OA trusted repository, during and after the project's life following Article 17 and Annex 5 of the GA. The consortium will be encouraged to publish in the Open Research Europe platform.

Furthermore, different repositories will be used by the partners, such as Arxiv or Zenodo for publications and Github or SourceForge for models and algorithms.

As noted, RWTH and INESC act as Open Access Coordinator to support Open Science throughout the project. Furthermore, TLX oversees the general data management strategy, supported by all partners who collect, generate or make data available (including notably piloting Member States).

The costs for long-term preservation of the data have been taken into account by the consortium. There will be no further costs related to the preservation of data beyond the end of the funding period.

7. Data security

BeFlexible partners commit to using state-of-the-art technologies for secure storage, delivery and access of personal data, as well as managing the rights of the users. The goal is to completely guarantee that the accessed, delivered, stored and transmitted content will be managed by authorised persons, with well-defined rights, at the right time.

BeFlexible uses secure the Microsoft SharePoint platform as an internal repository. BeFlexible consortium partners may also use internal secured storage platforms, or secure cloud services such as Google Drive and Miro. Where possible, it will be stipulated that personal data should be stored on EU-based servers. Where such is not possible, suitable arrangements should be put into place, such as Standard Contractual Clauses (SCC).

Demos will be conducted by the responsible Project partners, who, in accordance with the GDPR, conduct their personal data processing activities under the supervision of a qualified data protection officer (DPO).

In addition, the consortium confirms to comply with the following guidelines in order to ensure the security of any centrally stored data:

- Keep pseudonymised data and personal data of participants separated
- Encrypt data if it is deemed necessary by the responsible project partner
- Store data in at least two separate locations to avoid loss of data
- Limit the use of USB drives and personal folders
- Save digital files in one of the preferred formats (as set out above)
- Label files in a systematically structured way in order to ensure the coherence of the final data set

8. Legal and ethics considerations

The ethical aspects of the BeFlexible Project will be assessed particularly under WP2, which sets out the legal and ethical requirements that the project must comply with. However, also in other Work Packages legal and ethics issues are handled.

More specifically, legal and ethical issues are handled in:

- D2.3 Definition of legal & ethical requirements: focuses on legal and ethics compliance, including a review of applicable energy, contract and consumer laws in order to determine what the BeFlexible solutions must comply with, and which market practices can be implemented towards the consumer. Second, this deliverable will focus on data protection issues during the project.
- WPs 4, 5, and 6 concerning the demos: will all include legal and ethics support to each of the demos. This will include providing for informed consent concerning demo participants.
- T8.3 Exploitation strategy and IPR: will define the IP and knowledge management strategy of the BeFlexible project's outcomes. This will be reported on in D8.1 Dissemination, Communication & Exploitation Plan – incl. IPR strategy.
- D9.1 Project Management Handbook: includes general provisions on data handling within the project.

Issues of intellectual property rights and ownership are furthermore governed by the provisions of the Consortium Agreement and the Grant Agreement, as signed by all project partners.

All consortium members must keep any data, documents or other material confidential during the implementation of the BeFlexible and for the duration of the specified time-limit in accordance with Article 13 of the Grant Agreement. Further detail on confidentiality can be found in Article 13 of the Grant Agreement.

Additionally, the BeFlexible consortium partners confirm to respect for the EU and national law requirements on privacy and data protection and adhere to the research ethics standards applicable to Horizon Europe research. In accordance with the data minimization, data retention and purpose limitation principles, personal data will not be collected beyond the scope of the processing objectives and will not be stored longer than necessary.

9. Conclusion

The purpose of this document was to set out a first and provisional version of the DMP for the BeFlexible project. This DMP will have to be revised and updated throughout the full duration of the project. Based on the current assessment, research data that will be shared or made publicly accessible in BeFlexible is anticipated to be limited in scale and scope, due to the objectives and nature of the project.

Much of the research data in BeFlexible constitutes personal data. Therefore, this personal data is subject to strict legal safeguards against re-use, including through the GDPR, thus rendering most of the research data ineligible for sharing and re-use.

Nonetheless, certain statistical and aggregate data can be generated and made available for sharing and re-use where possible.

The information concerning the project partners' data processing activities will be further updated throughout the project.

10. References

- [1] European Commission, EU Grants: Data Management Template (HE):V1.0, 5 May 2021.
- [2] European Commission, Horizon Europe Programme Guide, Version 2.0, 11 April 2022.
- [3] European Data Protection Supervisor Preliminary Opinion 8/2020 on the European Health Data Space.
- [4] European Commission, Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020, Version 3.2, 21 March 2017.
- [5] Jones, S., Grootveld, M. (2017). How FAIR are your data?. Zenodo. <http://doi.org/10.5281/zenodo.1065991>.
- [6] <https://zenodo.org/>
- [7] <https://arxiv.org/>
- [8] <https://github.com/>
- [9] <https://sourceforge.net/>

11. Annex 1 – Data Processing Table

[PARTNER INITIALS], WP[No.], T[No.] (e.g. TLX, WP1, T1.2)	
Data set	<i>Name of the data set and reference</i>
Description	<i>Description of new data gathered in this task, description of existing data sets that will be re-used, source of the data, creation method, expected size of dataset, purpose of data gathering, ...</i>
File format	<i>Software or file format used to work with the data – e.g. Word, ...</i>
Metadata	<i>Data characteristics of metadata, any applicable standards to be used?</i>
Data sharing	<i>Data derives from ..., is shared with ..., is used b y...</i>
Archiving and preservation	<i>Where are the data are stored (in the EU or not), how do you handle backups, which tools are used to process and store the data, how is the data secured, ...</i>
Additional information	<p><i>Are you generating the data or sourcing it from elsewhere? Are there certain terms and conditions applicable?</i></p> <p><i>Is the data digital or non-digital? Both?</i></p> <p><i>How will the data be created or collected? What instruments or tools will be used?</i></p> <p><i>What transformations will the data undergo?</i></p> <p><i>Will the data be updated or become redundant as you make revisions and produce subsequent versions?</i></p> <p><i>Who has access to the data within and outside of the project?</i></p> <p><i>Will the data be maintained and shared after the project?</i></p> <p><i>Are you processing information that falls outside of the scope of this DMP? E.g. confidential information, personal data, IP-protected data.</i></p> <p><i>If the data contains personal data, has a legitimate processing basis been identified according to GDPR? Will the data be pseudonymized/anonymized?</i></p>