

## D9.2 **Updated** Data Management Plan

August 2024 Version 1.0





This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 101000395.

The opinions expressed in this document reflect only the author's view and do not reflect the European Commission's opinions. The European Commission is not responsible for any use that may be made of the information it contains.



Deliverable 9.1	Updated Data Management Plan
WP	9
Deliverable lead	SLU
Authors	Laurence Smith and Daiana de Oliveira
Contact	Laurence Smith
GA number	101000395
Funding body	H2020
Start / duration	1/9/2021 / 60 months
Type of deliverable (R, DEM, DEC,	R
OTHER, ETHICS, ORDP, DATA) <sup>1</sup>	
Dissemination level (PU, PP, RE,	PU
CO) <sup>2</sup>	
Website	https://pathways-project.com/

Version	Date	Description	Author
0.0	25-1-2022	First draft	Harry Blokhuis
1.0	19-8-2024	Final	Laurence Smith and Daiana de Oliveira

<sup>1</sup> Document, report (R), Demonstrator, pilot, prototype (DEM), Websites, patent filings, videos, etc., OTHER, Ethics requirement (ETHICS), Open Research Data Pilot (ORDP), Data sets, microdata, etc. (DATA)

<sup>2</sup> Public (PU), Restricted to other programme participants including EC (PP), Restricted to a group specified by the consortium including the EC (RE), Confidential, only for members of the consortium including EC (CO)



#### **Table of Contents**

	Glossary, abbreviations and acronyms4
1.	Executive summary5
2.	Project abstract
3.	Data summary6
	Purpose
	Data Description
4.	FAIR data principles8
	4.1 Making data findable, including provisions for metadata8
	Discoverability of data and metadata provision8
	Organization of Data
	4.2 Making data openly accessible9
	Data that will be made openly available9
	Availability guarantees10
	Access provision for restricted datasets 10
	4.3 Making data interoperable11
	4.4 Data re-use and licences11
	4.5 Allocation of resources12
5.	Data security12
6.	Ethical aspects13
7.	References13
Ap	pendix14



## Glossary, abbreviations and acronyms

- DCC Digital Curation Centre Explanation
- DMP Data Management Plan
- FAIR Findable, Accessible, Interoperable and Reusable data management principles
- GDPR General Data Protection Regulation
- ORDP Open Research Data Pilot
- SLU Swedish University of Agricultural Sciences



#### 1. Executive summary

As a 'living document', the Data Management Plan (Deliverable 9.1) has been updated at project month 36 to incorporate the developments as far as data generation, development, processing, and storage are concerned, and the end of the second project reporting period (August 2024).

#### 2. Project abstract

Worldwide demand for animal products is predicted to double over the next decades due to population growth and increasing economic prosperity. This may lead to further intensification of production which in turn may put pressure on available resources like land or water, and lead to higher greenhouse gas emissions and other environmental impacts. Furthermore, there is an increasing concern about the negative impacts of intensive production on animal welfare in livestock farming. At the same time, livestock farming plays a vital role in food and nutrition security by providing nutrient-rich food, whilst contributing to efficient agriculture and the vitality of rural territories. Also, livestock systems can recycle biomass and help to close nutrient cycles at farm and territorial levels. The lack of a holistic sustainability assessment approach makes it difficult to measure livestock's contribution to society, hampering evidence-based debates about tradeoffs and leading policymakers to focus on highly tangible, but essentially weak, leverage points. PATHWAYS is about identifying and increasing sustainable practices along the supply and production chains of the European livestock sector and aims to reduce environmental impacts while addressing societal demands for safe, nutritious, and affordable meat and dairy products. Coordinated by the Swedish University of Agricultural Sciences (SLU) and comprising 28 partners from 12 countries, this 5-year (2021-2026) € 9-million Horizon 2020 project contributes to the EU Farm-to-Fork Strategy which is at the heart of the EU Green Deal. PATHWAYS will be implemented through four key stages. First, we will define visions for the development of the livestock sector, and current drivers and barriers for sustainability and human nutrition within Europe. In the second stage, we will translate these visions into scenarios and develop a holistic evaluation of current/future systems. In the third stage, scenarios and innovations will be assessed, while in the fourth and final stage we will identify solutions and development pathways for a holistic re-design across agri-food chains.



#### 3. Data summary

#### PURPOSE

PATHWAYS aims to identify and increase sustainable practices along the supply and production chains of the European livestock sector and to reduce environmental impacts while addressing societal demands for safe, nutritious, and affordable meat and dairy products.

To achieve this goal, the project team will engage in several actions to ensure meaningful results. These actions are organised around 10 work packages:

- WP1 Multi-actor engagement for system re-design;
- WP2 Development and consolidation of scenario assessments for holistic solutions and pathways;
- WP3 New measurements and modelling for welfare, biodiversity, emissions, and farm practices;
- WP4 Assessing consumer behaviour, current and future diets;
- WP5 Farm to fork holistic Life Cycle Assessment;
- WP6 Assessment of the circular economy and territorial ecosystem services;
- WP7 Assessment of supply chain dynamics and market power;
- WP8 Knowledge exchange, dissemination and transfer of outcomes;
- WP9 Coordination and management;
- WP10 Ethics requirements.

#### DATA DESCRIPTION

The collection of data is closely related to the objectives of the project and can be summarised as follows:

*Farm-level data collection* in WPs 1 and 3: Up-to 15 farmers from each of the 16 practice hubs (n= 240) and individual stakeholders within the European multi-actor platform (n=50) will contribute information on their visions for sustainability and give feedback on the project results within face-to-face workshops. In addition, technical and economic data will be collected from 3-20 farms within each practice hub (approx. 150 farms) using a standard protocol (i.e., a modified version of the Public Goods tool (Gerrard et al. 2012)).

*Consumer and value chain data collection* in WPs 4 and 7: Data will be collected from 400-600 consumers in WP4 and approximately 1200 stakeholders in WP7.

This is complemented by various interview- and workshop-derived data in WPs 1-8.



Please see the appendix for an updated detailed table providing more information about the data, including re-use of data, origin of the data, data types and formats of data, expected data size and 'data utility'.



## 4. FAIR data principles

# 4.1 Making data findable, including provisions for metadata

#### DISCOVERABILITY OF DATA AND METADATA PROVISION

Metadata is provided for each PATHWAYS dataset (Table A1) alongside a metadata document, describing data access procedures, which has been deposited in the general-purpose open repository Zenodo (see <a href="https://zenodo.org/communities/pathways\_project">https://zenodo.org/communities/pathways\_project</a>) and assigned the following Digital Object Identifier (DOI): <u>10.5281/zenodo.13347159</u>.

Where possible, data have been directly deposited in Zenodo (see examples in Fig 1) and search keywords provided to optimise the possibility for discovery and re-use.

Final responsibility to comply with EU regulations lies with each partner producing and providing data.

zenodo 🖻	arch records	Q	Communities	My dashboard			٩	+-	<b>≗</b> lgps42@g	•
	WAYS H2020 PF	OJECT							± New	upload
Q Records All Members	i About									
		5 results found	d					Sort by	Newest	
Versions		December 9, 2022	(vt) Journal a	article 🔒 Open						
View all versions				ethane emissions by sheep usi Jexander N.; van Lingen, Henk J.; and 39		ase				
Access status		livestock. While s	similar models e	ng empirical models to predict enteric meth exist for dairy and beef cattle, there's a nee						n
Open	5	Part of PATHWAYS H Uploaded on August		ed in: Journal of Cleaner Production, 364, 2022.					ø	1 🛓
Resource types		June 17, 2024 (v1)	Publication	6 Open						
> Dublication		Assessing th	he impacts	of EU agricultural policies on t		tock sector: a review	w of the r	recent	literature	
Other	(1)	This review exam	nines how EU a	agricultural policies need to evolve to enhance and sources agricultural policies need to evolve to enhance of addressing these q	ance the sustainability of livestock produc				e sustainable practices	while
Subjects		Part of PATHWAYS H	12020 PROJECT	ed in: Agriculture and Human Values, 2024.	,,,,,,				0	1 ±
Zenodo, data files, metadata	(1)									

Figure 1: overview of the Zenodo page for PATHWAYS



#### ORGANISATION OF DATA

In PATHWAYS, file names follow a standard naming convention that on the one hand provides information about the content of the file and, on the other hand, enables a chronological order and the creation of versions: PATHWAYS\_[Type]\_YYYY-MM-DD\_[Version]v[y.y].

[Type] refers to:

- a milestone, written as MSx, where x is the number as indicated in description of action

- a deliverable, written as Dx, where x is the number as indicated in description of action

- other data or text, described with an informative name, e.g. 'workshop-Uppsala' or 'PGtool-Hub1'

[Version] indicates the version of the document e.g. v1, v2, final. No more than 10 versions of a file should be kept. Version numbering in file names can be through discrete or continuous numbering depending on minor or major revisions. For example:

Changes to file	Version numbering
Original document	1.0
Minor revisions made	1.1
Further minor revisions	1.2
Substantive changes	2.0

How data files are named, organised and version-controlled will be documented in a README text file, stored in the root folder of the project.

## 4.2 Making data openly accessible

#### DATA THAT WILL BE MADE OPENLY AVAILABLE

The PATHWAYS project aims at facilitating the sharing of data, results, and deliverables as open as possible. The PATHWAYS project, thus, pursues open access to both results (i.e., publications in scientific journals) and data, following the rules outlined in the Grant and Consortium Agreement.

Datasets that include personally sensitive data shall be anonymised before being made openly available. As previously mentioned, PATHWAYS intends to make all data openly available. However, should a task leader deem data not to be made openly available, justification is required. The Executive Board will then assess the reasoning of the justification and make the final decision based on examination of the following elements regarding confidentiality of datasets:

(i) Commercial sensitivity of datasets;

(ii) Data confidentiality for security reasons;

(iii) Conflicts between open-access rules and national and European legislation (e.g., data protection regulations);



(iv) Sharing data would jeopardise the aims of the project;

(v) Other legitimate reasons.

#### AVAILABILITY GUARANTEES

All PATHWAYS datasets will be made openly available, including relevant metadata unless the Executive Board accepts that there is sufficient reason and justification not to. Datasets together with its respective metadata will be made openly availably by deposition in the general-purpose open repository Zenodo at: <a href="https://zenodo.org/communities/pathways\_project">https://zenodo.org/communities/pathways\_project</a>. In case datasets cannot be made publicly available (due to legal and contractual reasons) only its associated metadata will be provided in Zenodo (see Table A1). At the point of publication, data will be made available with the appropriate licencing following HORIZON 2020 guidelines.

The curator for the PATHWAYS community in Zenodo is appointed by the PATHWAYS coordinator (SLU). When appropriate, partners should appoint a depositor (in case there is no data, there is no need for a depositor). Zenodo does not provide the curator with the uploader's credentials; therefore, prior to any upload, depositors must inform the PATHWAYS community curator (via email) about their intention to upload content to Zenodo, along with the title of the said content. Depositors are the only individuals who will be granted access by the curator to deposit content. Depositors are solely responsible for the folder arrangement, file format (in compliance with the Data Management Plan instructions), and authenticity and validity of the content of the deposits which should by no means contain personal or sensitive information (please see Section 4 Data Security). Depositors should remove any personal information from data files. Depositors ought to ensure that submitted material is in full compliance with the GDPR policy adopted by the PATHWAYS project.

#### ACCESS PROVISION FOR RESTRICTED DATASETS

All partners will have access to data produced by the PATHWAYS project (internal), with the exception of non-anonymised data. Original non-anonymised data will be stored under the responsibility of the task leader in a protected and secure storage location with restricted access adhering to all the necessary legal and ethical requirements.

All published data will be openly accessible to all internal and external data requests. In the case of restricted access, the Executive Board will assess external data requests or internal data requests for non-anonymised access.

Non-published data requests will be considered by the Project Management Team, following requests received via the instructions given in the corresponding metadata file available at: <u>https://zenodo.org/communities/pathways\_project.</u>



## 4.3 Making data interoperable

PATHWAYS strives to produce data in the project that are interoperable, that is allowing data exchange and re-use between researchers, institutions, organisations, and countries. It means PATHWAYS is adhering to general standards for formats (e.g., TXT, PDF, CSV, JPEG, RAW, AVI formats), as much as possible compliant with available open software applications. The data and metadata, standards and methodologies the PATHWAYS project follows have the aim to make the project data interoperable. Standard vocabularies for all data types present in the project will allow inter-disciplinary and trans-disciplinary interoperability.

In the unlikely case that uncommon or project-unique specific ontologies or vocabularies are to be used, mappings to more commonly used standard vocabularies for all uncommon data types will be provided to allow maximum interoperability. Any assumptions made, and the mapping steps to more commonly used vocabularies will be documented in a README file.

Data produced through PATHWAYS consumer research (e.g., semi or unstructured (narrative) interviews, focus groups and citizen jury participant information or observation accounts, photographs, videos, drawings) will use standard formats (e.g., TXT, DOC, CSV, JPEG, RAW, AVI formats) and will be made compliant with available (open) software applications, facilitating the recombination with various datasets from different origins.

#### 4.4 Data re-use and licences

EUDAT's B2SHARE licensing tool will be used to select the appropriate license for each dataset to be published (taking into consideration the sensitivity of the data, intellectual property rights, and any additional legal requirements). Based on Open Access regulation, we aim to allow data to be re-used by third parties, but with restrictions should IPR or other rights demand such restrictions.

Access to the research data will be dependent on any agreed 'embargo period' based on national and EU regulations. The 'embargo period' is applied to give time to publish the work or seek patents, where applicable and this will be as short as possible until the work is accepted for publication or patent, bearing in mind that research data should be made available as soon as possible.

Data will be stored based on the agreeable terms among partners, until which it can be re-usable (all research related data will be stored – as long as required according to national regulations – after the end of the research project). Because of the combined natural and social science nature of the data there is no time limit for its re-usability.

In case of sharing data or restricting certain data with third parties outside of the consortium, a data sharing agreement will be set up following legal requirements of the leading organisation. Data will be used in



standard forms allowing reuse, as well as allowing searchability. Data quality assurance processes will be undertaken, including applied standards and methodologies as documented in DCC guidance.

## 4.5 Allocation of resources

The management of the DMP is the responsibility of work package 9 LEAD and the project coordinators together with the project manager. The collection of the metadata and any dataset is conducted by the respective lead partners. It is the responsibility of the work package leaders to coordinate the specific data collection in accordance with this data management plan. Financing for data storage and making data available after the life of the project is covered by the project's indirect cost for each partner.

The DMP applies to all research of all consortium partners and individually each researcher or research team employed or subcontracted will be responsible for managing their data adequately (i.e., according to best practice). Where PATHWAYS researchers plan to publish with co-authors outside of PATHWAYS, they will make them aware of the PATHWAYS DMP requirements and data collection procedures and make sure that primary research data are stored to the same standard as required for H2020 projects. Responsibility for this will be with the first author. With the PATHWAYS project, the project coordinator, project manager and the executive board will take overall responsibility for data management within the project.

## 5. Data security

Here we describe what provisions are in place for data security within the PATHWAYS project. Data security is guaranteed by storing data using individual partners storage and following respective central routines for back-up. Data security will be guaranteed by storing data from individual partners storage systems. During the development of the project, partners may use their institution storage systems that will comply with the necessary data security.

The security measures that will be implemented to prevent unauthorised access to personal data or the equipment used for processing are as follows: The research data collected will only be linked to personal data by a code, which will be kept securely in a separate location from the research data and only accessible to the lead researcher. After 7 years the code/link will be destroyed. All data will be collected on laptops or handheld devices and then uploaded to central storage as outlined above and removed from the portable devices. For activities where audio or video recordings are taken, the data will be transcribed and then the recording medium erased or destroyed.

Data collected in the project will be stored on secure, password-protected servers at the lead researcher premises. All data will be stored in an anonymous and unidentifiable format so that entries cannot be linked to the personal identity of the participants. Hence, the participants' actual identities will be known only to the researchers who will protect the viewpoints, actions and personal characteristics in all communication



resulting from the project (reports, books, articles, and presentations) through anonymisation or pseudonymisation.

Original data and paper records will be kept in lockable cabinets or offices with controlled access, when not under the direct supervision of a member of the research team. Access to electronic data and records are controlled by passwords and, where appropriate, access to individual files folder or databases will also be password protected. Passwords will be known only to authorised individuals. Access controls will regularly be reviewed and updated as individuals join, leave or change roles within the project. Computers and software will not be left logged in and unattended.

#### 6. Ethical aspects

Requirements related to human ethics, protection of personal data ethics and animal ethics are described in Deliverables 10.1, 10.2 and 10.3 respectively.

## 7. References

Gerrard, Catherine L., L. G. Smith, B. Pearce, S. Padel, R. Hitchings, M. Measures, and N. Cooper. 2012. Public Goods and Farming. In *Farming for Food and Water Security*, edited by E. Lichtfouse. Dordrecht: Springer Netherlands.



### Appendix

Table A1 *Updated* summary of data per work package; \* = Data available via process described in <u>Metadata file</u> on Zenodo; \*\* = Data directly available via publication record on Zenodo; \*\*\* = Publication / Deliverable currently in progress to be made available by project end-date (i.e. Sept 2026)

	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP1	1.1	Establish database of stakeholders	Contact details of stakeholders	Humans	New	Word file	Text	Database	<1MB	Online form	Y	N	γ*
	1.2	Sustainability assessment	Farm practice data	Technical data	New	Excel files, Word files	Numerical, text	Database	<1GB	Excel sheets (offline)	Y	N	γ*
	1.3	Workshops	Personal details of practice hub members and their feedback	Humans	New	Excel files, Word files	Numerical, text	Database	<1GB	Online form	Y	N	γ*
	1.3	Living labs	Data collected from animal/ farm /value chain assessments	Animals, humans, technical data	New	Excel files, Word files	Numerical, text	Experimental	<1GB	Excel sheets (offline)	N	N	γ*
	1.4	Workshops	Personal details of MA Platform members and their feedback	Humans	New	Excel files, Word files	Numerical, text	Database	<10MB	Online form	Y	N	γ*



WP2	2.1	Literature review; interviews	Data from past projects, and scientific and technical literature	Humans / lit review	Already existing	Word file	Text	Database	<10MB	Word documents and Excel sheets (offline)	N	Y	γ**
	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP2	2.3	Macroeconom ic modelling	Economic data from published databases, scientific and technical literature	Modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Excel sheets (offline)	N	Y	N – task in progress
	2.4	Review of project results and focus groups	Responses from stakeholders, sustainability assessment data from elsewhere in the project	Human and technical data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	Y	Y	N – task has not started at time of reporting
WP3	3.1	Establish database of farm business data	Farm business data	Financial data	Already existing	Excel files, Word files	Numerical, text	Database	<1GB	Excel sheets (offline)	Y	N	γ*
	3.2	Review of project results and focus groups, farm level animal welfare data	Data from past projects, and scientific and technical literature, farm practice data, animal welfare data	Humans, animals	Already existing	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	Y***
	3.3	Review of project results and focus groups, farm level biodiversity data	Data from past projects, and scientific and technical literature, farm practice data, biodiversity data	Humans, grassland	Already existing	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	N	γ*
	3.4	Review of published data	GHG estimation methodologies	Technical data	Already existing	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	γ*



	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP3	3.5	Indicator evaluation	Data from scientific publications and that collected as part of T2.1	Technical data	Already existing	Word, files, published literature, text files, excel files	Text	Database	<30 MB	Word documents and Excel sheets (offline)	N	Y	γ*
WP4	4.1	Web-based public opinion survey (Italy, France, Germany, Romania)	Consumer willingness to pay, dietary, sex and gender, mindsets and socio-demographic characteristics data	Humans	New	Excel files, Word files	Numerical, text	Experimental	<1GB	Word documents and Excel sheets (offline)	Y	Y	γ***
	4.2	Database collation / assessment	Inventory of (micro)nutrients required / supplied. Use of data generated by T4.1 to generate "consumer archetypes"	Food	Already existing	Word, files, published literature, text files, excel files	Text	Database	<3 MB	Word documents and Excel sheets (offline)	N	Y	γ***
	4.3	Focus groups	Consumer attitudes	Humans	New	Word, files, published literature, text files, excel files	Text	Database	<3 MB	Word documents and Excel sheets (offline)	Y	Y	N – task in progress
WP5	5.1	Literature review; Delphi consultation	Assessment methods for improving LCA	Human and technical data	New	Word, files, published literature, text files, excel files	Text	Database	<30 MB	Word documents and Excel sheets (offline)	N	Y	γ* <b>*</b>
	5.2	Modelling of environmental impact resulting from farm practices	Environmental impact resulting from farm practices	Modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	γ <b>*</b>



	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP5	5.3	Modelling of environmental impact resulting from farm practices	Environmental impact of innovative farm practices in the Phubs	Modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	N – task in progress
	5.4	Assessment of current and future value chains	Modelling of impacts of future scenarios, Environmental impact of future scenarios	Technical and modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	N – task in progress
WP6	6.1	Stakeholder consultation via questionnaire s and focus groups	Ranking of ecosystem services by stakeholder groups	Humans	New	Word, files, published literature, text files, excel files	Text	Experimental	<30 MB	Word documents and Excel sheets (offline)	Y	Ŷ	γ*
	6.2	Modelling of circular economy at different spatial levels	Impact of current livestock systems on circular economy	Modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	γ*
	6.3	Modelling of ecosystem processes and their impacts at scale	Environmental data	Modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	N - task in progress
	6.4	Assessment of ecosystem service impacts under range of scenarios	Environmental a under future scenarios	Modelling data	New	Excel files, Word files	Numerical, text	Database	<1GB	Word documents and Excel sheets (offline)	N	Y	N task in progress



	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP7	7.1	Value chain mapping	Data from past projects, and scientific and technical literature. Responses from stakeholders	Humans / literature review	New	Word, files, published literature, text files	Text	Database	<30 MB	Word documents and Excel sheets (offline)	Ν	Y	γ*
	7.2	Development of scoring method for value chain sustainability assessment	List of metrics and expert feedback	Human and technical data	New	Word, files, published literature, text files	Text, numerical	Database	<30 MB	Word documents and Excel sheets (offline)	Y	Y	N task in progress
	7.3	Identification of "levers" for change	List of levers / characteristics for future value chains	Humans	New	Word	Text	Database	<10 MB	Word documents (offline)	N	Y	N -– task in progress
WP8	8.1	Development of knowledge exchange strategy for the project	Using data/material generated by project activities to communicate to stakeholders using human data (Name, email, country, company, occupation) when consented	Project data and humans		Word	Text	Database	<10MB	Word documents (offline)	N	Y	Υ*
	8.1	Project website	Using data/material generated by project activities and consent to use personal data in line with GDPR (Name, email, country, company, occupation)	Project data and humans	New	Word	Text	Database	<10MB	Word documents (offline)	Ŷ	N	Υ*



	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP8	8.1	Project newsletter	Using data/material generated by project activities and consent to use personal data in line with GDPR (Name, email, country, company, occupation)	Project data and humans	New	Word	Text	Database	<10MB	Word documents (offline)	Y	N	γ*
	8.2	Knowledge products: policy toolkit	Using data/material generated by project activities. Policy toolkit embedded on project website which uses personal data when consented in line with GDPR (Name, email, country, company, occupation)	Project data and humans	New	Word	Text	Database	<10MB	Word documents (offline)	Y	N	γ*
	8.2	Knowledge products: Open access repository, practice abstracts, motion design journeys, videos	Using data/material generated by project activities. Products embedded on project website which uses personal data when consented in line with GDPR (Name, email, country, company, occupation)	Project data and humans	New	Word	Text	Database	<10MB	Word documents (offline)	Y	N	γ*
	8.3	Establishing Community of Practice (CoP) and regular communicatio n with CoP	Personal details (name/organisation/occu pation) of CoP members and their feedback	Project data and humans	New	Word	Text	Database	<10MB	Word documents (offline)	Y	N	γ*



	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP8	8.4	2 large conferences / share fairs	Using data/material generated by project activities in registration (name/organisation/occu pation)	Humans	New	Word	Text	Database	<10MB	Word documents (offline)	Y	N	γ*
	8.5	Early career programme	Personal details of participants and individual progress reports	Humans	New	Word	Text	Database	<10MB	Word documents (offline)	Y	N	Y*
WP9	9.1	Control of project progress and quality of deliverables	All data used and generated by project activities and contact details for Innovation Management Group	Project data, human data	New	Word file	Text	Database	<5 MB	Word documents (offline)	Y	N	γ*
	9.2	Management of administrative data	All data used and generated by project activities	Project data incl. financial data	New	Word and Excel files	Text, numerical	Database	<5 MB	Word documents (offline)	Y	N	Y*
	9.3	Management of project data and Data Management Plan	All data used and generated by project activities	Project data	New	Word and Excel files	Text, numerical	Database	<30GB	Word documents (offline)	Y	N	γ*
	9.4	Organisation of six consortium meetings	Details of all project participants, minutes and data arising from meetings	Humans	New	Word files	Text, oral, visual	Database	<1 GB	Word documents (offline)	Y	N	N -– task in progress



	Task	Activity	Type of data	Subject	Newly generated/ already existing data	Data format (Excel, Word, text file)	Nature of data (numerical, oral, visual)	Data type (observational, experimental, simulated/mod elled, derived from databases)	Data volume (if known 1 - 500 MB = small, 501 MB - 5 GB = medium, over 5 GB = large)	Methodology of data collection	Personal/ sensitive data? Yes/No	Will data be published? Yes/No	Metadata file done? Yes/No
WP10	10.1	Management of procedures and criteria for meeting human ethics requirements	Procedures and criteria that will be used to identify/recruit research participant, templates of the informed consent forms and information sheets	Humans	New	Word files	Text	Database	<1MB	Word documents (offline)	N	Ν	Υ*
	10.2	Data protection	Description of restrictions on data use / access	Humans	New	Word files	Text	Database	<1MB	Word documents (offline)	N	N	γ*
	10.3	Ethics requirements: animals	Details of animal experiments' adherence to the Three Rs principles	Animals	New	Word files	Text	Database	<1MB	Word documents (offline)	N	Ν	γ*